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PADMAKA

Botanical name

Prunus cerasoides D. Don.

Syn. *Prunus puddum* Roxb. ex Brandis non Miq.

Family : Rosaceae

Classical name : Padmaka

Sanskrit names

Padmaka, Padmakâṣṭha, Padmagandhi,
Padmavarṇa, Padmāhva, Suprabha, Hemapadmaka,
Vimala, Marucchiva.

Regional names

Padmakh, Padmakath (Hindi); Paiyan (Kumaon, U.P.); Padmak (Mar., Guj.); Bird Cherry, Himalayan wild cherry (Eng.).

Description

A handsome medium-sized tree, with glossy green leaves, nearly glabrous.

Leaves ovate, long-acuminate, sharply and often duplicate-serrate, 3-5 in. long, petioles, 1/3 in. with 2-4 large glands, near base of leaf. Stipules palmately 3-5-fid, the divisions lanceolate, glandular imbricate.

Flowers white or pink, appearing before the leaves, on slender pedicels as long as flowers, or somewhat longer, often branched, in umbellate fascicles crowded near the ends of branches. Calyx turbinate with ovate-acute lobes, drupe ovoid or globose, 1/2-3/4 in. long, acid and somewhat astringent when ripe; kernel ovoid, rugose and furrowed.

Fruits yellow to red, ovoid, 1.3-1.6 cm. long and stone rough, rugose furrowed.

Flowering and fruiting time

Plant flowers during the months of October to December to April-May and onwards it bears fruits. Practically the flowers appear during autumn season and they are immediately succeeded by the leaves.

Distribution

Plant is occurring in the temperate regions from Indus to Bhutan; and it is fairly common in the Himalayan regions specially in outer ranges.

Chemical composition

The stem bark contains flavonone sakuranetin (1%), flavone genkwanin, isoflavone prunerin and isoflavonone padmakastin, along with smaller quantities of the glycosides sakuranin and padmakastin. Bark exudes gum-resin abundantly. Bark also contains small amount of taxifolin.

Pharmacodynamics

Rasa	: Kaṣāya, tikta
Gūṇa	: Laghu
Virya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāma

Properties and action

Karma	: Vedanāsthāpana Stambhana Raktastambhana-raktapittahara Varṇya Mūtrala Garbhasthāpana Viśaghna Svedāpanayana Kuṣṭhaghna Āmapācana Jvaraghna Kaṇḍūghna-kuṣṭhaghna Dāhapraśamana
Roga	: Nāḍīśūla-vedanāyukta vikāra Āmaśayaśaithilya Vamana-trṣṇā Hṛdroga (Kaphapaittika hṛdaya vikṛti) Āsmarī-śarkarā Garbhāśayadourbalya (janita

vikāra)-garbhasrāva-garbhapāta
 Viṣa
 Atisveda (svedādhikya)
 Kuṣṭha
 Varṇavikṛti
 Vātarakta
 Visarpa-visphoṭa
 Kāsa-śvāsa-hikkā
 Raktapitta.

Therapeutic uses

The drug Padmaka is chiefly an analgesic (vedanāsthāpana) herbal agent which is mainly used in neuralgia, burning sensation, abortion, thirst, heart diseases, intrinsic haemorrhage, calculus, skin and pigmentation disorders.

The kernel of fruits are used as a remedy for stone and gravel. The leaves, twigs, bark and kernels contain a cyanogenetic substance. The smaller branches are crushed and soaked in water and taken internally to check abortion in pregnant mothers. The drug is useful in gout, cough and asthma.

Externally it is applied to skin, colour, leprotic ailments and also in erysipelas itching and dermatitis. It is also given to check over sweating in body (atisveda) and vomiting.

The fruits have scanty pulp and are scarcely eaten. Nuts are reported to be used for preparing a well known cherry brandy. Kernels oil is similar to that of bitter almonds and with a strong flavour of prussic acid. The bark is used for tanning.

Parts used : Bark, seeds (kernel).

Dose : Powder 1-3 gm.

Formulation (yoga)

Mahāpadmaka ghṛtam, Padmaka tailam, Khuḍḍāka padmaka tailam, Padmakādi leha, Mahāpadmaka tailam.

Group (gaṇa)

Vedanāsthāpana, Varṇya, Kaśāyaskandha (Caraka Saṁhitā), Sārivādi, Candanādi (Suśruta Saṁhitā).

PADMAKA (पद्मक)

क. पद्मकं पद्मगन्धि स्यात्तथा पद्माह्वयं स्मृतम् ।

ख. पद्मकं तुवरं तिक्तं शीतलं वातलं लघु ॥

वीसर्पदाहविस्फोटकुष्ठश्लेष्मास्रपित्तनुत् ।

गर्भसंस्थापनं रुच्यं वमिव्रणतृषाप्रणुत् ॥

Bhāvaprakāśa Nighaṇṭu, Karpūrādi varga, 30-31.

पद्मकम्

पद्मकाष्ठं पद्मवर्णं पद्मकं हेमपद्मकम् ॥

सुप्रभो विमलश्चारुः शीतवीर्यो मरुच्छिवः ।

पीतरक्तः पद्मगन्धि पाटलापुष्पवर्णकः ॥

पद्मकगुणाः

पद्मकं तुवरं तिक्तं शीतलं वातलं लघु ।

गर्भस्य स्थापनं दाहविषपित्तकफास्रजित् ॥

विस्फोटव्रणवीसर्पवमिकुष्ठतृषापहम् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1400-1403.

पद्मकम्

पद्मकं पीतकं पीतं मालयं शीतलं हिमम् ।

शुभ्रं केदारजं रक्तं पाटलापुष्पसन्निभम् ।

पद्मकाष्ठं पद्मवृक्षं प्रोक्तं स्याद् द्वादशाह्वयम् ॥

गुणाः

पद्मकं पद्मवृक्षं तिक्तं रक्तपित्तविनाशनम् ।

मोहदाहज्वरभ्रान्तिकुष्ठविस्फोटशान्तिकृत् ॥

Rāja Nighaṇṭu, Candanādi varga, 139-140.

वातरक्ते खुड्वाकपद्मकतैलम्

महापद्मकतैलम्

Bhāvaprakāśa, Vātaraktādhikāra,

29/130-131; 126-129.

वमनचिकित्सायां पद्मकाद्यं घृतम्

Cakradatta, Chardi cikitsā, 15/27-28.

विसर्प-विस्फोटे महापद्मकघृतम्

Cakradatta, Visarpa-visphoṭa cikitsā, 53/36-37.

कासे

पद्मकादिलेहः

Caraka Samhitā, Cikitsā, 18-173/174.

हिक्काश्वासयोः

गुग्गुलं वा मनोह्वं वा शालनिर्यासमेव वा।

शल्लकीं गुग्गुलुं लोहं पद्मकं वा घृतप्लुतम्॥

Aṣṭāṅga Hrdaya, Cikitsā, 4-14.

वातरक्ते

पद्मकतैलम्

महापद्मकतैलम्

Caraka Samhitā, Cikitsā, 29-110/114.

रक्तपित्ते

‘उशीरकालीयकलोध्रपद्मकं.....रक्तं सपित्तं शमयन्ति योगाः।’

Caraka Samhitā, Cikitsā, 4-73/77.

PALAKYĀ

Botanical name : Spinacea oleracea Linn.

Family : Chenopodiaceae

Classical name : Palakyā

Sanskrit names

Palakyā, Pālāṅkyā, Kṣurapatrikā, Madhurā, Chhurika (Kṣurika), Cīritacchadā, Pālakya, Supatrā, Grāmavallabhā, Grāmīṇā, Snigdhapatrā, Vāstukākārā.

Regional names

Palak, Isfanj (Hindi); Palang, Pinnis (Beng.); Palak (Mar., Guj.); Dumpahachhuli, Matturbuchhali (Tel.); Vasayleykiray (Tam.); Spinach-soppu (Tel.); Palaksag (Oriya); Palak, Isfank (Punj.); Palengsag; Spinach, Garden Spinach (Eng.).

Description

An erect, smooth, annual herb, 30-60 cm. high. Leaves alternate, ovate-oblong, obtuse or acute, variously lobed, smooth, soft, succulent. Flowers unisexual, greenish; male flowers in terminal; leafless spikes; female flowers

in axillary clusters. Fruit hard, compressed utricles; enclosed in a spined, capsule-like body; seeds vertical.

Types of Spinach (Palakyā) are divided broadly into two groups one having triangular leaves and prickly seeds and the other round leaves and smooth seeds. The prickly-seeded type spinach serves as the autumn-winter crop in the hills. For the spring-summer crop sowing in the hills and the autumnal sowing in the plains, smooth-seeded types are preferred, since the seeds can easily be threshed, graded and stored for producing the spinach.

Smooth seeded types are supposed to have originated from the prickly-seeded types. The well known types of spinach suited to the Indian conditions, are Virginia Savoy, a good yielder with upright and vigorous plants, having blistered thick, crumpled, darkgreen and juicy leaves : long-standing Bloomsdale, a quick growing, hardy type with glossy, and dark green and tasty leaves; and Banerjee Giant, a robust variety, with large and fleshy leaves.

Flowering and fruiting time

Farming seasons.

Distribution

Plant is cultivated throughout India upto an altitude of 2,100 meters. It is under extensive cultivation of nutritious and eatable leaves.

Spinach or Palakyā (palak) is popular because of its high yield, wide adaptability to varying soil and climates and high nutritional value. Spinach is cold-season crop. It can be grown pure or as a mixed crop with peas, cabbage and other comparatively longer-duration vegetables. It is sown during September-November in the plains, and during February-April in the hills.

Chemical composition

Analysis of the edible portion (87%) of spinach gives following values : moisture 92.1, protein 2.0, fat 0.7, fibre 0.6, mineral matter 1.7 and carbohydrates 2.9%; calcium 73, oxalic acid 658; magnesium 84, potassium 206, iron 10.9, phosphorous 21, sodium 58.5, copper 0.01, sulphur 30 and chlorine 54 mg./100 g. Other minerals

present in the leaves (dry basis) follow : nickel 0.42, manganese 9.61, molybdenum 0.08, Zinc 13.53, and strontium 0.077 mg./100 g.; Cobalt (0.007-0.12 mg./100 g.), selenium and iodine (20.1 mg./100 g.).

Pharmacodynamics

Rasa	: Kaṣāya, tikta, madhura
Guṇa	: Guru, picchila
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Pittakaphaśāmaka

Properties and action

Karma	: Bhedana-sāraka Viṣṭambhī Grāhi Santarpaṇa Pathya (śāka)-āśupāki-rucikara Viśaghna Kāśaghna-śvāsahara Mūtrājanana Dāhaśāmaka Raktasamvardhaka (raktakaṇa vardhaka)
Roga	: Vibandha-koṣṭhabaddhatā Mūtrakṛcchra-mūtrāghāta-aśmarī Āntravikāra Yakṛcchoṭha (yakṛt śoṭha-vikāra) Kāmalā-pāṇḍu Śvāsa Dāha.

Therapeutic uses

The drug Palakyā is laxative, easily digestible, diuretic, raktavardhana and astringent. It is useful in urinary complaints (dysuria, calculus, gravel), intestinal disorders, liver complaints (inflammation), anaemia, jaundice, cough, asthma, burning sensation and efficiency of blood (R.B.C.) in patients. The lipids from the leaves are reported to possess anti-bacterial properties.

The fruits of Palakyā are medicinally useful. They

are demulcent and diuretic. Fruits are used for treatment of fever and inflammation of bowels.

Palakyā is a popular leafy-item among eatables as vegetable, soups and salads; and the leaves enter into preparation of several recipes, regimens and dishes of food utility as a very common household vegetative mostly leafy which is much relished as a nutritive, medicinally potent and healthy vegetable. It is appreciated as one of the several selected and highly suitable wholesome (pathya, hitatamaśāka) vegetable in Indian medicine by discussing its medicinal properties (including certain effects if consumed in excess e.g. viṣṭambhi and vātala for abdominal part but normally a good laxative in usual course).

The use of Palakyā or spinach is generally recommended by the physicians to patients in medical systems as a disease-countering and health-protective dietary material, in view of its chemical profile and potentials making it a good source of minerals as a whole.

Parts used : Leaves, seeds.

Dose : Edible (leafy vegetable).

PALAKYĀ (पलक्या)

क. पलक्या वास्तुकाकारा छुरिका चीरितच्छदा ।

ख. पलक्या वातला शीता श्लेष्मला भेदिनी गुरुः ।
विष्टम्भिणी मदश्वासपित्तरक्तकफापहा ॥

Bhāvaprakāśa Nighaṇṭu, Śāka varga, 16.

अ. पालक्यं तु पलक्यायां मधुरा क्षुरपत्रिका ।
सुपत्रा स्निग्धपत्रा च ग्रामीणा ग्राम्यवल्लभा ॥

ब. पालक्यमीषत्कटुकं मधुरं पथ्यशीतलम् ।
रक्तपित्तहरं ग्राहि ज्ञेयं सन्तर्पणं परम् ॥

Rāja Nighaṇṭu, Mūlakādi varga, 132-133.

पालङ्क्या

पालङ्क्या वास्तुकाकारा किञ्चिच्चीरितपत्रिका ।

पालङ्क्या मधुरा रूक्षा क्षारा शीतानिलप्रदा ॥

विष्टम्भिनी स्वादुपाका भेदिनी पिच्छिला गुरुः ।

अश्लेष्मला विषश्वासपित्तरक्तमदापहा ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 645-646.

PALĀṆDU

Botanical name : *Allium cepa* Linn.

Family : Liliaceae

Classical name : Palāṇḍu

Sanskrit names

Palāṇḍu, Durgandha, Bahupatra, Tīkṣṇakanda, Yavaneṣṭa, Mukhaduṣaka, Viśvagandha, Ullī, Sukanda, Durdruma, Rocana, Śūdrapriya.

Regional names

Pyaj, Piaj (Hindi); Ganda (Punj.); Kondha, Konrha (Mar.); Dungli (Guj.); Dungri, Kando (Guj.); Vasar (Si.); Pran (Kann.); Niruli (Tel.); Inrulli (Tam.); Vasl (Arabic); Piyaj (Pers.); Bulb onion (Eng.).

Description

A glabrous, bulbous herb, possessing a strong pungent aromatic odour. Leaves sub-distichous, fistular, shorter than the inflated scape head bearing flowers; pedicels shorter than the stellate flowers; sepals linear; oblong, filaments exserted, simple of the linear two toothed at the base; bulb free, solitary. Sometimes bulbils along with flowering on spadix. Fruits tri-cellular with small, black seeds.

Flowering and fruiting time

Farming seasons.

Distribution

It is cultivated throughout India. Farming on wide scale commonly for producing onion having dietary utility.

Kinds and varieties

Palāṇḍu has two kinds of bulbs viz. red (rakta) and white (śveta). Bulb of bigger size and white in colour is known as Śveta palāṇḍu. There are two classical varieties of palāṇḍu (incorporated in Nighaṇṭu) viz. Palāṇḍu and

Rājapalāṇḍu or nṛpapalāṇḍu. Kṣīra palāṇḍu is also mentioned.

Chemical composition

Bulb contains protein 1.2%, carbohydrate 11.6%, calcium, iron, vitamin A, B₁ and C. Bulb and green (fresh) herb yield a pungent, volatile oil with unpleasant smell. Fixed oil contains Allyl-propyl-disulphide.

Pharmacodynamics

Rasa	: Madhura, kaṭu
Guṇa	: Guru, snigdha, tīkṣṇa
Vīrya	: Iṣat uṣṇa (īśaduṣṇa)
Vipāka	: Madhura
Doṣakarma	: Vātakaphahara Pittavardhaka.

Properties and action

Karma	: Vedanāsthāpana Śothahara Vraṇaśothpācana Tvagdoṣahara-kaṇḍūghna Lekhana Dr̥ṣṭiśaktivardhana Amedhya Dīpana-pācana-rocana-anulomana Chardinigrahaṇa Yakṛduttejaka Raktastambhana Chedana-kaphaniḥsāraka Mūtrājanana Śukrājanana-vājīkaraṇa Ārtavajanana Balya-ojovardhana Nidrājanana
Roga	: Vātavyādhi Nāḍīśūla Vraṇaśotha-ekāṅgika śotha Mukha(maṇḍala) vikāra-vyaṅga- nyaccha-kilāsa Dr̥ṣṭimāndya Karnaśūla

Vātaroga-gr̥dhrasī-sandhivāta-
 ākṣepaka
 Yoṣāpasmāra-jalasantrāsa
 Agnimāndya-aruci-vibandha
 Viṣūcikā-chardi
 Kāmalā
 Arśa-raktārśa
 Hṛddourbalya-śoṭha (sarvāṅga)
 Raktapitta urdhvaga (nāsāgata
 raktasrāva)
 Mūtrājanana
 Śukradourbalya-klaibya
 Rajorodha
 Dourbalya-ojakṣaya
 Carmaroga
 Kāsa-śvāsa-hikkā.

Therapeutic uses

The drug Palāṇḍu is aphrodisiac, diuretic, expectorant, and stimulant. It is used in anorexia and anasarca; it is a cardiac depressant. The drug is useful in cough, dyspepsia, impotency, jaundice, piles, nervine and neurological diseases, respiratory diseases, scanty menstrual and urinary diseases. Palāṇḍu is an effective vātahara drug as indicated by Vṛddha vāgbhāṭa. The juice of Palāṇḍu kanda (onion bulb) mixed with honey (or sugar candy or jaggery) is recommended to be administered orally in the acute attack of cough and asthma.

The bulb (palāṇḍu kanda) are used in various vātavikāra (vātavyādhi) such as neuralgia, sciatica, joints swelling, convulsions, hysteria, hydrophobia and other ailments caused by provocation of vāta doṣa.

In various gastro-intestinal diseases, it is given frequently. It is taken in piles, prolapse of rectum, jaundice and constipation. Palāṇḍu is specifically indicated in viṣūcikā (gastro-enteritis); the juice of bulb is orally given to patient suffering from viṣūcikā (siddha bhaiṣajya maṇimālā, 4-273).

Palāṇḍu is prescribed in treatment of epistaxis (nāsāgata raktapitta). The juice of bulb is recommended

for putting into nostrils in this condition of nasal haemorrhage. Similarly the juice of leaves (palāṇḍu) is also considered useful for this purpose.

The drug is vedanāsthāpana and vātahara allaying pain and vāta. It increases or promotes raja and tama (mānasika doṣa) which affect as amedhya auṣadhi.

Parts used : Bulb, seeds, leaves.

Dose : Bulb Juice 10-30 ml., Seeds powder 1-3 gm.

PALĀṆḌU (पलाण्डु)

- क. पलाण्डुर्यवनेष्टश्च दुर्गन्धो मुखदूषकः ।
पलाण्डुस्तु बुधैर्ज्ञेयो रसोनसदृशो गुणैः ॥
ख. स्वादु पाके रसेऽनुष्णा कफकुष्ठतिपित्तला ।
हरते केवलं वातं बलवीर्यकरो गुरुः ॥

Bhāvaṇḍa Nighaṇṭu, Haritakyādi varga, 226-237.

पलाण्डुः

पलाण्डुर्मुखदूषी स्यात् सुकन्दकरणोऽपरः ॥
लताको दुर्दुमः क्षीरपलाण्डुर्धवलाक्षकः ।

पलाण्डु-रसोनसमगुणाः

पलाण्डुस्तद् गुणैर्न्यूनः श्लेष्मलो नातिपित्तलः ॥
स्वादुपाकरसोऽनुष्णः केवलानिलनाशनः ॥

क्षीरपलाण्डुः

तद्वत् क्षीरपलाण्डुः स्यात् पिच्छिलो रक्तपित्तहा ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1222-1224.

पलाण्डुः

पलाण्डुस्तीक्ष्णकन्दश्च उल्ली च मुखदूषणः ।
शूद्रप्रियः क्रिमिघ्नश्च दीपनी मुखगन्धकः ॥
बहुपत्रो विश्वगन्धो रोचनो रुद्रसंज्ञकः ।
श्वेतकन्दश्च तत्रैको हारिद्रोऽन्य इति द्विधा ॥

पलाण्डुगुणाः

पलाण्डुः कटुको बल्यः कफपित्तहरो गुरुः ।

वृष्यश्च रोचनः स्निग्धो वान्तिदोषविनाशनः ॥

Rāja Nighaṇṭu, Mūlakādi varga, 55-57.

राजपलाण्डुः

अन्यो राजपलाण्डुः स्यात् यवनेष्टो नृपाह्वयः ।

राजप्रियो महाकन्दो दीर्घपत्रश्च रोचकः ॥

नृपेष्टो नृपकन्दश्च महाकन्दो नृपप्रियः ।

रक्तकन्दश्च राजेष्टो नामान्यत्र त्रयोदशः ॥

राजपलाण्डुगुणाः

पलाण्डुर्नृपपूर्वः स्यात् शिशिरः पित्तनाशनः ।

कफहृदीपनश्चैव बहुनिद्राकरस्तथा ॥

Rāja Nighaṇṭu, Mūlakādi varga, 58-60.

नृपपलाण्डुः

वक्ष्यते नृपपलाण्डुलक्षणं चातीक्ष्णमधुरो रुचिप्रदः ।

कण्ठशोषशमनोऽतिदीपनः श्लेष्मपित्तशमनोऽतिवृंहणः ॥

Rāja Nighaṇṭu, Mūlakādi varga, 61.

पलाण्डुवामायिकप्रयोगाः वातव्याधौ

‘रसनान्तरं वायोः पलाण्डुः परमौषधम् ।’

Aṣṭāṅga Saṅgraha, Uttara, 49-135.

हिक्काश्वासयोः

लशुनस्य पलाण्डोर्वा मूलं गृञ्जनकस्य वा ।

नावयेच्चन्दनं वापि नारीक्षीरेण संयुतम् ॥

Caraka Samhitā, Cikitsā, 17-131.

विसूचिकायाम्

पलाण्डुकन्दपानीयमानि द्विपलं पिबेत् ।

विसूचिकां विशेषेण निःशेषयति निश्चितम् ॥

Siddha Bhaiṣajya Maṇimālā, 4-273.

रक्तार्शसि

सिद्धं पलाण्डुशाकं तक्रेणोपोदिकां सबदराम्लाम् ।

रुधिरस्त्रावे प्रदद्यान् मसूरसूपं च तक्राम्लम् ॥

Caraka Samhitā, Cikitsā, 14-204.

रसखण्डयूषयवागूसंयोगतः केवलोऽथवा जयति ।

रक्तमति वर्तमानं वातं तु च पलाण्डुरुपयुक्तः ॥

Caraka Samhitā, Cikitsā, 14-208.

नासारक्तस्त्रावे

नस्यं दाडिमपुष्पोत्थो रसो दूर्वाभवोऽथवा ।

आम्रास्थिजः पलाण्डोर्वा नासिकास्तु रक्तजित् ॥

Siddhasāra, 24-204.

‘यवासमूलानि पलाण्डुमूलं नस्यं तथा दाडिमपुष्पतोयम् ।’

Caraka Saṁhitā, Cikitsā, 4-107.

पलाण्डुपत्रनिर्यासनस्यं नासाग्रजावहम् ।

यष्टीमधुमधुयुतं पश्चान्नस्येऽसृजं जयेत् ॥

Hārīta Saṁhitā, 3-10-39.

PALĀŚA

Botanical name : Butea monosperma (Linn.) Kuntze.

Family : Fabaceae (Papilionaceae)

Classical name : Palāśa

Sanskrit names

Palāśa, Raktapuṣpaka, Kṣāraśreṣṭha, Brahmavṛkṣa, Samidvara, Kinśuka.

Regional names

Dhak, Tesu (Hindi); Palash (Beng.); Palas (Mar.); Khakhro (tree-Guj.); Kemuda (flowers-Guj.); Palash-papraha (seeds-Guj.); Paras (Tam.); Modhung (Tel.); Mulung (Kann.); Palashin samat (Mal.).

Description

Medium-sized deciduous trees with tawny-tomentose herbage, 10-15 meters high. Leaves pinnately 3-foliolate; petioles 7-15 cm. long; leaflets grey-tomentose beneath, terminal ovate-rhomboid, 10-20 cm. long, equally broad rounded at apex, lateral ones oblique and smaller; leaflets coriaceous, hard when mature.

Flowers fascicled at the nodes of racemes; peduncle woody and stout; fls. 4-6.5 cm. long, in 20-30 cm. long racemes. Calyx broadly campanulate; teeth lanceolate, deltoid velvety tomentose. Corolla very much exerted, showy, orange-scarlet or flame-coloured, standard acute, recurved, wings adnate to much curved acute keel.

Pedicels, bracts, bracteoles and calyx, all velvety. Corolla bright pink, tinged with orange, upto 7.5 cm. long; vexillum silky-pubescent outside.

Pods silvery hairy when young, look leaf like as a glance, when seen from a distance; pod 10-20 × 2.5-4 cm. stalked, rounded at base; 1-seeded at apex.

Flowering and fruiting time

Plant begins flowering in spring season and flowering stage in March-April (full blooming exhibits 'flame of the forest', almost around Holi festival in India). Fruiting during summers or April-June.

Distribution

It occurs throughout India. Trees belong to forest component of various regions in country and it grows up to 4,000 ft. (1204.18 meters) elevation. Common in warm areas (except in much sandy soils) and dry deciduous forests or mixed forests, along road sides and common and abundant in certain localities (also under plantation).

Chemical composition

Bark and gum contain Kinto-tannic acid 50%, mucilaginous matter and alkaline 2%. Seeds contain palasonin, and active principle which acts on round-worm in particular. Fixed oil is also obtained 18 per cent.

Flowers yield dye and rootbark gives fibres. Tree is host plant for lac.

Pharmacodynamics

Rasa	: Kaṭu, tikta, kaṣāya
Guṇa	: Laghu, rūkṣa
Virya	: Uṣṇa, (puṣpa-flowers : śīta)
Vipāka	: Kaṭu (puṣpa-flowers : madhura)
Doṣakarman	: Kaphapittaśāmaka (puṣpa-flowers : kaphapittaśāmaka).

Properties and action

Karma	: Kṛmighna-bhedana (bīja-seeds) Dīpana-grāhī-yakṛduttejaka Trṣṇāśāmaka-stambhana (puṣpa-flowers) Amlatānāśaka-grāhī (niryāsa-gum resin)

	Anulomana-bhedana (kṣāra-alkali)
	Raktastambhana
	(flowers and gum resin)
	Raktaśodhana (seeds)
	Diuretic (flowers)
	Pramehaghna (seeds and tvak bark)
	Uttejaka (seeds)
	Vṛṣya (gum resin)
	Garbhanirodhaka
	Yonidr̥dhikarāṇa
	Kuṣṭhaghna (flowers and seeds)
	Jvaraghna-dāhapraśamana
	(flowers)
	Balya (gum resin)
	Sandhānīya
	(bark, flowers and seeds)
	Viśaghna (seeds)
	Rasāyana (pañcāṅga-all parts)
	Netraroga-pilla-pittābhiśyanda-
	raktābhiśyanda.
Roga	: Kṛmiroga-gaṇḍūpada krimi
	Agnimāndya-grahaṇī-arśa-atisāra
	Udararoga-gulma-śūla
	Plīhāroga
	Raktapitta-raktavikāra
	Tṛṣṇā-dāha-jvara
	Mūtrakṛcchra-prameha
	Śukradourbalya
	Carmavikāra
	Dourbalya
	Asthibhagna
	Viṣa
	Antravṛddhi
	Vṛścikadamśa
	Ślīpada.

Therapeutic uses

The drug Palāśa is anthelmintic, aphrodisiac, astringent, carminative, depurative and tonic. It is used in abdominal diseases, anorexia, colitis, diarrhoea, dysentery,

gout, helminthic manifestations, piles and splenic disorders.

The seeds of Palāśa śimbī (pod) are suggested among the herbal drugs with anti-fertility potentiality which has recently been reported in experimental studies on Palāśa bīja as a contraceptive medicine. It carries textual base in Indian medicine which claims Palāśa as a drug having utility of contraceptive drug.

Parts used

Bark, flowers, gum-resin, seeds, alkali (kṣāra).

Dose

Bark decoction 50-100 ml., Flowers powder 3-6 gm., Gum-resin 1-3 gm., Seeds powder 3-6 gm.

Formulation

Palaśabījādi cūrṇa, Palāśakṣāra ghr̥ta, Palāśa ksāra.

Group

Rodhrādi, Muṣkakādi, Ambaṣṭhādi (Caraka Samhitā), Nyagrodhādi (Suśruta Samhitā).

PALĀŚA (पलाश)

पलाशस्तु कषायोष्णः क्रिमिदोषविनाशनः ।

Rāja Nighaṇṭu, Karavīrādi varga, 37.

पलाशबीजम्

तद्बीजं पामाकण्डूतिं दद्रुत्वग्दोषनाशकृत् ।

Rāja Nighaṇṭu, Karavīrādi varga, 37.

पलाशपुष्पम्

‘तस्य पुष्पञ्च सोष्णञ्च कण्डूकुष्ठार्तिनाशनम् ।’

Rāja Nighaṇṭu, Karavīrādi varga, 37.

पलाशभेदाः

रक्तः पीतः सितो नीलः कुसुमैस्तु विभज्यते ।

किंशुकैर्गुणसाम्येऽपि सितो विज्ञानदः स्मृतः ॥

Rāja Nighaṇṭu, Karavīrādi varga, 38-39.

पलाशो दीपनो वृष्यः सरोष्णो व्रणगुल्मजित् ।

भग्नसन्धानकृद् दोषग्रहण्यर्शःक्रिमीन् हरेत् ॥

कषायकटुकस्तिक्तः स्निग्धो गुदजरोगजित् ॥

Bhāvaprakāśa Nighaṇṭu, Vaṭādi varga, 50.

पुष्पफलयोगुणाः

तत्पुष्पं स्वादु पाके तु कटु तिक्तं कषायकम् ॥

वातलं कफपित्तास्रकृच्छ्रजिद ग्राहि शीतलम् ।

तृड्दाहशमकं वातरक्तकुष्ठहरं परम् ॥

Bhāvaprakāśa Nighaṇṭu, Vaṭādi varga, 51-52.

फलं लघूष्णं मेहार्शःकृमिवातकफापहम् ।

विपाके कटुकं रूक्षं कुष्ठगुल्मोदरप्रणुत् ॥

Bhāvaprakāśa Nighaṇṭu, Vaṭādi varga, 53.

‘पलाशस्तुवरस्तिक्तः स्निग्धोष्णो दीपनः कटुः ।

सरः सन्धानकृद् वृष्यो जयेद् दोषव्रणकृमीन् ॥

ग्रहणीगुल्मगुदजान्.....’

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 832-833.

पुष्पम्

‘.....तत् पुष्पं स्वादुतिक्तकम् ।

तृड्दाहकफपित्तास्रकुष्ठहत्..... ॥’

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 834.

फलम्

....फलमस्य च ।

कषायं कटुकं पाके वातलं ग्राहि शीतलम् ।

रूक्षं विपाके कटुकं लघूष्णं कफवातजित् ॥

कुष्ठगुल्मोदरप्लीहं मेहार्शःकृमिशूलनुत् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 835.

नवपत्रम्

‘किंशुकस्य प्रवालं तु कृमिवातहरं परम् ।’

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 836.

पलाशबीजानि विडङ्गयुक्तान्युन्मिश्रितान्यामलकीफलानाम् ।

रसेन मध्वाज्ययुतानि पीत्वा वृद्धोऽपि मासात्तरुणत्वमेति ॥

Rāja Mārtaṇḍa.

क्षारश्रेष्ठः कृमिघ्नश्च सङ्ग्राही दीपनः सरः ।

प्लीहगुल्मग्रहण्यर्शोवातश्लेष्मविनाशनः ॥

Dhanvantari Nighaṇṭu.

पुष्पबीजयोर्गुणाः

किंशुकस्यापि कुसुमं सुगन्धि मधुरं च तत् ।
बीजन्तु कटुकस्निग्धमुष्णं कृमिबलासजित् ॥

Dhanvantari Nighaṇṭu.

गुल्म-प्लीहाचिकित्सायाम्

पिप्पलीं किंशुकक्षारभावितां सम्प्रयोजयेत् ।
गुल्मप्लीहापहां वह्निदीपनीञ्च रसायनीम् ॥

Cakradatta, 38-2.

पित्ताभिष्यन्दे

‘क्षौद्रोपेतं कैशुकञ्चापि पुष्पम् ।’

Suśruta Samhitā, Uttara, 10-9.

‘पालाशं स्याच्छोणितं चाञ्जनार्थं शल्लक्या वा शर्कराक्षौद्रयुक्तम् ।’

Suśruta Samhitā, Uttara, 10-7.

द्वितीये शक्रतुल्यः स्यात् तृतीये वज्रवद् भवेत् ।
दूरश्रावी चतुर्थे तु पञ्चमे खं गतिर्भवेत् ॥
मासषट्के स्वयं कर्ता शिवतुल्यपराक्रमः ।
महाकल्पान्तपर्यन्तं जीवेद् वर्षैकसेवनात् ॥

Rasaratnākara, Rasāyana Khaṇḍa.

अपतानकरोगे

‘तासायां वाऽङ्गारचुल्यां तप्तायां वा शिलाभ्यां सुरा-
परिपित्तायां पलाशदलच्छन्नायां शाययेत् ॥’

Suśruta Samhitā, Cikitsā, 5-18.

विदारिकारोगे

‘अजकर्णेः सपलाशैः मूलकलकैः प्रलेपयेत् ।’

Suśruta Samhitā, Cikitsā, 20-14.

विषे

‘शिखि पित्तार्धयुतं स्यात्पलाशबीजमगदो भूतेषु मतः ।’

Caraka Samhitā, Viśaṇḍaprakaraṇa.

पलाशबस्तिः

जलद्विकंसेऽष्टपलं पलाशात् पक्त्वा रसोऽर्धाढकमात्रशेषः ।
कल्कैर्वचां भागाधिकापलाभ्यां युक्तः शताह्वाद्विपलेन चापि ॥
ससैन्धवः क्षौद्रयुतः सतैलो देयो निरूहो बलवर्णकारी ।

आनाहपार्श्वमययोनिदोषान् गुल्मानुदावर्त्तरुजं च हन्यात् ॥

Caraka Samhitā, Siddhi, 3-44/45.

कृमिरोगे पलाशबीजम्

‘पलाशबीजस्य रसं पिबेन्माक्षिकसंयुतम् ।

पिबेत्तद्बीजकल्कं वा मधुना क्रिमिनाशनम् ॥’

Bhāvaprakāśa, Kṛmīrogādhikāra, 7-21.

रक्तगुल्मे पलाशक्षारम्

विशेषमपरञ्चाशु शृणु रक्तप्रभेदनम् ।

पलाशक्षारतोयेन सर्पिःसिद्धं पिबेच्च सा ॥

सक्षारं त्र्यूषणं सर्पिः प्रपिबेदस्त्रगुल्मिनी ॥

Caraka Samhitā, Cikitsā, 5-173.

Bhāvaprakāśa, Gulmādhikāra, 32-50/51.

प्लीहरोगे पलाशक्षारम्

पलाशक्षारतोयेन पिप्पली परिभाविता ।

प्लीहगुल्मार्त्तिशमनी वह्निमान्द्यहरी मता ॥

Bhāvaprakāśa, Plīhayakṛdadhikāra, 33-14.

कासे

पलाशोदुम्बरफलं मरिचैः सहभक्षितम् ।

कासं हरेत् त्रिभिवारिः कायक्लेशकरं निशि ॥

Vaidya Mārtaṇḍa, 3-16.

पलाशशाकं तैलञ्च

‘किंशुकं कफपित्तघ्नम् ।’

Suśruta Samhitā, Sūtra, 46.

‘पलाशतैलानि मधुरकषायाणि कफपित्तप्रशमनानि ।’

Suśruta Samhitā, Sūtra, 45.

कुष्ठगुल्मोदराशोघ्नं कटुपाकि तथैव च ।

करञ्जकिंशुकारिष्टफलं जन्तुप्रमेहजित् ।

किंशुकं (शाकं) कफपित्तघ्नम् ॥

Suśruta Samhitā, Sūtra, 46.

रसायने

पलाशबीजानि विडङ्गयुक्तान्युन्मिश्रितान्यामलकीफलानाम् ।

रसेन मध्वाज्ययुतानि पीत्वा वृद्धोऽपि मासात्तरुणत्वमेति ॥

Rājamārtaṇḍa, 33-5.

ब्रह्मवृक्षकल्पः

- क. ब्रह्मवृक्षस्य पञ्चाङ्गं छायाशुष्कं सुचूर्णितम् ।
मध्वाज्याभ्यां लिह्येत्कर्षं वर्षकेन जरां भवेत् ॥
जीवेद्वर्षसहस्रैकं दिव्यतेजा महाबलः ।
- ख. ब्रह्मवृक्षस्य पत्राणि छायाशुष्काणि कारयेत् ॥
त्रिंशत्पलं तु तच्चूर्णं चतुर्विंशत्पलं घृतम् ।
एकीकृत्यं क्षिपेद् भाण्डे तं रुध्वा धान्यराशिनम् ।
कृत्वा मासात्समुद्धृत्य भागात् कुर्याच्चतुर्दशः ।
भागैकं भक्षयेन्नित्यं भुञ्जीत कान्तभाजने ॥
एकमासत्रयं कुर्यात् वज्रकायो भवेन्नरः ।
तस्य मूत्रपुरीषाभ्यां ताम्रमायाति काञ्चनम् ॥
- ग. ब्रह्मवृक्षस्य बीजानि चूर्णितानि घृतैः सह ।
पूर्ववद् धान्यमध्ये तु क्षिप्त्वा मासात्समुद्धरेत् ॥
पलमेकं सदा खादेद् वत्सरान्मृत्युजित् भवेत् ।
वलीपलितनिर्मुक्तो जीवेद् ब्रह्मदिनत्रयम् ॥
ब्रह्मबीजोत्थितं तैलं गवां क्षीरैः पलद्वयम् ।
तुल्यैः पिबेद् भक्षयेन्मूर्च्छां सिञ्चेत्तस्य मुखे पयः ॥
बीजे क्षीरौदनं दद्यात् मासाज्ज्ञानी भवेन्नरः ॥

पुंसवने

पत्रमेकं पलाशस्य पिष्ट्वा दुग्धेन गर्भिणी ।
पीत्वा मध्वाज्ययुतानि पीत्वा वृद्धोऽपि मासात्तरुणत्वमेति ॥

Bhāvapraṇāśa, Cikitsā, 70-30.

पलाशमूलं बीजञ्च

पलाशमूलस्वरसो नेत्रच्छायामान्ध्यपुष्पजित् ।
तद्बीजं कृमिविध्वंसि हितः काण्डो रसायने ॥

Sodhala.

पैत्तिकशूले

‘पालाशं धान्वनं वापि पिबेद्यूषं सशर्करम् ।’

Sūsruta Samhitā, Uttara, 42-107.

पुत्रगर्भधारणार्थम्

पत्रमेकं पलाशस्य पिष्ट्वा दुग्धेन गर्भिणी ।

पीत्वा पुत्रमवाप्नोति वीर्यवन्तं न संशयः ॥

Bhāvaprakāśa, Yonirogādhikāra, 70-30.

गुल्मप्लीहयोः

पलाशक्षारतोयेन पिप्पली भाविता शुभा ।

गुल्मप्लीहार्तिशमनी आग्निदीप्तिकरी स्मृता ॥

Vṛnda, Udarādhikāre.

श्लीपदे

‘पलाशमूलस्वरसं पिबेद्वा तैलेन तुल्यं सितसर्षपाणाम् ।’

Vṛnda mādhyama, Ślīpadādhikāra, 42-13.

पित्ते

पलाशवृन्तमाहृत्य दध्ना कांस्ये निधापयेत् ।

आश्च्योतनं श्लेष्महरं पक्ष्मणां च प्ररोहणम् ॥

Śodhala, Netrarogādhikāra.

प्रसूतायोनिदृढीकरणे

पलाशोदुम्बरफलं तिलतैलसमन्वितम् ।

योनौ विलिप्तं मधुना गाढीकरणमुत्तमम् ॥

Bhāvaprakāśa, Yonirogādhikāra, 70-129.

गर्भाधाननिवारणार्थम्

ऋतौ घृतक्षौद्रयुतैः पलाशबीजैः प्रलेपं मसृणप्रपिष्टैः ।

करोति या स्त्री भगन्ध्रमध्ये न सा भवेद् गर्भवती कदाचित् ॥

Śodhala, Gadanigraha, 6-1-60, Pradarādhikāre.

अन्त्रवृद्धिशमनाय

‘अन्त्रवृद्धिशमनाय किंशुकत्वक्कषायमपि पाययेच्छिशुम् ।’

Vaidya Manoramā.

योनिगाढीकरणार्थम्

पलाशोदुम्बरफलं तिलतैलसमन्वितम् ।

मधुना योनिमालिष्य गाढीकरणमुत्तमम् ॥

Baṅgasena.

नेत्ररोगे पैत्तिककाचे

‘पलाशरोहीतमधूकजाः रसाः क्षौद्रेण युक्ता मदिराग्रमिश्रिताः ।’

Suśruta Samhitā, 17-41.

वृश्चिकदंशने

‘अर्कक्षीरेण सम्पिष्टं लेपाद्वीजं पलाशजम् ।
वृश्चिकार्तिं हरेदाशु..... ॥’

Baṅgasena.

‘पलाशबीजं शूलघ्नो लेपोऽर्कक्षीरभाविताम् ।’

Aṣṭāṅga Saṅgraha, Uttara, 43-70.

रक्तगुल्मे

‘पलाशक्षारतोयेन सर्पिःसिद्धं पिबेच्च सा ।’

Bhāvaprakāśa, Cakradatta, 30-47.

अर्शःसु

व्योषगर्भं पलाशस्य त्रिगुणं भस्मवारिणि ।
साधितं पिबतः सर्पिः पतन्त्यर्शस्यसंशयम् ॥

Bhāvaprakāśa.

कृमिरोगे

पलाशबीजं स्वरसं पिबेद् वा क्षौद्रसंयुताम् ।
पिबेत्तद् बीजकल्कं वा तत्रेण कृमिनाशनम् ॥

दाहज्वरे

अम्लपिष्टैः सुशीतिर्वा पलाशतरुजैर्दिहेत् ।
बदरीपल्लवोत्थेन फेनेनारिष्टकेन च ॥

Vṛndamādhava, 1-102.

पलाशस्य बदर्या वा निम्बस्य मृदुपल्लवैः ।
अम्लपिष्टैः प्रलेपोऽयं हन्याद् ज्वरम् ॥

Bhāvaprakāśa, Cikitsā, 1-360.

पुष्पाख्ये नेत्ररोगे

पलाशपुष्पस्वरसैः बहुशः परिभाविताम् ।
करञ्जबीजं तद्वर्तिः दृष्टेः पुष्पं विनाशयेत् ॥

Bhāvaprakāśa, Cikitsā, 63-205.

वीर्यवर्द्धनार्थम्

पत्रमेकं पलाशस्य पिष्ट्वा दुग्धेन गर्भिणी ।
पीत्वा पुत्रमवाप्नोति वीर्यवन्तं न संशयः ॥

Bhāvaprakāśa.

समुद्रफेनघर्षणजनितशोफे

अम्भोधिफेनकषणाकुपितानुगुत्थं

यन्मण्डलं भवति तच्छिशिराम्बुपिष्टैः ।
 बीजैः प्रणश्यति पलाशतरोः प्रलितं
 सान्ध्यं यथा तिमिरमिन्दुकरोपगूढम् ॥

Rāja Mārtaṇḍa.

अतिसरे

पलाशफलनिर्यूहं पयसा पाययेत् तनु ।
 ततोऽनुपाययेत्कोष्णं क्षीरमेव यथाबलम् ॥
 प्रवाहिते मले तेन प्रशाम्यत्युदरामयः ॥

Caraka Samhitā, Cikitsā, 19-59/60.

पलाशफलनिर्यूहं युक्तं वा पयसा पिबेत् ।
 ततोऽनु कोष्णं पातव्यं क्षीरमेव यथाबलम् ॥

Aṣṭāṅga Hṛdaya, Cikitsā, 9-68.

अर्शःसु

‘त्रिवृहदन्ती पलाशानां.... ।
 सुभृष्टयमके दद्याद् शाकं दधिसरायुतम् ॥’

Caraka Samhitā, Cikitsā, 9-122.

रक्तपित्तप्रतिकारार्थम्

पलाशवृन्तस्वरसे तद्रर्भञ्च घृतं पचेत् ।
 सक्षौद्रं तच्च रक्तघ्नं तथैव त्रायमाणया ॥

Aṣṭāṅga Hṛdaya, Cikitsā, 2-43.

त्वग्रोगे कुष्ठे च

पलाशनिर्दाहरसेन चापि कर्षोद्धृतान्याढकसम्मितेन ॥
 दर्वीप्रलेपं प्रवदन्ति लेपमेतं परं कुष्ठनिषूदनाय ॥

Caraka Samhitā, Sūtra, 3-16.

कृमिषु

‘पलाशबीजस्वरसं कल्कं वा तण्डुलाम्बुना ।’

Suśruta Samhitā, Uttara, 54-25.

रक्ताभिष्यन्दे पिल्ले

‘रसक्रियां वा....पलाशपुष्पैः.... ।’

Suśruta Samhitā, Uttara, 12-50.

रक्तपित्ते

‘पलाशवृक्षस्वरसे विपक्वं सर्पिः पिबेत्क्षौद्रयुतं
 वनस्पतीनां स्वरसैः कृतं वा सशर्करं क्षीरघृतं पिबेद् वा ।

सुशीतम् ।'

Suśruta Samhitā, Uttara, 45-29.

PANASA

Botanical name

Artocarpus heterophyllus Lam.

Syn. *Artocarpus integra* (Thunb.) Merrill.

Artocarpus integrifolia auct. non L.

Family : Moraceae

Classical name : Panasa

Sanskrit names

Panasa, Kaṇṭakiphala, Atibṛhatphala, Āmāśaya-phala, Phalavṛkṣaka, Palasa.

Regional names

Katahal (Hindi); Kantal (Beng.); Phanas (Mar., Guj.); Pilparum (Tam., Tel.); Halasu (Kann.); Chakka (Mal.); Vakki (Pers.); Jack Tree (Eng.).

Description

Glabrous, evergreen trees, 50-60 feet high. Leaves leathery, bright, oblong, coriaceous, stipule leaving an annular scar behind. Syncarp large, cylindrical, densely and uniformly covered with numerous short, hard, greyish, echinate processes; hanging on a rope like, short stalk emerging from trunk and short branches.

Tree bark exudates milky juice (resinous gum). Fruit 12-30 inches long 6-18 inches diam. (or sometimes more and bigger in size and weight exceeds from 5 to 25 kgs) Seeds about 1 inch long, kidney-shaped, covered with skin-like seed-coat; embedded in white fruit pulp (in raw or unripe fruit) and ripe fruit with yellowish pulp (sweet).

Flowering and fruiting time

Plant flowers and fruits during the period from November to May.

Distribution

It is grown in almost throughout India specially in warmer regions of country; Bihar, Uttar Pradesh, Kerala,

Southern India, Central India and other areas. Commonly planted in gardens, house premises and other places for vegetable and edible-fruit.

Chemical composition

Fruit contains protein 1.9, moisture 77.2, fat 0.1, Carbohydrate 18.9, fibres 1.1, minerals 0.8, calcium, phosphorous 0.03 per cent; fruits contain iron 0.5 mg., vitamin A 540 I.U. and vitamin C 10 mg. Seeds content 51% of fruit; seeds contain moisture 51.6, protein 6.6, fat 0.4, carbohydrate 38.4, fibres 1.5, mineral 1.5, calcium 0.05 and phosphorous 0.13 per cent; seed contains iron 1.2 mg. per 100 gm.

Bark contains tannin 3.3%. Gum exuded contains 42.6-86.4% resin. Dried exude contains a crystalline substance artostenone.

Wood gives a yellow colouring matter morin and cyanomacluxin.

Pharmacodynamics

Rasa	: Madhura, kaṣāya
Guṇa	: Guru, Snigdha
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Pittaśāmaka Kaphavātavardhaka (apakva phala-unripe fruit) Vātapittaśāmaka (pakva phala-ripe fruit).

Properties and action

Karma	: Viṣṭambhī-durjara (phala-fruit) Rucya-tarpaṇa Stambhana (tvak-bark) Śukravardhana (fruit) Raktastambhana (fruit) Tvagdoṣahara (ripe fruit) Viṣaghna (patra-leaves) Balya (ripe fruit) Śothahara-vraṇapācana (kṣīra-latex) Vṛṣya (bīja-seeds) Vaktraviśodhana (puṣpa-flowers)

Nirasa (bāla phala-raw or immature small fruit)

Hṛdya (madhyapakva phala-semi mature or ripe fruit)

Dipana (pakvaphala-ripe fruit).

Roga

: Atisāra

Raktapitta

Śukradourbalya

Carmavikāra

Dourbalya-kṛṣatā

Granthiśoṭha-vraṇa-kṣata

Viṣa

Śrama-dāha

Kṣata.

Therapeutic uses

The fruit of drug Panasa (phala) is viṣṭambhi that forms wind (vāta-janana in koṣṭha) in gastro-intestinal tract resulting into flatulence (ādhmāna) and it is also durjara (not easily digestible) that takes extra time (or more than normal time) in digestion being guru (heavy) and snigdha (unctuous) in nature or properties (guṇa). It is useful as a drug as well as a common vegetable-fruit vegetable (phala śāka) which is largely consumed among household dietary articles; it generally used in food after cooking (like wise other vegetable) and it is also eatable when fruit ripens and pulp becomes sweet and yellowish. Pieces of fruit pulp when raw in white colour are also pickled. Panasa fruit is widely relished in diet. The properties of fruit in both stages-raw and ripe (pakvāpakva), seed (bīja), pulp (majjā), flowers (puṣpa) and also in three stages (or age) of maturity of fruit (bāla or young, madhya pakva or semi-ripe and pūrṇapakva or fully matured) are specified in texts.

The drug Panasa is useful in various ailments on account of the medicinal properties of different parts of Panasa including fruits which are medicinally effective.

The latex (milky juice) of Panasa is applied in śoṭha and as vraṇa-pācana for allaying glandular swelling and inflammation of boil (vraṇaśoṭha). Ripe fruit is useful in in-

trinsic haemorrhage (raktapitta), seminal troubles (weakness) being vṛṣya specially śukrajanana (increasing or generating quantity and quality of semen). Fruits are unwholesome (apathya) in abdominal diseases (udaravikāra).

The decoction of bark is given in diarrhoea (atisāra). A decoction of leaves and roots is taken in skin diseases. Ripe fruit may be useful in ailments caused by vātakapha doṣa (but usable by keeping its property of uneasy digestability in view). Fruits are balya, bṛmhaṇa, tarpaṇa, māmśala, and dāhahara. Seeds are also medicinally useful.

Parts used : Fruit, bark, leaves, flowers, seeds, latex.

Dose : Decoction 50-100 ml.

PANASA (पनस)

क. पनशः कण्टकिफलः पलसोऽतिबृहत्फलः ।

ख. पनसं शीतलं पक्वं स्निग्धं पित्तानिलापहम् ॥
तर्पणमेव विष्टम्भि वातलं तुवरं गुरु ।
बल्यं शुक्रप्रदं हन्ति रक्तपित्तक्षतव्रणान् ॥

श्लेष्मातकसदृशसदृशकपत्रः स्यात् कण्टकिफलस्तथा ।

पनसस्त्वाशयफल फल आशयो गर्भकण्टकः ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 462.

पनसगुणाः

पनसं तुवरं स्वादु गुरु विष्टम्भि वातलम् ।

पनसपुष्पम्

तिक्तं पनसपुष्पं तु गुरु वक्त्रविशोधनम् ॥

पनसफलम्

पनसस्य फलं बालं कफमेदोविवर्धनम् ।

वातपित्तहरं बल्यं दाहघ्नं मधुरं गुरु ॥

तद्विशेषाद्विवर्ज्यं स्याद् गुल्मिभिर्दुर्बलाग्निभिः ।

पनसपक्वफलम्

रक्तपित्तहरं पक्वं विपाके स्वादु शीतलम् ॥

तर्पणं बृंहणं वृष्यं मांसलं श्लेष्मलं भृशम् ।
बल्यं स्निग्धं जयेद् वातं क्षतरक्तक्षयानपि ॥

पनसबीजम्

पनसोद्भूतबीजानि वृष्याणि मधुराणि च ।
गुरुणि बद्धवर्चांसि सृष्टमूत्राणि तानि च ॥

पनसमज्जा

मज्जा तस्यापि पित्तघ्नो वृष्यः श्लेष्मानिलापहः ।

Kaiydeva Nighaṇṭu, Oṣadhi varga, 463-468.

पनसः

पनसस्तु महासर्जः फलितः फलवृक्षकः ।
स्थूलः कण्टफलश्चैव स्यान्मूलफलदः स्मृतः ।
अपुष्पफलदः पूत-फलो ह्यङ्गमितस्तथा ॥

पनसगुणाः

पनसं मधुरं सुपिच्छिलं गुरु हृद्यं बलवीर्यवृद्धिम् ।
श्रमदाहविशोषनाशनं रुचिकृद्ग्राहि च दुर्जरं परम् ॥

पनसबीजगुणाः

ईषत्कषायं मधुरं तद्बीजं वातलं गुरु ।
तत्फलस्य विकारघ्नं रुच्यं त्वग्दोषनाशनम् ॥

Rāja Nighaṇṭu, Āmrādi varga, 32-34.

पक्कापक्कतोविभिन्नावस्थतया विशेषगुणाः

बालं तु नीरसं हृद्यं मध्यपक्वं तु दीपनम् ।
रुचिदं लवणाद्युक्तं पनसस्य फलं स्मृतम् ॥

Rāja Nighaṇṭu, Āmrādīphala varga, 35.

PANASĪ-ANĀNĀSA

Botanical name : Ananas comosus (Linn.) Merr.

Family : Bromeliaceae

Classical names : Panasī-Panasaphala, Bahunetrāphala.

Common name : Ananas

Sanskrit names

Bahunetrāphala, Panasī-Panasaphalā, Ekaphala,
Anānāśa, Tarpaṇaphala.

Regional names

Ananas, Katahal saphari (Hindi); Anaras (Beng.); Annas (Mar.); Anannas (Guj.); Anashapajham (Tam.); Ananasha (Tel.); Enunnas (Tel.); Pine-apple (Eng.).

Description

Erect-herb, biennial, 60 cm. (2 ft.) tall, appearing like aloe plant (ghṛtakumari). Rosette of leaves arises from middle of plant. Leaves 1-2 or 2-3 feet long, dentate, thin but strongly fibrous. Scaly conical spike; gradually developed and turned into a flesh fruit resembling with jack fruit (panasa); green when raw or unripe, turning yellow orange when ripens; single fruit with crowns; fruit of about 1-2 kgs. weight; rough surface with eye-signs. Seeds ovoid, flat. Fruit pulp yellowish-reddish, fleshy, tasty, sweet-sour.

Flowering and fruiting time

Plants flower in post-summer season and fruit during rains.

Distribution

Plant is native of south America (Brazil). In India (introduced by Portugese), it is cultivated widely in Malabar, Bengal, Assam, Orissa, western coastal region and some other areas. Western coastal region is fruit producing belt. Largely cultivated for commonly edible fruit popular as pine-apple.

Kinds and varieties

There are about 90 varieties of pine-apple which are broadly categorised as queen, capene and spanish. Varieties of first two categories are prevalent in India.

Chemical composition

Fruit contains bromelin, a digestive enzyme which is equally active in acidic and alkaline media. Proteid digesting ferment and milk curding ferment are present.

Ash contains phosphoric acid, calcium, iron, sodium and potassium salts.

Pharmacodynamics

Rasa	: Madhura (ripe fruit); Amla (unripe fruit)
Guṇa	: Guru, Snigdha
Vīrya	: Śīta

Vipāka	: Madhura
Doṣakarma	: Vātapittaśāmaka

Properties and action

Karma	: Mūtravirecanīya-aśmaribhedana Tarpaṇa Dāha-trṣṇā-santāpaśāmaka Hṛdya-raktapittaśāmaka Rocana-dīpana-pācana-anulomana Tivra recana-kṛmighna (unripe fruit-apakva phala) Garbhāśayottejaka-ārtavajanana- garbhapātakara (higher dose) Jvaraghna Balya.
Roga	: Aśmarī-mūtrakṛcchra Aruci-udaraśūla-amlapitta-vibandha Kāmalā Hṛdroga Kaṣṭārtava-rajorodha Jvara-trṣṇā-dāha-santāpa Kṛmiroga Dourbalya

Therapeutic uses

The drug Panasī or Anānāsa is diuretic; it is useful in dysuria and calculus (mūtrakṛcchra and aśmarī). It is cardiac and allaying intrinsic haemorrhage (raktapitta). Fruit is useful as tonic and given in debility. Syrup (sherbet) and murabbā are benefecial for using by heart patients.

The juice of fruit is taken in anorexia, dyspepsia, abdominal colic, hyperacidity, jaundice, constipation, excess thirst, heat and burning sensation. As an emmenagogue, the juice of raw (unripe) fruits is given in dysmenorrhoea and painful scanty menses. Unrip fruit juice (āmaphalarasa) is used in worms (Kṛmiroga).

Fruits are commonly relished as popular, tasty and nutritive fruits.

Parts used : Fruit, leaves.

Dose

Fruit juice 25-50 ml. (23.32-58.31 g.), Leaves juice 11.66-23.32 g.

Formulations

Syrup, Aqua and Murabbā of Anānās (pine-apple).

PANASĪ-ANĀNĀSA (पनसी-अनानास)

बहुनेत्रफलं चाम्लं कृमिघ्नं मधुरं सरम्।

बल्यं वातहरं रुच्यं श्लेष्मलं तर्पणं गुरु॥

Rājavallabha Nighaṇṭu, Phalavarga.

PĀRASĪKA YAVĀNĪ

Botanical name : Hyoscyamus niger Linn.

Family : Solanaceae

Classical name : Pārasīka yavānī

Sanskrit names

Pārasīka yavānī, Yāvanī, Turuṣkā.

Regional names

Khurasani ajwayan (Hindi); Khurasani ajavain (Punj.); Khurasani ova (Mar.); Khurasani ajma (Guj.); Agarbhang (Ka.); Kurasani momam (Tam.); Kurasani yamani (Tel.); Bajulbajj (Arabic); Tukhonbang (Pers.); Henbane (Eng.).

Description

Erect, more or less hairy, 30 cm. to 1 meter (or upto 5 ft.) tall herb with a disagreeable odour, viscidly hairy, foetid, annual or bi-annual.

Leaves radical and cauline, coarsely dentate or pinately lobed, leaves spreading, stalked oblong ovate, 15 to 20 cm. long, toothed. Stem-leaves smaller, sessile, ovate, irregularly pinnated passing into bracts.

Flowers pale-yellow, green, veined with purple and darker in the centre may arise in the furks of branches or in the axils of leaf-like bracts. Fls. yellowish green, sessile or

sub-sessile, in terminal scorpioidal cymes, pyxidium 0.5 in. diam. Calyx and corolla 5-toothed; stamens 5, protruding and style larger than the stamens.

Fruits capsule, 1 cm. in diam. and enclosed in calyx. Seeds numerous, minute, oval or slightly kidney-shaped, c. 1.5 mm. long, brown, marked with fine but conspicuous reticulations.

Flowering and fruiting time

Farming seasons. Flowering and fruiting during the period from July to August.

Distribution

Plant occurs in the Himalayas from Kashmir to Kumaon in Western Himalayan zone. Cultivation in Kashmir, Punjab, Uttar Pradesh, Nilgiris and Maharastra and some other areas.

Chemical composition

Seeds yield fixed oil 25-30%. Leaves and flowers contain alkaloids hyoscyamine and hyoscine. Atropine and scopoline are also found in lesser quantity or traces. Bi-annual herbs, root contains atropine. Proportion of alkaloidal content in different parts of herb is estimated as following : 0.16, 0.045, 0.08, 0.07-0.10 and 0.06-0.10 in roots, leaves, flowers and seeds respectively. The principle alkaloids present in various parts of henbane are hyoscyamine and hyoscine or scopolamine.

The roots contain highest concentration of alkaloids at the end of vegetative period and the secondary roots are richer in alkaloids than primary roots. Roots-bark contains more alkaloids than the wood. Alkaloidal content of the leaves increase with maturity and reaches the maximum at the time of flowering after which it decreases.

Pharmacodynamics

Rasa	: Tikta, kaṭu
Guṇa	: Rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphāvātāśāmaka Pittavardhaka.

Properties and action

Karma	: Mādaka-vedanāsthāpana- ākṣepahara Krimighna Nidrājanana-sāmaka Śūlapraśamana Hṛdayāvasādaka (lower dose)- hṛdayabalya-raktastambhana Kaphaghna-śvāsahara Mehaghna-aśmarighna Kāmāvasādaka (anaicchika)- vṛṣya (kāmaśaktivardhana) Vyavāyi-vikāśi-dhātuśoṣaṇa Ārtavanīyāmaka.
Roga	: Unmāda-anidrā- mastiṣkāvaraṇaśoṭha-śūla-prālāpa Vāta pradhāna- śothavedanāyuktavikāra Udaravikāra-gulma-śūla-ānāha Kṛmiroga Hṛddourbalya-raktasrāva Kāsa-śvāsa Bastiśoṭha-aśmarī-hastimeha- prameha Svapnadoṣa-śighra vīryapatana- atikāmeccā Aniyamitārtava.

Therapeutic uses

The drug Pārasika yavānī is anodyne, anti-phlogistic, carminative, narcotic, sudorific, mydriatic and sedative. It is used in amenorrhoea, asthma, calculus, colic, insomnia, nervous affections, spermatorrhoea and whooping cough. The drug is used for inducing sleep and relief from shock and pain.

The seeds of plant forms drug Pārasikayavānī bīja administered internally against intestinal worms in Indigenious systems of medicine. Plant drug is given in diabetes alongwith other ingredients. Dried leaves and flowers are sometimes used (smoking) like ganja.

The therapeutical value of hyoscyamine and other alkaloids are described in pharmacopocial compendia and other relevant works. It has sedative action in nervous affections and irritable conditions. Hyoscyamine is anodyne, narcotic and myariatic drug which is used in specific respiratory complaints such as asthma and whooping cough. It is also counteracting the griping action of purgative and helping to relieve spasm in urinary tract. Larger quantity of hyoscyamine produces a central nervous effect.

The crude form of plant drug is administered in various diseases in Indian medicine (specially leaves, flowers or flowering tops and seeds) particularly in ailments of nervous urinary, respiratory, circulatory and reproductive systems and digestive system.

Parts used : Seeds, leaves, flowers.

Dose : Seeds powder .25 - 1 gm. (250 mg. - 1 gm.).

Formulation : Pārasīkādi cūrṇa.

PĀRASĪKA YAVĀNĪ (पारसीक यवानी)

चौहारः कटुकस्तिक्तः तीक्ष्णोष्णो दीपनो लघुः ॥

त्रिदोषशमनो वृष्यो जीर्णामृमिशूलनुत् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1206-1207.

पारसीकयवानी तु यवानीसदृशी गुणः ।

विशेषात्पाचनी रुच्या ग्राहिणी मादिनी गुरुः ॥

Bhāvaprakāśa Nighaṇṭu, Harītakṣādi varga, 80.

पारसीकयवानिका पीता पर्युषितवारिणा प्रातः ।

गुडपूर्वा कृमिजातं कोष्ठगतं पातयत्याशु ॥

Cakradatta.

रतिवर्द्धनार्थं कामेश्वरमोदकम् (घटकद्रव्यम्)

‘एतस्मिन् रतिवल्लभे यदि पुनः सम्यक्खुराशाणिका ।

.....तच्चूर्णाद्धा विजया तदा सहि भवेत्कामेश्वरी मोदकः ॥’

Bhāvaprakāśa, Vāṇikaraṇādhikāra, 72-39.

क्रिमिरोगे

पारसीकयवानी पीता पर्युषितवारिणा प्रातः ।

गुडपूर्वा कृमिजालं कोष्ठगतं पातयत्याशु ॥

Vṛndamādhava, 7-1.

PĀRIBHADRA

Botanical name

Erythrina variegata Linn. var. *orientalis* (Linn.) Merrill.,

Syn. *Erythrina indica* Lam.

Family : Leguminosae/Papilionaceae (Fabaceae)

Classical name : Pāribhadra

Sanskrit names

Pāribhadra, Kaṇṭaki palāśa, Raktapuṣpa, Prabhadra, Mandāra, Pārijāta, Bahupuṣpa, Raktakesara, Nimbataru.

Regional names

Pharhad (Hindi); Palte madar (Beng.); Pangara (Mar.); Pararu (Guj.); Kaliyam (Tam.); Vadachipa chettu (Tel.); Indian coral tree (Eng.).

Description

***Erythrina variegata* L. :** Deciduous tree armed with short sharp conical black prickles arising from woody tubercles; bark thin, yellowish; wood white, soft. Branches or woody sticks or twigs quite weak or breakable (suggesting care in tree climbing).

Leaves glabrescent, 3-foliolate; petioles 10-20 cm. long, unarmed; leaflets broadly ovate or rhomboid, acuminate, entire, 10-20 cm. long and broad, membranous, glabrescent, lateral ones oblique.

Racemes 10-15 cm. long, clustered at the end of leafless branchelets. Calyx spathaceous, recurved, truncate at mouth, 5-toothed at the narrow tip; calyx clothed with deciduous tomentum, mouth very oblique. Corolla bright scarlet, standard much larger than wings and keel. Peduncles stout, woody, upto 15 cm. long. Flowers appear when plant becomes leafless.

Pods 15-30 cm. long, curved, torulose, beaked, 6-12-seeded.

Flowering and fruiting time

Plant flowers in spring or February-March and its fruiting stages begins onwards in summers or April-May. Blooming begins by leafless stage of plant.

Distribution

Plant occurs in tropics of Asia and Australia. It is found in almost India in forests in wild as well as in planted state in gardens, park and campus or avenues.

Plant is regarded as an ornamental for showy flowers. Plant is propagated by cuttings or seeds.

***Erythrina stricta* Roxb.**

Large deciduous trees, armed with sharp prickles arising from woody lamellate tubercles. Leaves pinnately 5-foliolate, sometimes armed; petioles 5-15 cm. long; leaflets broadly rhomboid-ovate, 7.5-15 cm. long and broad, glabrous above, densely pubescent beneath; lateral ones, obliquely deltoid. Racemes clustered at the ends of leafless branchlets. Calyx spathaceous, split half way down on one side, 6-10 mm. long, pubescent. Corolla scarlet, standard linear-lanceolate, 3.7-5 cm. long; keel ovate-lanceolate; wings falcate, acuminate. Pods 10-15 cm. long, stipitate, suburgid, 2-3-seeded.

Flowering and fruiting time

Plant flowers and fruits during colder months to hotter months. Flowers in springs and fruits in summers.

Chemical composition

The leaves are reported to contain a non-nitrogenous inert substance m. p. 83° and a mixture of alkaloids; they contain hypaphorine arisodine; arisotrine and arithreyoline.

The bark contains resin, fixed oil and fatty acids (0.60%), alkaloids (0.05%) including hypaphorine which is an inert alkaloid (decomposing at 97°), betaine and potassium carbonate.

The seeds contain a fixed oil; the oil extracted from red-coloured seeds (yield 11.3% on air-dry material) is pale yellow in colour; the seeds contain almost all the three alkaloids in leaves and bark. The proportion of these alka-

loids present is 0.11, 0.035 and 0.082 respectively in bark, leaves and seeds.

The seeds oil contains saturated and unsaturated fatty acids (oleic 53.42 and linoleic 9.87) 36.7 and 63.3% respectively. Fixed oil from seeds of white kind is redish in colour.

Pharmacodynamics

Rasa	: Kaṭu, tikta
Guṇa	: Laghu
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma.

Properties and action

Karma	: Karṇya (karṇarogahara) Śothahara-vraṇaśodhana Maṣṭiṣkaśāma-ākṣepahara- nidrājanana Rocana-dīpana-pācana-anulomana- śūlahara Pittasrāvajanana Kṛmighna Raktaprasādana-śothahara Kaphaniḥsāraka Mutrājanana Vājikaraṇa Medohara Kupiluviṣa pratirodhī Jvaraghna Vātaghna
Roga	: Karṇaroga Granthiśotha-vraṇaśotha- netrābhiṣyanda Ākṣepaka-anidrā Aruci-agnimāndya-śūla-kṛmi- vibandha Amlapitta Raktavikāra-phiraṅga-upadamśa Kāsa Mūtra kṛcchra-mūtrāghāta

Medoroga
 Avabāhuka
 Kaṣṭārtava-dhvajabhaṅga
 Kuṣṭha
 Bālagraha (pūtanāpratiṣedhaka)
 Jvara.

Therapeutic uses

The drug Pāribhadra is anthelmintic, carminative, and hypoglycaemic. It is used in anorexia, ear diseases, helminthic manifestations, inflammation, intestinal worms and obesity.

The leaves are laxative, diuretic, anthelmintic, galactagogue and emmenagogue. They are applied externally for dispering venereal buboes and relieving pain in joints. The fresh-juice of the leaves is applied for relieving earache and as anodyne in toothache. The leaf-juice is also applied to kill worms in sores. Pāribhadra is indicated in amlapitta (hyperacidity).

The seeds are poisonous when raw (seeds containing hypaphorine) and they may be eaten after boiling and roasting.

For medicinal purposes, the bark and leaves are generally used in treatment of various diseases. Leaves juice is dropped into ears for checking earache, and it is applied to glandular, joints swelling and conjunctivitis. Leaves are also given in some other ailments.

Bark is useful in dysuria, urinary anomalies, obesity, cough, blood impurities, syphilis, gonorrhoea, dyspepsia, colic, worms and constipation. The drug is also useful in scanty menses, impotency, insomnia, fever, leprosy and other ailments. Pāribhadra is also suggested against kupilu viṣa.

The leaves and tender shoots of the plant are eaten as pot-herb. Leaves are valued as cattle fodder of nutritious category.

The bark yields a pale yellow fibre suitable for cordage. Plant has much value as cultivated ornamental plant for showy and beautiful flowers carrying an aesthetic importance, other than medicinal properties as the flowers or

pāribhadra puṣpa are specifically indicated for allaying biliary complaints and ear-diseases (Kaiyadeva Nighaṇṭu, Oṣadhi, 899) for which the leaves or pāribhadra patra are also suggested in other texts of materia medica (Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi. 100).

Parts used : Fruit, roots.

Dose : Juice 10-20 ml., Decoction 50-100 ml.

Formulation : Pāribhadrāvaleha.

PĀRIBHADRA (पारिभद्र)

क. पारिभद्रो निम्बतरुर्मन्दारः पारिजातकः ।

ख. पारिभद्रोऽनिलश्लेष्मशोधमेदः कृमिप्रणुत् ।

तत्पत्रं पित्तरोगघ्नं कर्णव्याधिविनाशनम् ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 100.

पारिभद्रः

निम्बद्रुमो रक्तपुष्पः प्रभद्रः पारिभद्रकः ।

मन्दारकः पारिजातः कण्टकी कण्टकिंशुकः ॥

पारिभद्रगुणाः

पारिभद्रोऽनिलश्लेष्मशोधमेदः कृमीन् हरेत् ।

पारिभद्रपुष्पम्

तत्पुष्पं पित्तरोगघ्नं कर्णव्याधिविनाशनम् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 898-899.

पारिभद्रः

अ. अथ भवति पारिभद्रो मन्दारः पारिजातको निम्बतरुः ।

रक्तकुसुमः क्रिमिघ्नो बहुपुष्पो रक्तकेसरो वसवः ॥

ब. पारिभद्रः कटूष्णः स्यात् कफवातनिकृन्तनः ।

अरोचकहरः पथ्यो दीपनश्चापि कीर्तितः ॥

Rāja Nighaṇṭu, Śālmalyādi varga, 19-20.

बालग्रहे पूतनाप्रतिषेधे

कपोतवंकाऽरलुको वरुणः पारिभद्रकः ।

आस्फोता चैव योज्याः स्युः बालानां परिषेचने ॥

Suśruta Samhitā, Uttara, 32-3.

अवबाहुके

‘.....अथ पारिभद्रात् । स्वरसं पिबेद् वा ।’

Gadanigraha, 2-19-127.

क्रिमिरोगे

पारिभद्रकपत्राणां क्षौद्रेण स्वरसं पिबेत् ।

पत्तूरस्वरसं वापि पिबेद् वा सुरसादिजम् ॥

Suśruta Saṁhitā, Uttara, 54-26.

पारिभद्रकपत्रोत्थं रसं क्षौद्रयुतं पिबेत् ।

केम्बुकस्य रसं वापि पत्तूरस्याथवा रसम् ॥

Vṛndamādhava, 7-2.

मूत्राघाते

पाटल्या यावशूकाच्च पारिभद्रात्तिलादपि ।

क्षारोदकेन मदिरां त्वगेलोषणासंयुताम् ॥

पिबेद् गुडोपदंशान् वा लिह्यादेतान् पृथक् पृथक् ॥

Vṛndamādhava, 33-2.

अम्लपित्ते

पारिभद्रदलानीति चामलक्याः फलानि च ।

क्वाथपानं प्रयोक्तव्यमम्लपित्तं व्यपोहति ॥

Hārīta Saṁhitā, 24-4.

PĀRIJĀTA

Botanical name : *Nyctanthes arbortristis* Linn.

Family : Oleaceae

Classical name : Pārijāta

Sanskrit names

Pārijāta, Śephāli, Nālakuṇkumaka, Rāgapuṣpī, Kharapatraka, Hāraśṛṅgāra, Prājakta, Śephālikā, Hāra-śṛṅgārapuṣpaka.

Regional names

Harshingar, Seoli, Harasingar (Hindi); Sephalika, Seoli (Beng.); Khurasli, Parijatak (Mar.); Jayaparvati (Guj.); Kapilana gadustu, Pagadamalle (Tal.); Manjhapu (Tam.); Harsing (Kan.); Pavizhamalli (Mal.); Godokoliko

(Oriya); Saparom (Mund.); Night Jasmine, Coral Jasmine (Eng.).

Description

Large shrubs or small trees upto 7 meters high, roughly hairy all over. Leaves opposite, ovate, acute or acuminate, very scabrous, with unicellular warty trichomes and glandular hairs.

Flowers fragrant, aggregated in small heads; disposed in 3-choromous cymes. Corolla white with orange-coloured tube; falling off entire together with stamens.

Capsule charataceous, compressed, obcordate or sub-orbicular separating into 2, 1-seeded carpels.

Flowering and fruiting time

Plant flowers and fruits in September-November.

Distribution

Plant occurs in Indian subcontinent. It is occasionally found in agricultural fields, gardens and on ridges. Plant is grown almost throughout India upto 3,000 ft. altitude, it is wild as well as planted.

It is cultivated in the gardens almost throughout India for its fragrant flowers. Plant is easily propagated by seeds or cuttings.

Chemical composition

The flowers contain an essential oil similar to that of jasmine, which is obtained by the water-distillation method (yield 0.0045%). The concrete, obtained by extraction with benzene in a yield of 0.058%, gives on steam-distillation 10.5% of otto.

The bright orange corolla tubes of the flowers contain a colouring matter, nyctanthin, which is identical with a-crocin ($C_{20}H_{24}O_4$) from saffron. Nyctanthin occurs in material in a concentration of C. 0.1% probably as a glucoside. Besides the colouring matter, the flowers contain d-mannitol, tannin and glucose. Bark contains a glycoside and two alkaloids.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa

Vipāka	: Kaṭu
Doṣakarma	: Kaphavātahara Pittasaṁśodhana.

Properties and action

Karma	: Pittasāraka Dīpana-anulomana Kṛmighna Raktaśodhaka Kaphaghna Mūtrala Svedajanana Jvaraghna Viśaghna Jantughna-keśya Nāḍīsothahara-vedanāsthāpana- vātaghna Kaṇḍūghna-tvacya.
Roga	: Yakṛt vikāra-plihodara-pittavikāra Agnimāndya-vibandha Kṛmiroga Raktavikāra Kāsa-śvāsa Gṛdhrasī-vātaroga Mūtrakṛcchra Tvagdoṣa Jīrṇajvara Sarpaviṣa Kṣudraroga-dadru Kaṇṭhaśālūka-galaśuṇḍi Prameha-udakameha Vātaroga-sandhivāta.

Therapeutic uses

The drug Pārijāta is cholagogue, antipyretic and bitter tonic. It is used in all types of nervine and neurological diseases, fever, rheumatism and worms. The drug is used to relieve sciatica pain in traditional medicine.

The drug is given in chronic fever and scanty urine. It is given in cutaneous affections. Leaves-juice is used in

snake-bite. It is used in ringworm, udakameha, and akṣiśūla.

Pārijāta is indicated in management of various diseases by its oral as well as topical administered as single drug and an ingredient of some recipes prescribed in medical texts.

The leaves of drug plant (pārijāta patrasvarasa) is an esteemed anti-sciatica herbal agent; the juice of leaves is orally given to patients suffering from sciatica. Similarly the decoction prepared with leaves of Pārijāta has been prescribed in Indian medicine for gr̥dhrasī (sciatica) and other allied painful conditions. The decoction of roots obtained from plant of Pārijāta is administered in sandhivāta (joints pain and swelling).

The corolla-tubes of the flowers yield dye which are useful for colouring silk and of dyeing use fabrics, sometimes in conjunction with safflower, turmeric, indigo or Kath. It imparts a beautiful but fleeting, orange or golden colour.

The leaf-juice is recommended to be given orally in loss of appetite, dyspepsia, anorexia, constipation, piles and worms. The juice of leaves of Pārijāta is specifically prescribed for liver complaints and bilious affections and also in blood diseases (raktavikāra). This drug is useful in spleen disorders.

The powder of leaves or bark is used in cough and asthma.

Parts used : Leaves, bark.

Dose : Juice 10-20 ml., Powder 1-3 gm.

PĀRIJĀTA (पारिजात)

पारिभद्रः

‘पारिभद्रो निम्बतरुर्मन्दारः पारिजातकः ।’

पारिभद्रोऽनिलश्लेष्मा शोथमेदःकृमिप्रणुत् ।

तत्पत्रं रोगघ्नं कर्णव्याधिविनाशनम् ॥

Bhāvaprakāśa Nighaṇṭu, Guḍīcyādi varga, 99-100.

शेफालिः

शेफालिः कटुतिकोष्णा रूक्षा वातक्षयपहा ।
स्यादङ्गसन्धिवातघ्नी गुदवातादिदोषनुत् ॥

Rāja Nighaṇṭu.

पारिजातः

प्राजक्तः पारिजातश्च हारशृङ्गारपुष्पकः ।
नालकुङ्कुमको रगपुष्पी च खरपत्रकः ॥

Nighaṇṭu Saṅgraha.

रसः प्राजक्तपत्रस्य ज्वरघ्नी तिक्तकः स्मृतः ।
पर्णखण्डसमायुक्ता त्वचा कासविनाशिनी ॥

अक्षिशूले

वल्कलं पारिजातस्य तैलकाञ्जिकसैन्धवैः ।
कफजाताक्षिशूलघ्नं तरुघ्नं कुलिशं यथा ॥

Vṛndamādhava, 35.

Netrarogādhikāra, 61-25.

सन्धिवाते

‘शेफालिकामूलविनिर्मितं वा क्वाथो नृणां सन्धिकवातरोगम् ।’

Rājamārtanda, 22-4.

प्लीहोदरे

‘पारिजातकेक्षुरकापामार्गक्षारं वा तैलसंसृष्टम् ।’

Suśruta Saṁhitā, Cikitsā, 14-13.

Vṛndamādhava, 35-3/4.

उदकमेहे

‘तत्रोदकमेहिनं पारिजातकषायं पाययेत् ।’

पारिजातः पारिभद्रकः (टीका) ।

Suśruta Saṁhitā, Cikitsā, 11-8.

गृध्रस्याम्

शेफालिकादलैः क्वाथो मृद्वग्निपरिसाधितः ।

दुर्वारं गृध्रसीरोगं पीतमात्रं समुद्धरेत् ॥

Bhāvaṇṭaśā, Cikitsā, 24-142. Cakradatta, 22-43.

गलशुण्डीहरशेफालीप्रयोगः

‘गलशुण्डीहरं तद्वच्छेफालीमूलचर्वणम् ।’

Cakradatta, Mukharoga cikitsā, 56, 37-10.

कण्ठशालूकादौ

शेफालिकामूलमुशन्ति कण्ठशालूकान् प्रतिचर्चितं सत् ।
 रोगं निहन्यादुपजिह्विकाख्यं नासान्तरप्रस्तुतरक्तधाराम् ॥

Rāja Mārtaṇḍa, 5-11.

दद्रौ

शेफालिकादलैर्धृष्टा तद्रसेन प्रलेपिता ।
 दद्रुः क्षिप्रमजीर्णोत्था नाशमायात्यसंशयम् ॥

Gadanigraha, 2-36-133.

PĀRĪṢA**Botanical name**

Thespesia populnea Soland ex. Correa.
 Syn. *Hibiscus populneus* L.

Family : Malvaceae**Classical name : Pārīṣa-Parīṣa****Sanskrit names**

Pārīṣa, Parīṣa, Kapītana, Pārśvapippala,
 Gardabhāṇḍa, Kapicūta, Kamaṇḍalu, Supārśvaka, Phaliṣa,
 Cilimba, Kṣīrapādapa,

Regional names

Paraspipal, Parsipu, Porush, Gajadand (Hindi);
 Parasacha jhad (Mar.); Gangravi (Tel.); Chilanti (Tam.);
 Puvarasu (Mal.); Huvarase (Kann.); Portia tree, Umbrella
 tree, Indian Tulp Tree, False Rosewood (Eng.).

Description

Small to medium sized trees; twigs clothed with minute brown to silvery, glabrescent.

A compact quick-growing, evergreen tree, 18 meters in height and 1.2 meters in girth, with 2.5 m. clear-bole. Bark grey to brown, fissured, often krobby, fibrous, C. 4.0 mm. thick. Woods timber and sapwood white with a pale yellowish or pinkish tinge, and heartwood reddish-brown to chocolate colour.

Leaves shallowly to deeply cordate or truncate at

base 8-22 cm. long; apex long acute acuminate or long attenuate; petiole long; elastic.

Flowers axillary, solitary, large, showy; pedicels rigid, at apex with deltoid hypanthium. Epicalyx 3. Calyx coriaceous, cupular minutely 5-toothed or entire. Corolla yellow fading to pink, fleshy, ciliate, outside on covering margins densely scaly, subcaducous. Ovary 10-loculed; locules 4-ovuled; stigma connate to a clavate 5-sulcate body.

Capsule globose or sub-globose; exoligneous; mesocarp fleshy; fruit sub-globose, 2-4 cm. across, shortly beaked usually indehiscent. Seeds 4 per cell, 8-15 mm. long.

Flowering and fruiting time

It is flowering in September-November and fruiting in November-August.

Plant flowers and fruits during greater part of the year. Blooming throughout the year in tropics.

Distribution

Plant occurs in India specially in seacoastal regions. It is commonly planted as an avenue tree and other places. Largely cultivated for ornament and shade.

Chemical composition

The flowers and capsules yield a yellow dye, soluble in water. A sample of petals obtained from the flowers (Tamilnadu) yielded the following colouring principles : Kaempferol 7-glucoside (populin 0.33%), Kaempferol (populnetin 0.07%), herbacetin (mostly present as its glucoside 0.03%) and a colourless flavonoid populneol.

In addition, flowers also yield quercetin, gossypetin, kaempferol-3-mono-glucoside and B-sitosterol which vary in proportion (depending upon seasonal and other factors).

A dextro-rotatory gossypol has been further isolated from the flowers, fruits and bark. Presence of thespesin (0.4%) and herbacetin has been reported from the fruits. Thespesin has, however, been proved later to be the optically active gossypol.

The sample of fully ripe seeds (Madras) yields C.

20% of a dark red-coloured fatty oil. The unsaponifiable matter is reported to contain ceryl alcohol and B-sitosterol.

Pharmacodynamics

Rasa	: Kaṣāya
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka

Properties and action

Karma	: Mūtrasaṅgrahaṇīya
	Stambhana
	Sandhānīya-śothahāra-kuṣṭhaghna
	Raktapittaśāmaka-raktaśodhaka
	Yonidoṣahara
	Dāhapraśamana
	Viśaghna
	Medohara
	Garbhassthāpana-puṁsavana
Roga	: Prameha
	Pradara-yoniroga
	Bandhyā
	Carमारoga-kaṇḍū-pāmā
	Śotha
	Dāha
	Raktapitta-raktavikāra
	Atisāra-arśa
	Medoroga
	Viṣa.

Therapeutic uses

The drug Pārīṣa is mūtrasaṅgrahaṇīya and used in prameha and other urinary disorders. The bark, leaves, flowers and fruits are reported to be useful in cutaneous affections such as scabies, posoriasis, ringworm, guineaworms and eczema, being kuṣṭhaghna and kaṇḍūghna. It is topically applied over skin in condition of ulcer, scabies, itching, eczematous affections and swelling.

The drug is used in poisons (viṣa), medoroga (obesity), burning sensation (dāha), blood anomalies (rakta vikāra), leucorrhoea and other vaginal complaints

(pradara-yoniroga), diarrhoea (atisāra), piles (arśa) and diseases caused by provocation of kapha pitta humors (doṣa prakopaja vikāra). Bark is sandhāniya (union-promotor) and applied in relevant conditions.

Pārīṣa or Pārśvapippala has been specifically recommended to be given in sterility (bandhyātva) for promoting conception or conceiving (garbhadhāraṇa), in addition to its application in puṁsavana karma during pregnancy (reversal or datermination of sex in foetus) which is incorporated in the medical (clinical) texts of Indian medicine.

The leaves are employed as a local application to inflamed and swollen joints, besides their other utility they are alongwith the flowers are eaten either raw, cooked or fried in butter; the young buds and leaves have a pleasant taste and leaves are good cattle fodder.

The extracts of leaves are active against *Micrococcus pyogenes* var. *aureus* and *Escherichia coli*. The root is reported to be toxic. The seeds possess purgative properties. The plant has been shown to be effective in malaria. The pollen may cause allergy. The astringent bark, roots and fruits are reported to be useful in dysentery, haemorrhoids; and the mashed bark is employed as a poultice or hot fomentation for wounds.

The ethanolic extract of fruits showed activity against Ranikhet disease virus and also anticancer activity against Lewis Lungcarcinoma in the mice.

The tree yields a gum which is brown, pachy and shiny gum which does not dissolve but swells up in water.

Parts used : Bark, root, fruit, bark, leaves.

Dose : Decoction 50-100 ml.

Groups (gana)

Mūtrasaṅgrahaṇīya, Kaṣāyaskandha (Caraka Saṁhitā), Nyagrodhādi (Suśruta Saṁhitā).

PĀRĪṢA-PĀRĪŚA (पारीष-पारीश)

क. पारीषोऽन्यः पलाशश्च कपिचूतः कमण्डलुः ।

गर्दभाण्डः कन्दरालः कपीतनसुपार्श्वकौ ॥

ख. पारीषो दुर्जरः स्निग्धः कृमिशुक्रकफप्रदः ।

फलेऽम्लो मधुरो मूले कषायः स्वादुमज्जकः ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 4-5.

फलीशः

अ. कपिचूतः कपेर्वासः चिलिम्बः सुप्रतिष्ठितः ॥

कपीतनश्च वानीरः फलीशः क्षीरपादपः ।

फलीश-पारीशगुणाः

ब. फलीशो दुर्जरः स्निग्धः कृमिशुक्रकफप्रदः ॥

फलं मूलञ्च

स. फलेऽम्लो मधुरो मूले कषायः स्वादुमज्जकः ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 433-435.

बन्ध्यारोगे गर्भधारणार्थं पारीषः

याऽबला पिबति पार्श्वपिप्पलं जीरकेण सहितं हिताशिनी ।

श्वेतया विशिखपुङ्खया युतं सा सुतं जनयतीह नान्यथा ॥

Bhāvaprakāśa, Yonirogādhikāra, 70-29.

पुंसवने

याऽबला पिबति पार्श्वपिप्पलं जीरकेण सहितं हिताशिनी ।

श्वेतया विशिखपुङ्खया युतं सा सुतं जनयतीह नान्यथा ॥

Bhāvaprakāśa, Cikitsā, 70-29.

गर्भधारणोपायः

याबला पिबति पार्श्वपिप्पलं जीरकेण सहितं हिताशिनी ।

श्वेतया च शरपुङ्खायुतं सा सुतं जनयतीह नान्यथा ॥

Rasapradīpa, 469.

PARṆABĪJA

Botanical name

Kalanchoe pinnata (Lamk.) Pers.

Syn. *Bryophyllum pinnatum* (Lam.) Kuntz.

Syn. *Bryophyllum calycinum* Salisb.

Family : Crassulaceae

Classical name : Parṇabīja

Sanskrit name : Parṇabīja

Regional names

Jakhme hayat, Ghavapatta (Hindi); Kop pata (Beng.); Ghayamaro (Guj.); Simajomudu (Tel.).

Description

***Kalanchoe pinnata* (Lamk.) Pers.**

Herbs, up to 75 cm. high, young stem often green with deep purple blotches. Leaves simple or compound, upper usually 3-5 (-7)-foliolate; leaflets 5-20 × 25-5 cm., ovate or elliptic, margin crenate or serrate.

Flowers pendant in 10-40 cm. long panicles; pedicels slender. Calyx 2-4 cm. long, green with purple tinge; segments ovate-triangular. Corolla green in lower half, red in upper half; base swollen, constricted in the middle lobes triangular. Anthers black, hastate. Hypogynous scales adhering at the base of ovaries, sub-rectangular, yellow. Ovaries ovoid-oblong, free or connate at the base, narrowed-into 2.5-3.5 cm. long, styles.

***Kalanchoe lanceolate* (Forsk.) Pers. var. *glandulosa* (Hochst ex A. Rich.) Cufed. syn. *K. glandulosa* Hochst.**

Perennial glandular-hairy herbs, upto 75 cm. high. Lower leaves obovate, almost entire, more or less pubescent, amplexicaul; upper cauline. Leaves densely glandular-pubescent; lanceolate or oblanceolate, obtuse, amplexicaul.

Flowers in dense paniculate glandular-pubescent cymes. Calyx upto 1 cm. long, glandular-pubescent divided about half way down into 4 segments; segments triangular-ovate, acute or acuminate. Corolla yellow, 1-1.5 cm. long, tube glandular-pubescent in the upper part, segments ovate-oblong, acuminate.

Hypogynous scales narrow, linear, whitish, membranous. carpels glabrous.

Flowering and fruiting time

It bears flowers during the period from October to February. Flowering in cold season and fruiting in summer season.

Distribution

It is planted and found as escape on border of forests and other places in hot and moist regions specially in Bengal. It is grown in various states in India; Central India.

Kinds and varieties

There are certain other plants of **Kalanchoe** genus (belonging to Crassulaceae) viz. *Kalanchoe laciniata* (L.) D. syn. *K. schweinfurthia* Penzig., *Kalanchoe integra* (Medik.) Kuntze. syn. *K. spathulata* Dc. which are also considered to be botanical source of Parṇabīja as well as they are also claimed to be substitutes or botanical sources of Pāṣāṇabheda (*Bergenia ligulata* (wall.) Engl.) in some regions. **Kalanchoe** plants are commonly known as Hem sagar, Haija, Patharchur, Patharchata, Ghavapatta and other local names etc. in different parts of country.

Kalanchoe laciniata (Linn.) Dc. is an erect, stout and perennial herb distributed in the Deccan and hilly areas of Southern India upto an elevation of 3,000 ft. Leaves large, variable, succulent, deeply pinnatifid twice or thrice; flowers yellow orange or magenta, in paniculate cymes.

Pharmacodynamics

Rasa	: Kaṣāya, amla
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittaśāmaka

Properties and action

Karma	: Raktaskandana-raktastambhana (raktarodhaka) Vraṇaśodhana-vraṇaropana Raktapittaśāmaka Mūtrala
Roga	: Raktasrāva Abhighāta-abhighātaja śoṭha-vraṇa- kṣata-srāva Raktapravāhikā-raktārśa Raktapradara Mūtrakṛcchra.

Therapeutic uses

The drug Parnabija is diuretic herbal agent which has been considered and employed in certain regions as one of the plant sources for Pāśānabheda (*Bergenia ligulata* Stapf.). Besides the diuretic, it is raktastambhaka or haemostatic and astringent drug which is specifically used as a wound healer drug.

The paste of leaves is applied over incised wound, bleeding lesions, bruises, cuts, ulcers and traumatic swelling. Leaves juice is used in incised wound (kṣataja vṛaṇa). The application of leaves in the form of paste or juice (patrakalka or svarasa) acts as a haemostatic agent coagulating the blood haemorrhage and it heals up the wound gradually on account of its raktastambhana, vṛaṇaśodhana and ropāṇa action of plant drug.

The leaves juice is internally given in blood dysentery (sarakta pravāhikā), bleeding piles or haemorrhoids (raktārśa) and menometrorrhazia (raktapradara-asṛgdara).

The plants of some other species of *Kalanchoe* are used in the same way as *Bryophyllum* species or *Kalanchoe pinnata* (Lamk.) Pers. syn. *Bryophyllum calycinum* Salisb, principal source plant for Parnabija.

For the instance, *Kalanchoe integra* (Medic) Kuntze. (syn. *Kalanchoe spathulata* Dc., *K. brasiliensis* Cambess) is medicinally in the same manner as *Kalanchoe pinnata* (Lamk.) Pers. The leaves are ground for obtaining juice (of a bitter variety) is antiperiodic, tonic and purgative. Leaves are reported to possess insecticidal properties, they are burnt and applied to abscesses.

Similarly, *Kalanchoe laciniata* (Linn.) Dc. is also used medicinally. The leaves are considered styptic, astringent and antiseptic. Roasted or crushed leaves are applied as poultice to wounds, cuts, abrasions, ulcers, bites of venomous insects, gnats etc. Internally the leaf juice is given in diarrhoea, dysentery, lithiasis and pthisis. The leaves are also reported to be useful in cough and colds while applying as a poultice. Leaves are used in lotions for small pox.

Part used : Leaves.

Dose : Juice 10-20 ml.

PARNABĪJA (पर्णबीज)

पर्णबीजं कषायाम्लं मधुरं शीतमेव च ।

वातपित्तहरं रक्तस्तम्भनं व्रणरोपणम् ॥

Dravyaguna Vigyana, Part II, 788.

PARNAYAVĀNĪ**Botanical name**

Coleus amboinicus Lour.

syn. *Colous aromaticus* Benth.

Family : Lamiaceae (Labiales)

Classical name : Parnayavānī

Sanskrit name : Parnayavānī

Regional names

Patta ajwain (Hindi); Patharchur (Beng.); Pan oba (Mar.); Ovapan (Guj.); Karpuravalli (Tam.); Indian Borage, Country borage (Eng.).

Description

A rather large succulent herb with crenated and aromatic leaves and small, pale purple flowers. Plant hairy, downy, shrubby herb. Stem 1-3 feet long, Leaves fleshy, dentate, heart-shaped, slightly hairy, very fleshy; the leaves with cumin or thymol aroma. Flowers minute, blue or violet. Leaves surface glandular hairy and more dense hairy on lower (back side) surface giving frosted appearance. Lvs. venation reticulate and with intensely odorous.

Distribution

Plant is a native of Malucca group of Islands, the East Indies. Commonly cultivated in gardens throughout India. It is planted as pot-herb also for ornamental purpose. Escape in Rajasthan.

Chemical composition

Herb contains an aromatic volatile oil containing carvacrol, an active principle, in small quantity.

Pharmacodynamics

Rasa : Kaṭu, tikta

Guṇa	: Laghu, rūkṣa, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma

Properties and action

Karma	: Vātānulomana Dīpana-rocana-pācana-grāhī Yakṛduttejaka Kṛmighna Uttejaka Kaphaghna- kaphadurgandhanāśana-śvāsahara Mūtrala-aśmarīhara Vedanāsthāpana-viṣaghna Ākṣepahara-māḍaka.
Roga	: Aruci-agnimāndya-ajīrṇa-viṣṭambha Udaraśūla-atisāra-visūcikā-grahaṇī Kṛmiroga Śirāśūla Jāṅgama viṣa Hṛddaurbalya Jīrṇakāśa-śvāsa-hikkā Aśmarī-mūtrakṛcchra.

Therapeutic uses

The leaves of drug (Pārṇayavānī patra) have a pleasant odour and pungent taste, and are used for flavouring meat and salad. It is good substitute for borage (*Borago officinalis* Linn.) for flavouring wines and beer. The aromatic properties are attributed to a volatile oil containing carvacrol and present in the herb in small quantities.

The drug Pārṇayavānī is a diuretic herbal agent. The source plant of Pārṇayavānī, *Coleus amboinicus* Lour. has been finding a place among various substitutes or claimed plant sources of Pāśānabheda (*Bergenia ligulata* (Wall) Engl.) which is well-known diuretic drug mostly recommended in urinary calculus and allied ailments.

The leaves of Pārṇayavānī are given as diuretic in urinary complaints and considered useful in calculus or stones and gravels (as the local or regional names also indi-

cate towards its medicinal utility as anti-calculus herb such as Patharchur, Pathorchura, Patherchur, Parthurchur, Karpuravalli etc.).

The leaves of Parṇayavānī are expressed to obtain juice which is mixed with sugar and given as a powerful aromatic carminative. The leaves are used in dyspepsia, although it is said to have intoxicating properties. A decoction of the leaves is given for chronic coughs and asthma and also allied respiratory problems.

Parṇayavānī is quite useful in disorders of digestive system, particularly gastro-intestinal complaints. The drug is mainly indicated in anorexia, dyspepsia, flatulence, liver disorders, abdominal colic, gastro-enteritis with piercing pain (viṣūcikā also under stage of cholera). The diarrhoea in this condition is checked by administration of Parṇayavānī which is an effective herbal remedy as anti-diarrhoeal medicine. In this stage, the leaves juice is in the dose of 12 ml. is orally given and after this initial dose, the two doses of 6 ml. at interval of one hour. In case there is no relief in diarrhoea stool frequency (purgation), the some course of medicine is repeated after 8 hours till the motions (diarrhoea) is checked. The watery stool like rice-water (taṇḍulodaka) of white colour is changed into yellowish colour and gradually the stool becomes greenish and begins solidifying for attaining normal consistency and characters subsequently.

The causative micro organisms are also reported to be inactive and scanty (though not destroyed completely).

The leaves are also used as household medicine for preparing 'Pakora' in diarrhoea.

The leaves and their juice are given in abdominal disorders in the form of juice as single drug and also in combination with other drugs and carminative as well as stomachic or anti-colic drugs. Leaves are also useful to be consumed by patient in some dietary preparations.

Leaves are topically applied to headache and insects bite (Jaṅgamaviṣa). The plant drug is used in vātavyādhi (akṣepaka, apatantraka and other ailments). It is useful in

chronic cough, hiccough, asthma and bronchitis. The drug is also considered useful in heart problem (weakness). Leaves of plant are very aromatic when they are small and pungent in taste.

Parts used : Leaves

Dose : Juice 5-10 ml.

PARPAṬA

Botanical name

Fumaria vaillantii Loise.

Syn. *Fumaria indica* (Hassk.) Pugsley., *F. vaillantii* Loisel. var. *indica* Hassk., *F. parviflora* subsp. *vaillantii* sensu Hook. f.

Family : Fumariaceae

Classical name : Parpaṭa

Sanskrit names

Parpaṭa, Varatikta, Reṇu, Sūkṣmapatra.

Regional names

Pittpaparha, Dhamgajra (Hindi); Vanshulpha (Beng.); Shahtara (Punj.); Tura (Tam.); Chatrasi (Tel.); Shahtar (Pers.); Shahtaraj (Arab.); Pitpapada (Guj.); Fumitory (Eng.).

Description

Diffuse, slender, much-branched annual glaucous weeds of cultivated fields, herbs upto 50 cm. high. Leaves with linear segments, 2-3 pinnatisect, ultimate segments. Flowers small, whitish or rose-coloured; sepals 2, lanceolate; petals 2+2, one outer obtusely spurred. Stamens 6, diadelphous.

Fruits globose, rugose when dry with 2 pits at the top, 1-seeded. Seed granular, rugose, with a minute tubercle and two depression on the latter's two sides.

Flowering and fruiting time

Plant flowers and fruits during the period from November or December to March.

Distribution

It is an occasional weed in cultivated or agricultural

fields and waste places. Plant occurs in subtropical regions. It grows in gangetic plains, Himalayan terai, Nilgiri and other areas in country, Central India.

Kinds and varieties

The drug sold in Indian drug market under the name Sheaharah or Pittapatra is fumitory imported mainly from Persia. It consists of the dried aerial parts of *Fumaria officinalis* linn., the common fumitory of Europe and probably also of *Fumaria parviflora* Linn., both of which are not found in India.

The dried aerial part of the Indian plant are used as substitute; the Indian plant, *Fumaria vallantii* Loisel suggested prevalent as substitute of fumitory and known as Parpaṭa has following characteristics for identification (habit and habitat aspects).

A diffuse annual, 10-60 cm. height, pale-green much branched herb, with leaves divided into narrow segments, flat. Racemes lax scented. Flowers pale pink in 0.5-1.25 cm.; sepals lanceolate, much smaller than the corolla tube; pedicels exceeding the bracts; fls. colour pink or whitish with purple tips, in terminal or leaf-opposed racemes. Fruits globose, rugose when dry, rounded at the top with 2 pits, pale green much branched; racemes 2.5 cm.; fruit 1-seeded; globose nutlet.

The plant is distributed over the greater part of India as a weed of cultivation and is commonly seen on roadsides and on hills ascending up to 9,000 ft.

It flowers and fruits during the cold season.

Chemical composition

Herb contains pentatriacontane (0.5%), an alkaloidal principle identical with protopine (0.13%), tannins, phlobaphenes and sugars. Potassium salt predominate among the ash constituents and the diuretic property of the herb is attributed to their presence.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Laghu
Virya	: Kaṭu

Vipāka	: Śīta
Doṣakarma	: Kaphapittaśāmaka

Properties and action

Karma	: Pittaśāmaka-jvaraghna- dāhapraśamana Raktaśodhaka-rakta prasādana Yakṛduttejaka Mūtrala Svedajanana-kuṣṭhaghna Dīpana-rocana Grāhi Kṛmighna Mastiṣkaśāmaka Trṣṇāpraśamana Chardinigrahaṇa
Roga	: Raktapitta-raktavikāra- raktaduṣṭijanya vikāra Vātarakta Yakṛdvikāra-kāmalā Kṛmirōga Bhrama-mūrcchā-mada-madātyaya Mūtrakṛcchra Tvagvikāra-kuṣṭha Jvara-dāha-pittavikāra-paittika jvara Trṣṇā Aruci-agnimāndya-glāni.

Therapeutic uses

The drug Parpata is anthelmintic, aperient, cooling, diaphoretic, diuretic and febrifuge. It is used in burning sensation in the body, fever, giddiness, thirst, urogenital disorders including cystitis, gonorrhoea and vomiting.

The drug plant is bitter, slightly acrid and astringent. It is regarded as a laxative, diuretic and alterative. It is useful in dyspepsia and scrofulous skin affections. The seeds of the plant are used as a remedy for pain in the body. The plant is used as fodder.

The diuretic properties carrying phytochemical base of the presence of potassium salts which attribute its phar-

macological activity in particular. Similarly the alkaloidal principle causes a fall in blood pressure in experimental animals as per observations of investigations conducted on this plant drug.

The drug Parpaṭa is allaying over thirst or thirst in excess (tṛṣṇānigrahaṇa) and it is refrigerant, sedative, blood purifier, haemostatic, diuretic, antipyretic and diaphoretic.

The dried whole plant of drug is generally used. It is given in fever, bilious and skin affections and blood impurities, gout, intrinsic haemorrhage, liver disorder, jaundice, worms, anorexia, deysuria, leprosy and burning sensation, vertigo, alcoholism, syncope, faint and ailments caused by kaphapitta ailments.

Parts used : Whole plant.

Dose : Powder 3-5 gm., Decoction 50-100 ml.

Formulation : Parpaṭādi kvātha, Parpaṭādyariṣṭa

Groups : Tṛṣṇānigrahaṇa (Caraka Samhitā).

PARPATA (पर्पट)

पर्पटः कटुकः पाके रसे तिक्ते हिमो लघुः ॥

सङ्ग्राही वातलो हन्ति दाहपित्तकफज्वरान् ।

पिपासारोचकच्छर्दि रक्तपित्तमदभ्रमान् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1108-1109.

पर्पटो हन्ति पित्तास्रभ्रमतृष्णाकफज्वरान् ।

सङ्ग्राही शीतलस्तिक्तो दाहनुद्वातलो लघुः ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 92.

पर्पटः शीतलस्तिक्तः पित्तश्लेष्मज्वरापहः ।

रक्तदाहारुचिग्लानिमदविभ्रमनाशनः ॥

Rāja Nighaṇṭu, Parpaṭādi varga, 10.

पर्पटपत्रगुणाः-पर्पटपत्रम् (पत्रशाकम्)

पर्पटो हन्ति पित्तास्रज्वरतृष्णाकफभ्रमान् ।

सङ्ग्राही शीतलस्तिक्तो दाहनुद्वातलो लघुः ॥

Bhāvaprakāśa Nighaṇṭu, Śāka varga, 38.

पित्तज्वरे पर्पटक्काथः

एकः पर्पटकः श्रेष्ठः पित्तज्वरविनाशनः ।

किं पुनर्यदि युज्येत चन्दनोदीच्यनागरैः ॥

Cakradatta, Jvara cikitsā, 1-87.

छर्दिनाशाय पर्पटक्काथः

‘क्काथः पर्पटजः पीतः सक्षौद्रश्छर्दिनाशनः ।’

Cakradātta, Chardi cikitsā, 15-11.

PARUṢAKA

Botanical name

Grewia asiatica Linn.

Syn. *Grewia subinaequaelis* Dc., *G. hainesiana* Dc.

Family : Tiliaceae**Classical name : Paruṣaka****Sanskrit names**

Paruṣaka, Paruṣam, Nīlārṇa, Ropaṇa, Dhanvana-cchada, Pārāvata, Mṛduphala, Puruṣa, Paruṣa, Paru.

Regional names

Phalsa, Sukri, Farsa (Hindi); Phalsa (Beng.); Phalsa (Guj.); Phalsai, Phalsi, Parpaka (Mar.); Pharosakoli (Oriya); Jangolat (Santal); Palisa, Phalisa, Dagali, Byadachi (Tam.); Jana, Nallajana, Peddajana, Phunki (Tel.); Phalashah (Urdu).

Description

Medium-sized tree with greyish white to greyish brown bark, sapwood whitish heartwood small, irregularly shaped and dark brown, young parts stellately pubescent.

Stem-bark externally warty, uneven, greyish green, internally reddish brown, thick, fibrous tough, leathery and sometimes creamish in colour.

Leaves 7-17 × 6-12 cm., ovate or sub-orbicular, heart-shaped, acute, sub-acuminate or cuspidate, sharply and often coarsely doubly serrated, sub-glabrous above, hoary-tomentose beneath, rounded or only slightly cordate at the base, 5-7-nerved; petioles 6-12 mm. long, thickened at the top, stipules linear to foliaceous and broadly falcate.

D.Y.3-6

Shortly petioled leaves. Matured leaves $17.5-21.5 \times 12.75-17.5$ cm.

Flowers buds broadly cylindric or clavate, peduncles axillary, usually many, long and slender, far exceeding the petioles and often 3-4 times as long upto 4 cm. long, bracts beneath the pedicels lanceolate; sepals 6-12 mm., linear-oblong, acute, stellately pubescent or tomentose; petals 3-6 mm. yellow or reddish yellow, oblong or ovate-oblong, jagged or entire, gland with a wide fleshy margin, pubescent towards the edges, gonophore long, stigma with 4 short, rounded lobes, style much thickened above.

Fruits red globose, 6-8 mm. in diam., with pleasantly acid pulp, indistinctly lobed, pyrenes 1-2 always 1-celled only.

Fruits shortly stalked fleshy fibrous drupe, greyish purple at maturity, tomentose, surface having black circular depressed spots with large stellate covering trichomes and rest of the surface with small stellate covering trichomes; 1-2 seeds with stony hard seed coat, painted at one end and grooved on the surface, seed 1-2 chambered, light brown, thin, papery, inner seed coat, embryo with 2 leafy cotyledons and oily endosperm.

Flowering and fruiting time

Spring to summer season. Fruits ripen in hotter months and available in market as edible fruits.

Distribution

Plant grows in the warmer regions of India mostly as a non-wild plant. It is cultivated throughout India, especially in Punjab, Uttar Pradesh and Maharashtra (Bombay).

Chemical composition

The seeds of Paruṣaka fruits contain oil. Leaves contain crude protein 10.1 %, fat 6.8 %, crude fibre 14.1%, nitrogen free extract 54.8%, carbohydrate 68.9%, ash 14.2%, calcium 4.18%, phosphorus 0.25% and tannin. Bark contains mucilaginous substance which is reported to contain various chemical substances (in bark as well as heartwood). The presence of triterpenes viz. lupeol, lupenone, fridelin and betulin in the stem-bark of Grewia

astriatica Vahl. (Paruṣaka or Phalsa) after successive extraction with light petrol. Fruits contain acid (as citric) 2.8%, sugar (as sucrose) 11.7% and vitamin C-trace. The pectin content is low. The fruits juice content ranges from 55 to 65% in Paruṣaka. Grewinol, a long chain keto-alcohol is isolated from the flowers of source plant of drug; it is characterized as tartariccontane - 22 - ol - 13 one based on degradative studies and physical characteristics. Besides Grewinol, white needles of lauric acid was found after recrystallization. A mixture of sebacic acid, adipic acid and glutaric acid was also found in chemical screening. Phytochemical investigations find the presence of a number of compounds in the flowers of Paruṣaka after successive extraction.

Pharmacodynamics

Rasa	: Madhura, amla, kaṣāya
Guṇa	: Laghu
Vīrya	: Śīta
Vipāka	: Amla, Madhura
Doṣakarma	: Pittaśamana Vātakaphahara Pittakara.

Properties and action

Karma	: Trṣṇānigrahaṇa Rocana-hṛdya Bṛmhana Dāhapraśamana Viṣṭambhī Dīpana-pācana Śūlapraśamana Madahara Jvaraghna Raktapittahara Mūḍhagarbhāpakarṣaka Śukrājanana
Roga	: Trṣṇā (pipāsādhikya) Jvara-paittika jvara Dāha

Kṣaya
 Śōpha
 Mūḍhagarbha
 Raktapitta
 Aruci-agnimāndya
 Hṛdroga-hṛddourbalya
 Dourbala
 Madātyaya
 Bhrama
 Śūla-paittika śūla
 Vātarakta
 Śukradoṣa
 Galarohiṇī.

Therapeutic uses

The fruits are medicinally useful and the ripe fruits are commonly known among edible fruits. The unripe fruit is bitter, acrid and sour, and they checks vāta and cause kapha and biliousness. The ripe fruit is sweet, pleasant to taste, cooling, digestable, tonic, aphrodisiac and they allay thirst and burning sensation and they cure inflammation, heart and blood disorders and fever. Fruits are useful in throat troubles and they helps removal of dead foetus, strengthen the chest and the heart and useful in diarrhoea.

Bark is useful to cure diarrhoea and it cures biliousness and alliviates vāta. Root and bark are used as a demulcent. Fruits are supposed to possess astringent, cooling and stomachic properties. The plant drug is sub purgative, antipyretic and acopics. Infusion of bark is used as a demulcent.

Leaves are useful as an application to pustular eruptions and the buds are also prescribed for the some. Root-bark is considered useful in rheumatism. Plant drug has been reported to possess antitubercular properties. The ether extract of leaves possesses antibacterial activity against *Staphylococcus aureus* and *Escherichia coli*.

In treatment of Vātarakta, Paruṣaka ghṛta is recommended. In glycosuria (Ikṣumeha), the infusion of inner

bark in suggested as good medicine. Syrup or drink of the fruits is of common use with medicinal utility.

In throat diseases, the drug is used specially prescribed in Galarohiṇī, gargle with decoction of Drākṣā (*Vitis vinifera*) and Paruṣaka (*Grewia asiatica*). In cases of thirst, cold juice of Paruṣaka is given. In alcoholism caused by pitta doṣa, saturating soups and drinks may be prepared of the juice of drug Paruṣaka alongwith Āmalakī and Kharjūra. In disorders of semen (pūyaprakhyā śukradoṣa), ghr̥ta cooked with paruṣaka and vaṭa may be given to patient. In case of colic caused by pitta (pittaja śūla), the juice of drug Paruṣaka fruits mixed with Drākṣā and Kharjūra (and also aquatic fruits), added with sugar is given orally. External application of the drug is prescribed in texts with special reference to condition of difficult labour (mūḍha-garbha). The paste of root of plant drug Paruṣaka or Pṛśniparṇī (*Uraria picta* Desv.) is prescribed to be applied to umbilicus, pelvis and vulva etc.

Parts used : Fruits, root, leaves, bark.

Dose : Fruit juice 10-20 ml.

Formulations

Paruṣaka ghr̥ta, Paruṣaka pānaka (Sharbat phālsā).

PARUṢAKA (परुषक)

क. परुषकं तु परुषमल्पास्थि च परापरम् ।

ख. परुषकं कषायाम्लमामं पित्तकरं लघु ॥

ग. तत्पक्वं मधुरं पाके शीतं बृंहणम् ।

हृद्यन्तु पित्तदाहास्त्रज्वरक्षयसमीरहत् ॥

Bhāvaprakāśa Nighaṇṭu, Āmrāphalādi varga, 98-99.

परुषकम्

अ. परुषको नीलवर्णो रोपणो धन्वनच्छदः ।

पारावतो मृदुफलः पुरुषः परुषः परुः ॥

परुषकगुणाः

ब. परुषकं कषायाम्लं लघूष्णं स्वादु पित्तलम् ।

रूक्षं मारुतजित्..... ॥

पक्कफलम्

स. पक्कं स्वाद्वम्लं शुक्रलं हिमम्॥
 रोचनं मधुरं पाके हृद्यं विष्टम्भि बृंहणम्।
 हन्ति मारुतपित्तास्रतृष्णादाहक्षतक्षयान्॥

Kaṭyadeva Nighaṇṭu, Oṣadhi varga, 391-393.

परुषकम्

परुषकं नीलपूर्णं गिरिपीलु परावरम्।
 नीलमण्डलमल्पास्थि परुषञ्च परुस्तथा॥

परुषकगुणाः

परुषकमम्लं कटुकं कफार्तिजिह्वातापहं तत्फलमेव पित्तदम्।
 सोष्णञ्च पक्कं मधुरं रुचिप्रदं पित्तापहं शोफहरञ्च पीतम्॥

Rāja Nighaṇṭu, Āmrādi varga, 110-111.

रोहिणीनामकगलरोगे

‘....कवलो द्राक्षापरुषैः कथितो हितः।’

Bhāvaprakāśa, Cikitsā, 66-135.

मूढगर्भापकर्षणे

परुषकशिफालेपः स्थिरामूलकृतोऽथवा।
 नाभिबस्तिभगाद्येषु मूढगर्भापकर्षणः॥

Śodhala, Gadanigraha.

Vṛndamādhava, 65-13.

Baṅgasena, Strīroga, 229

मदात्ययस्य पिपासायाम्

‘परुषकानां पीलुनां रसं....।’

Caraka Saṃhitā, Cikitsā, 12-147.

परुषकगुणाः

परुषकं फलं चाम्लं वातघ्नं पित्तकृद् गुरु।
 तदेव पक्कं मधुरं वातपित्तनिबर्हणम्॥

Dhanvantari Nighaṇṭu.

वातरक्ते पारुषकं घृतम्

Caraka Saṃhitā, Cikitsā, 29-58/65.

Bhāvaprakāśa, Vātaraktādhikāra, 29-90/92.

परुषकमूलं सुखप्रसवकसम्प्रयोगः

‘परुषक....मूललेपस्तद्वत् पृथक् पृथक्।’

Cakradatta, Strīroga cikitsā, 63-13.

पैत्तिकशूले

परुषकाणि मृद्वीकाखर्जूरौदकजान्यपि ।

तत् पिबेच्छशर्करायुक्तं पित्तशूलनिवारणम् ॥

Suśruta Samhitā, Uttara. 42-108.

पूयप्रख्ये शुक्रदोषे

‘परुषकवटादिभ्यां पूयप्रख्ये च साधितम् ।’

Suśruta Samhitā, Śārīra, 2-9.

A. PĀṢĀṆABHEDA

Botanical name : *Bergenia ligulata* (Wall.) Engl.

Family : Saxifragaceae

Classical name : Pāṣāṇabheda

Sanskrit names

Aśmaghna, Prastara, Nagabheda, Aśmabheda, Nagabhid, Aśmrībheda, Dṛṣadbheda, Nagajit.

Regional names

Pakhanbheda, Silpharha, Patharchur (Hindi); Pakhanbheda (Mar., Guj.); Panharh (Kann.).

Description

A perennial herb with thick rootstock. Stem short, fleshy, procumbent; small plant growing closely appressed to rocks with leaves about 10 in diam.

Leaves ovate or orbicular, entire, ciliate, base cordate, glabrous on both surfaces, dotted on the lower stalk; stem sheathing at the base.

Flowers white, pink or purple, in spreading cymose panicle terminating in flexible scape. Petals orbicular with a claw. Fruits globose, style long.

Flowering and fruiting time

Spring season to summer or rainy season.

Distribution

Plant occurs in temperate regions from Kashmir region to Bhutan; It is found in the Himalayas between the altitudes of 2,000 and 2,500 meters, commonly on the rocks in forest of hilly regions. Generally it grows wild at 8,000-10,000 ft. elevation in the Himalayan regions and

also found in the Khasi hills and other areas in North-East Himalaya at about 4,000 ft. altitude.

Kinds and varieties

There are two other Himalayan species of *Bergenia* which are also used as botanical source (substitutes or adulterants) of drug Pāṣāṇabheda. They are *Bergenia ciliata* Royle. and *Bergenia stracheyi* (Hook. f. Thoms.) Engl.

Some other medicinal plants are also referred and claimed as botanical sources, substitutes (or adulterants) and regional source plants of Pāṣāṇabheda, such as *Kanchoe pinnata* Pers. (Crassulaceae), *Coleus ambonicus* Benth. (Lamiaceae), *Aerva lanata* Juss. (Amaranthaceae), *Iris, pseudo-acorus* (Iridac), *Ocimum basilicum* Linn. (Lamiaceae), *Bridelia retusa* Spreng, (Euphorbiaceae) and *Rotula aquatica* Lour. (Boraginaceae).

Currently the botanical source of Pāṣāṇabheda is acceptable as *Bergenia ligulata* (Wall.) Engl.

Chemical composition

Roots contain tannic acid (14.2%), gallic acid, starch 19%, mineral salt, metarvin, albumin, glucose, mucilaginous matter, wax and aromatic substance. Ash 12.87% which contains oxalates predominantly.

Pharmacodynamics

Rasa	: Kaṣāya, tikta
Guṇa	: Laghu, snigdha, tikṣṇa
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣaśāmakā.

Properties and action

Karma	: Mūtrala-aśmarībheda Stambhana Kaphaniḥsāraka Jvaraghna Viśaghna Raktapittaśāmakā-hṛdya Śothahara-vraṇaropaṇa.
Roga	: Aśmarī-mūtrakṛcchra-mūtrāghāta Yonivyāpad-śvetarakta pradara- kaṣṭārtava

Raktapitta-hṛdroga
 Jvara
 Kāsa
 Vraṇa-vraṇaśoṭha
 Netrābhiṣyanda
 Dantodbhedagadāntaka
 Atisāra-pravāhikā-arśa
 Ahiphena viṣa
 Śūla-gulma
 Plīharoga.

Therapeutic uses

The drug Pāṣāṇabheda is diuretic and anti-calculus medicine. It is an antidiabetic drug which is used in diabetes. The drug is astringent, cardiogenic, expectorant, antipyretic, antidote to poison, anti-inflammatory, wound healer and anti-haemorrhoidal and it allays burning sensation and excess thirst.

The decoction or powder of roots is orally given in calculus and other urinary complaints as an effective remedy which is a valued herbal drug widely administered in management of aśmarī and mūtrakṛchra, bastiśūla, mūtrāghāta and mūtramārga saṅkramaṇa (urinary tract infection) alongwith allied complaints of urinary system.

The dried roots pieces forming the crude drug Pāṣāṇabheda which is useful in some other diseases in addition to urinary or renal disorders.

It is used in heart troubles, intrinsic haemorrhage, vaginal complaints, leucorrhoea, menorrhagia, fever, diarrhoea, dysentery, piles, cough and burning sensation.

Externally the root is applied on boil-swelling and conjunctivitis. It is mixed with honey and applied to teething (dantodbheda) in children. The drug is indicated against opium-poisoning.

Part used : Roots.

Dose

Powder 3-6 gm. Decoction 50-100 ml.

Formulation

Pāṣāṇabhedādi kvātha, Pāṣāṇabhedādyā ghrta.

Group

Mūtravirecanīya (Caraka Saṁhitā), Viratarvādi (Suśruta Saṁhitā).

B. GORAKṢAGAÑJĀ

Botanical name : *Aerva lanata* Juss.

Family : Amaranthaceae

Classical name : Gorakṣagañjā

Sanskrit name : Gorakṣagañjā

Regional names

Gorakhaganja, Thikritorh (Hindi); Pashanabhed (South.).

Description

A prostrate tomentose herb, branches many; branches 6-10 in long, branching from root-stock; leaves alternate, entire, obovate; spikes axillary usually 2-4 together; flowers white, 5-nerous.

Leaves 1/2 - 1 in. long, round, obovate (oval or ovoid), hairy. Flowers dense, in round umbel, axillary, greenish-white in colour. Fruits leathery, with black seeds. Roots camphoraneous, odorous (smelling like camphor).

Flowering and fruiting time

Plant flowers and fruits during the period from November to January.

Distribution

Plant occurs in tropical regions of India ascending to 6,000 ft. altitude. Plant is growing in Uttar Pradesh, Andhra Pradesh, Gujrat, Kerala, Tamilnadu and Madhya Pradesh and other provinces in country.

Kinds and varieties

Aerva species particularly *Aerva lanata* Juss., are used as Pāṣāṇabheda (*Bergenia ligulata* (wall.) Engl.) in Southern India. Another species *Aerva javanica* Juss. is also used medicinally as a substitute or adulterant to this plant drug Gorakṣagañjā.

Another species *Aerva javanica* Juss. has stem of 2-3

feet tall, and with leaves 1-4 in. long and flowering spike 1-6 in. long.

Pharmacodynamics

Rasa	: Tikta, kaṣāya
Guṇa	: Laghu, tikṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma

Properties and action

Karma	: Aśmarībhedana
	Mūtrala
	Kaphahara
	Vātaghna
Roga	: Aśmarī
	Mūtrakṛcchra
	Kaphavātajanya vikāra.

Therapeutic uses

The drug Gorakṣagañjā is a good diuretic and the roots are given in dysuria (mūtra kṛcchra) and calculus (aśmarī). It is used for alleviating diseases caused by kapha and vāta doṣa.

The roots are used (particularly in southern India) as an effective diuretic drug specifically for calculus, as substitute or a source plant of Pāṣāṇabheda.

Parts used : Roots.

Dose : Decoction 50-100 ml.

GORAKṢAGAÑJĀ (गोरक्षगञ्जा)

गोरक्षगञ्जा तुवरा सतिक्ता लघ्वी च तीक्ष्णा परमोष्णवीर्या ।
कफार्तिहृत् मूत्रविरेचनीया प्रभावतोऽप्यश्मरीनाशनी स्यात् ॥

Dravyagūṇa Vijñāna, part II, p. 658.

PĀṢĀṆABHEDA (पाषाणभेद)

अश्मभेदो हिमस्तिकः कषायो बस्तिशोधनः ।

भेदनो हन्ति दोषार्शोगुल्मकृच्छ्राश्महृद्गुजः ॥

योनिरोगान् प्रमेहाँश्च प्लीहशूलव्रणानि च ।

Bhāvaprakāśa Nighaṇṭu.

पाषाणभेदः

- अ. अश्मभेदो दृषद्भेदः प्रस्तरो नगभेदकः ॥
पाषाणभेदो नगभिदश्ममहाश्मभेदकः ।

गुणाः

- ब. अश्मभेदो हिमस्तिक्तः कषायो बस्तिशोधनः ॥
भेदनो हन्ति दोषार्शोगुल्मकृच्छ्राश्महद्भुजः ।
योनिरोगप्रमेहाँश्च प्लीहशूलव्रणानपि ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1144-1146.

वटपत्री

- अ. कट्वम्लनामिका गोधावती श्यामा तु मोहनी ।
ऐरावती वटपत्री दीनकः शीतको मतः ॥
ब. वटपत्री कषायोष्णा योनिमूत्रगदापहा ।

वटपत्रीफलम्

- स. तत्फलं मधुरं रूक्षं कषायं स्तम्भनं हिमम् ॥
लेखनं कफपित्तघ्नं विबन्धाध्मानवातकृत् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1099-1101.

क. पाषाणभेदः

- पाषाणभेदकोऽश्मघ्नः शिलाभेदोऽश्मभेदकः ।
श्वेता चोपलभेदी च नगजिच्छिलिगर्भजा ॥
पाषाणभेदो मधुरस्तिक्तो मेहविनाशनः ।
तृट्दाहमूत्रकृच्छ्रघ्नः शीतलश्चाश्मरीहरः ॥

Rāja Nighaṇṭu, Parpatādi varga, 39-40.

ख. वटपत्री

- अन्या तु वटपत्री स्यादन्या चैरावती च सा ।
गोधावतीरावती च श्यामा खट्वाङ्गनामिका ॥
वटपत्री हिमा गौल्या मेहकृच्छ्रविनाशिनी ।
बलदा व्रणहन्त्री च किञ्चिद्दीपनकारिणी ॥

Rāja Nighaṇṭu, Parpatādi varga, 41-42.

ग. श्वेतशिला

- अन्या श्वेता शिलावल्का शिलाजा शैलवल्कला ।

वल्कला शैलगर्भाह्वा शिलात्वक् सप्तनामिका ॥
 शिलावल्कं हिमं स्वादु मेहकृच्छ्रविनाशनम् ।
 मूत्ररोधाश्मरीशूल-क्षयपित्तापचारकम् ॥

Rāja Nighaṇṭu, Parpatādi varga, 43-44.

घ. क्षुद्रपाषाणभेदः

क्षुद्रपाषाणभेदाऽन्या चतुष्पत्री च पार्वती ।
 नागभूरश्मकेतुश्च गिरिभूः कन्दरोद्भवा ॥
 शैलोद्भवा च गिरिजा नगजा च दशाह्वया ।
 क्षुद्रपाषाणभेदा तु व्रणकृच्छ्राश्मरीहरा ॥

Rāja Nighaṇṭu, Parpatādi varga, 45-46.

मूत्रकृच्छ्रादिरोगे शिलोद्भिदादितैलम्

शिलोद्भिदैरण्डसमस्थिराभिः पुनर्नवाभीरुरसेषु सिद्धम् ।
 तैलं शृतं क्षीरमथानुपानं कालेषु कृच्छ्रादिषु सम्प्रोज्यम् ॥

Bhāvaprakāśa, Mūtrāghātādhikāra, 36-40.

वातजन्याश्मरीरोगे पाषाणभेदाद्यं घृतम्

Bhāvaprakāśa, Aśmarīrogādhikāra, 37/18-16.

Cakradatta, 34/8-10.

पाषाणभेदाद्यं चूर्णं घृतञ्च

Cakradatta, Aśmarī cikitsā, 34/36-37.

अश्मर्याम्, मूत्राघाते, मूत्रकृच्छ्रे च

नलाश्मभेदकदर्भेक्षुत्रपुसैर्वारुबीजकम् ।
 क्षीरं परिशृतान् तत्र पिबेत् सर्पिःसमायुतान् ॥
 पाषाणभेदाद्यं घृतम् ।

Cakradatta, 38-7/9.

पाषाणभेदाद्यं चूर्णं घृतञ्च

Cakradatta, 34-35/36.

PĀṬALĀ

Botanical name : *Stereospermum suaveolens* Dc.

Family : Bignoniaceae

Classical name : Pāṭalā

Sanskrit names

Pāṭalā, Kṛṣṇavṛntā, Madhudūti, Ativallabhā,

Tāmrapuṣpī, Amoghā, Kuberākṣī, Kumbhipuṣpī, Ambuvāsinī.

Regional names

Parhal, Padhal, Adhkapari, Padiala, Padaria (Hindi); Padal (Punj.); Parul (Beng.); Padal (Mar., Guj.); Padari (Tam.); Kaligottu (Tel.), Hudaybilla (Kan.), Putoli (Oriya); Phullai (Kash.); Padal (Punj.); Pader (Santal); Parari (Nepal); Singyen (Lepcha).

Description

Tree 9-18 meters tall; large and deciduous trees upto 18 meters high and 1.8 m. in girth, with a clear bole of C. 9 meters. Bark grey or dark brown, with horizontal furrows, exfoliating in large, flat scales.

Leaves imparipinnate, 30-60 cm. (38-45 cm.) long; leaflets 5-9 broadly elliptic, 14×7.5 cm.; petiole hardly 0.25 cm.; calyx 0.8 cm., hairy lobes 3.5, very short, broad; corolla pale or dark purples puberulous without hairy in the throat; lobes rounded, crisped crenate. Flowers dull-purple, yellow within; fragrant in large, lax panicles.

Capsule 45×0.5 cm., slightly rough with tubercles, obscurely 4-ribbed, glabrous. Seeds 3×0.6 cm. deeply notched at the middle. Capsules straight cylindric, 30×60 cm. $\times 1.7$ cm., dark grey, somewhat rough, with elevated whitish specks; seeds pale yellowish brown, 3.2×1.3 cm., with large membranous wings.

Flowering and fruiting time

Plant flowers in post-spring or summer season and the fruits ripen during cold season.

Distribution

Plant occurs throughout India in dry regions. It is found in Bihar, Gujarat, Himachal Pradesh and Uttar Pradesh. Plant is also occurring in southern India, terai regions and specially in West Bengal.

Trees are found in greater parts of India specially in mixed, deciduous and sal forests; and they are common in the sub-Himalayan tract, ascending to an altitude of 1,500 meters.

It occurs in Rajsthan, Chota Nagpur, Central India

and many parts of the peninsula, chiefly in valleys and on plateau and plains. It often tends to gregarious on clayey ground and is frequently found also on grassy savannah lands.

In the Siwalik hills it is characteristic of the dry upper slopes and ridges on sandstone and conglomerate in somewhat stunted form, but reproduces freely.

Kinds and varieties

There are two kinds of Pātalā as mentioned by Bhāvamiśra viz. Raktapuṣpa (redflowered) and Śvetapuṣpa (white-flowered). Śvetapuṣpa Pātalā is named as Kāṣṭhapātalā, Ghaṇṭāpātalā, Muṣkāka etc. which indicate towards Mokṣaka (Muṣkaka). Mokṣaka is distinct drug and occupying separate identity which is botanically known as Schrebera Swietenoides Roxb.

Chemical composition

Bark yields a dark coloured gum. It is also reported to contain a bitter substance. Ethanolic extracts (50%) of the roots showed activity against Ranikhet disease virus.

The roots fat is made up of palmitic (30.41%), stearic (58.16%), and oleic (11.43%) acids; ceryl alcohol is also present the extract of plant contain lapacol [2-hydroxy-3-(methyl-2-butyryl)-1-4-naphtho quinone].

The woods contain (dry basis) cellulose 45.6, pentosan 13.2, lignin 31.0 and ash 1.3 per cent.

The leaves (fully grown matured) contain (on dry basis) : ash 13.48, calcium 1.67, carbon 43.4 and nitrogen 1.81% and also manganese.

Pharmacodynamics

Rasa	: Tikta, kaṣāya (Flowers and fruits : Kaṣāya, madhura)
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa (Flowers and fruits : Śīta)
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣaghna Kaphavātaśāmaka (bark) Vātapittaśāmaka (flowers, fruits).

Properties and action

Karma	: Śōthahara (bark)

	Hṛdya (flowers)
	Vedanāsthāpana-vraṇaropana
	Rucivardhana-grāhī
	Tṛṣṇāśāmaka
	Yakṛduttejaka
	Āmāśayāmlatā hrāsaka
	Kaphaghna-hikkānigrahaṇa
	Mūtrala-aśmarināśana
	Vājikaṇa (flowers)
	Jvaraghna-dāhapraśamana
	Pouṣṭika-balya (flowers)
	Vraṇaropana.
Roga	: Śoṭha (bark)
	Vraṇa-dagdhavraṇa
	(patrakalka-leaves paste)
	Śiraḥśūla-ardhāvabhedaka (seeds)
	Vātavyādhi (bark)
	Aruci-tṛṣṇā-ādhmāna-chardi
	Atisāra-arśa
	Amlapitta (bark)
	Hṛdroga (flowers)
	Kāsa-śvāsa
	Hikkā (flowers)
	Mūtrāghāta-aśmari (kṣāra-alkali)
	Śukradourbalya (flowers)
	Jvara-dāha
	Dourbalya (flowers)
	Netraroga-raktābhiṣyanda

Therapeutic uses

The drug Pātālā is appetizer, biliary stimulant, cardiogenic, cooling, diuretic, febrifuge and tonic. It is used in anasarca, calculus, cough, diarrhoea, emaciation, hemiparesis, hyperacidity, nervous disorders and piles.

The investigations find that the ethanolic extracts (50%) of the roots show activity against Ranikhet disease virus; it also shows hypoglycaemic activity in albino rats and anticancer activity against human epidermoid carcinoma of the naso-pharynx in tissue-culture.

The extracts of the plant containing lapacol which show highly significant activity against Walker-256 carcinosarcoma when injected or given orally.

Parts used : Root bark, bark, flowers, seeds, leaves, alkali.

Dose : Root bark decoction 50-100 ml.

Alkali 1-1.5 gm.

Formulation

Bṛhat Pañcamūlādi kvātha, Pāṭali tailam, Pāṭalādi kṣārodaka yoga.

Groups

Śothahara (Caraka Saṁhitā), Bṛhatpañcamūla, Daṣmūla, Adhobhāgahara, Āragvadhādi (Suśruta Saṁhitā).

PĀṬALĀ (पाटला)

पाटला

पाटला तुवराऽनुष्णा तिक्ता दोषत्रयापहा ।

अरुचिश्वासशोफास्त्रच्छर्दिहिध्मातृषापहा ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 37.

पाटलापुष्पम्

पुष्पं कषायमधुरं हिमं हृद्यं कफास्त्रनुत् ।

पित्तातीसारदाहघ्नं..... ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 38.

पाटलाफलम्

.....फलं तिक्तं हिमं गुरु ॥

कषायमधुरं कृच्छ्ररक्तपित्तानिलापहम् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 38-39.

पुष्पफलयोगुणाः

पुष्पं कषायं मधुरं हिमं हृद्यं कफास्त्रनुत् ।

पित्तातिसारानुत्कण्ठ्यं फलं हिक्काऽस्त्रपित्तहृत् ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 22.

पाटला-घण्टापाटलयोगुणाः

पाटलः तुवरः तिक्ताऽनुष्णा दोषत्रयापहा ।

अरुचिकासशोथास्त्रच्छर्दिहिकातृषाहरी ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 21.

पाटली

पाटली तु रसे तिक्ता कटूष्णा कफवातजित् ।

शोफाध्मानवमिश्वास-शमनी सन्निपातनुत् ॥

Rāja Nighaṇṭu, Karavīrādi varga, 50.

सितपाटलिका

सितपाटलिका तिक्ता गुरूष्णा वातदोषजित् ।

वमिहिकाकफघ्नी च श्रमशोषापहारिका ॥

Rāja Nighaṇṭu, Karavīrādi varga, 52.

मूत्राघाते

‘सतैलं पाटलाभस्मक्षारं बद्ध्वा परिस्तुतम् ।’

Cakradatta, 33-5.

Bhāvaprakāśa, Mūtrāghātādihikāra, 36-36.

मूत्राघाते पाटलादिक्षारोदकयोगः

Cakradatta, Mūtrāghāta cikitsā, 33-3.

व्रणचिकित्सायां पाटलीतैलम्

सिद्धं कल्ककषायाभ्यां पाटल्याः कटुतैलकम् ।

दुग्धव्रणरुजास्त्रावदाहविस्फोटनाशनम् ॥

Cakradatta, 44-94.

मूत्राघातेऽश्मर्याञ्च

पाटलाक्षारमाहृत्य सप्तकृत्वःपरिस्तुतम् ।

पिबेन् मूत्रविकारघ्नं संसृष्टं तैलमाश्रया ॥

Suśruta Samhitā, Uttara, 58-46.

Vṛndamādhava, 33-4.

हिक्कायाम्

पाटलायाः फलं पुष्पं..... ।

मधुद्वितीयाः कर्तव्यास्ते हिक्कासु विजानता ॥

Suśruta Samhitā, Uttara, 50-27.

दग्धव्रणे

सिद्धं कषायकल्काभ्यां पाटल्याः कटुतैलकम् ।

दग्धव्रणरुजास्त्रावदाहविस्फोटनाशनम् ॥

Vṛndamādhava, 25-22.

व्रणप्रच्छादनार्थम्

कदम्बार्जुननिम्बानां पाटल्याः पिप्पलस्य च ।

व्रणप्रच्छादनं विद्वान् पत्राण्यर्कस्य चादिशेत् ॥

Caraka Samhitā, Cikitsā, 25-15.

रक्ताभिष्यन्दे

पाटल्यार्जुन..... ॥

समञ्जिष्ठानि मधुना पिष्ट्यानीक्षुरसेन वा ।

रक्ताभिष्यन्दशान्त्यर्थमेतदञ्जनमिष्यते ॥

Suśruta Samhitā, Uttara. 12-11/12.

PĀTĀLAGARUḌĪ

Botanical name : *Cocculus hirsutus* (Linn.) Diels.

Syn. *Menispermum hirsutum* L.

Cocculus villosus Dc.; *Cocculus villosus* Dc.

Family : Menispermaceae

Classical name : Pātālagaruḍī-Chilahiṇṭa

Sanskrit names

Pātālagaruḍī, Chilahiṇṭa, Mahāmūla, Vatsādani.

Regional names

Jaljamani, Patalgarudi, Chilent, Charenti, Sarenta, Jaljamni (Hindi); Humer (Beng.); Vasanbel (Mar.); Patal galori (Guj.); Vevati (Saurashtra, Guj.); Katukkodi (Tam.); Dusaraitage (Tel.); Dusari valli (Pers.); Sagdai-balli, Dusarivalli (Kan.).

Description

Twining or trailing herbs or undershrubs; young parts softly pubescent or villosus; slender perennial dioecious.

Leaves deltoid to ovate-oblong, obtuse at base, softly pubescent, 7 × 5 cm., smaller upwards and oblong or flowering branches.

Male flowers in axillary, panicled cymules; bracts minute; sepals 6, 2-seriate, inner ones larger; petals 6, base auricled, apex 2 fid; stamens 6, free; male fls. in short peduncled capitate cymes. Female peduncles usually 1-3-flow-

ered, axillary, minute, greenish; carpels 3, glabrous, style cylindric.

Drupelets reddish purple or deep purple to black when ripe, 2-4 mm. long; drupes tranversely rugose.

Flowering and fruiting time

Plant begins flowering between November and April; and it bears fruiting between March and May.

Distribution

Plant common over bushes, on hedges and small trees, sometimes on herbs or trailing on ridges, throughout Madhya Pradesh, Central India. It occurs in tropical Africa and India, it is found almost throughout country.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Laghu, snigdha, picchila
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣaghna.

Properties and action

Karma	: Viṣaghna Vṛṣya-śukrastambhana-vājīkaraṇa Vāmaka Tvagdoṣahara Kāśaghna-śvāsahara Dīpana-pācana-anulomana Raktabhāraśāmaka-raktaśodhaka Mūtrala Kuṣṭhaghna Jvaraghna Vātaghna Santarpaṇa
Roga	: Viṣa Carmavikāra Agnimāndya-vibandha-śūla Raktabhārādhikya (uccaraktacāpa) Raktavikāra Kāsa-śvāsa Śukravikṛti-śukrakṣaya-klībatā Mūtrakṛcchra-pūyameha-

mūtrāghāta
 Carmaroga
 Jvara
 Sarpaviṣa
 Snāyukaroga
 Prameha

Therapeutic uses

The drug Pātālagaruḍī or Chilahiṇṭa is antidote to poison (viṣaghna) and aphrodisiac (vṛṣya). The leaves juice is very mucillaginous. Roots and leaves are mainly employed for medicinal purposes.

The juice of leaves when mixed with water forms a jelly which is given as a cooling medicine in gonorrhoea and it is applied externally in eczema, prurigo and impetigo.

The root is bitter, alterative, laxative and demulcent. It is used with some other suitable medicines in bilious affections, dyspepsia, rheumatism and stomach-ache of children.

The roots are prescribed against snake-bite (sarpaviṣa) in texts of clinical medicine (Rājamartanḍa, 29-4 and Gadanigraha, 7-3/29-30). The roots of gāruḍī (Pātālagaruḍī or Chilahiṇṭa) has been recommended for both external as well as internal administration in case of snake-bite poisoning (sarpadaṁśaja viṣa). It is rubbed, pasted (lepana), intake (pāna), snuffed (nasya) and used in eyes as collyrium (aṅjana) which counteract the snake poison (bhujāṅgadaṁśṭra viṣa) in case cyamosis (śyāmalatva) has not developed in snake-bitten patient. The tribal medicine also suggests application of roots of chilahiṇṭa as a single drug and also with some other anti-venom drugs in cases of snake-bite.

The plant drug is also useful in hypertension and as blood purifier. It is also used in gunica worm (snāyuka roga) as intake of root. The leaves juice (or jelly forms in water) is frequently suggested to be used in seminal complaints in rural herbal medicine.

Parts used : Roots, leaves.

Dose : Juice 10-20 ml.

PĀTĀLAGARUDĪ—CHILAHINTA (पातालगरुड़ी)

वत्सादनी तु मधुरा पित्तदाहास्रदोषनुत् ।
वृष्या सन्तर्पणी रुच्या विषदोषविनाशिनी ॥

Rāja Nighaṇṭu.

छिलहिण्टः परं वृष्यः कफहल्लघुमेहहा ।

Bhāvaprakāśa Nighaṇṭu.

लोहमारणार्थम्

शुद्धलोहभवं चूर्णं पातालगरुडीरसैः ।

मर्दयित्वा पुटेद्वह्नौ दद्यादेवं पुटत्रयम् ॥

Śāraṅgadhara Samhitā, Madhya Khaṇḍa, 11-44-47.

छिलहिण्टः

छिलहिण्टो महामूलः पातालगरुडाह्वयः ।

छिलहिण्टः परं वृष्यः कफघ्नः पवनापहः ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 260.

स्नायुकरोगे

‘पातालगरुडीमूलं पिबेत् स्नायुकनाशनम् ।’

Yogaratanākara, p. 357.

सर्पविषे

नस्याञ्जनालेपनपानयोगैर्भुजङ्गदष्टस्य विषं निहन्ति ।

मूलं गवाक्ष्याः परिवृष्यमाणं न श्यामलत्वं प्रतिपद्यते चेत् ॥

Rājamārtanḍa, 29-4.

Gadanigraha, 7-3-29/30.

PĀTHĀ

Botanical name : *Cissampelos pareira* Linn.

Family : Menispermaceae

Classical name : Pāṭhā

Sanskrit names

Pāṭhā, Ambaṣṭhā, Varatiktā, Abiddhakarnī,
Piluphalā.

Regional names

Parh, Padh, Parhi, (Hindi); Aknadi (Beng.); Padvel (Mar.); Venivel (Guj.); Appatta (Tam.); Pada (Tel.); Padvali (Kann.); Kattuvalli (Mal.).

Description

Root Drug Morphology : The drug occurs in the form of dried, cylindrical pieces of perennial and seldom branched matured tap roots. The drug varies in size and measures 15.0-24.0 cm. in length and 1.0-2.5 cm. in diam. The pieces of roots obtained from the closer portion of shoots system are woody in comparison to other portions obtained from deeper parts of the root. The other portions are generally more fleshy and tuberous. The dried roots are brownish to grey in colour, corky in texture, compressed, entire or splitted longitudinally. The external surface is rough and rugged due to numerous minute pits and waxy. It also shows vertically branched cracks or fissures. The older pieces of drug exhibits longitudinally ridgiditid surface with transverse cracks. The fracture of the roots is short and spintery. There is faint aromatic odour. The taste is at first sweetish and then bitter.

Distribution

Plant is found in wild state throughout India and Sri Lanka.

Kinds and varieties

There are two kinds of the drug Pāṭhā and Rājapāṭhā which are botanically identified as *Cissampelos pariera* Linn. and *Cyclea peltata* syn. *Cyclea arnotii* Miers. respectively. Some species of another genus *Stephania* are sometimes claimed to be plant sources (adulterants or substitutes) of Rājapāṭhā viz. *Stephania glabra* Miers, and *S. japonica* Miers. Leaves are broader and tuber is larger comparatively. *Stephania japonica* Miers. plant occurs in India (two varieties of *Stephania japonica* Miers. are found in different parts of country e.g. var. *japonica* in Southern India and var. *discolor* in Assam, West Bengal, Orissa and Northern Andhra Pradesh).

The main and common source plant *Cissampelos pariera* Linn. is abundently growing in nature (wild state).

Plant can be propagated by seeds. Natural habitat of plant provide commercial supplies mainly. Most of the collection of plant drug on commercial scale is carried out from Northern India, West Bengal, Southern regions and other various parts of country : Raw drug material is extracted after rainy season. It is collected from the forests, hedges and shrubs (climbing habit) grounds (prostrate habit), river beds and other places in localities of natural population of plants.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Laghu, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarman	: Tridoṣaśāmakā Kaphapittahara

Properties and action

Karma	: Stanyaśodhana Raktaśodhaka-śothahara Vraṇaropaṇa, Dipana-pācana-grāhi Viśaghna Kṛmighna Kaṇḍūghna Kuṣṭhaghna Mūtrala Jvaraghna Dāhapraśamana Balya Chardinigrahaṇa Vraṇaropaṇa Hṛdya Śūlahara Ārtavajanana Arśoghna Sukhaprasavakara.
Roga	: Stanyaduṣṭi-stanyavikāra Agnimāndya-ajirṇa-udaraśūla Atisāra-pravāhikā Plīhodara

Raktavikāra-hṛdroga-śoṭha
 Kāsa-śvāsa
 Bastiśoṭha-mūtrakṛcchra
 Kuṣṭha-kaṇḍū
 Śītajvara-jvarātisāra
 Dāha
 Dourbalya
 Kaṣṭaprasava-mūḍhagarbha
 Arśa
 Prameha roga-lavaṇameha
 Rājayakṣmā
 Śīroroga-ardhāvabhedaka
 Vraṇa-antarvidradhi.

Therapeutic uses

The drug Pāṭhā is anthelmintic, antidote to poison, antilithic astringent, cardiac, carminative, diuretic, expectorant, febrifuge, sedative, supportive and toxic in action. Plant drug is medicinally used for asthma, cold and cough, colic, diarrhoea, dysentery, fever, indigestion, inflammatory affections of the bladder and kidney (chronic cystitis), nephritic disorders, piles and ulcers.

The roots of plant drug Pāṭhā are employed in Indian system of medicine in various classical formulations. Drug is ingredient of Kuṭajāvaleha, Śatāvare guḍa, Paṭolādi kvātha cūrṇa, Bṛhanmanjiṣṭhādi kvātha cūrṇa, Mahāyogarāja guggulu, Caṅgeri ghr̥ta, Tiktaka cūrṇa, Puṣyānuga cūrṇa, Kālaka cūrṇa, Pradarāntaka louha, Gaṅgādhara cūrṇa (bṛhat) and other preparations.

Pāṭhā is useful as anthelmintic, anti-histaminic, antipyretic, astringent, bitter, cardiogenic, diuretic, refrigerent and stomachic. It is used in abdominal pain, anorexia, cystitis, dropsy, fever, heart diseases, internal rupture, respiratory disorders and skin diseases.

The drug Pāṭhā is therapeutically considered useful for combating toxicosis and toximia arising out of systemic disorders, ingested poisons and stings, bites and other similar poisonous or toxic conditions.

Parts used : Roots, stem.

Dose : Decoction 50-100 ml., Powder 1-3 gm.

Formulations : Pāṭhādicūrṇa, Ṣaḍadharāṇa yoga.

Groups

Stanyaśodhana, Jvarahara, Sandhāniya (Caraka Saṁhitā), Āragvadhādi, Pippalyādi, Brhatyādi, Ambaṣṭhādi, Mustādi (Suśruta Saṁhitā).

PĀTHĀ (पाठा)

पाठा तु कटुका तीक्ष्णा लघुरुष्णा त्रिदोषहा ॥

हरेत् कुष्ठज्वरच्छर्दिदाहातीसारहृद्गुजः ।

गुल्मकण्डूविषश्वासव्रणशूलगरकृमीन् ॥

Kaiyadeva Nighaṇṭu.

कुचेलिका (राजपाठा)

कुचेलिका तिक्तरसा स्वादुपाका हिमा लघुः ।

ग्राहिणी वातला पित्तकफरक्तविनाशिनी ॥

Kaiyadeva Nighaṇṭu.

पाठोष्णा कटुका तीक्ष्णा वातश्लेष्महरी लघुः ।

हन्ति शूलज्वरच्छर्दिकुष्ठातीसारहृद्गुजः ।

दाहकण्डूविषश्वासकृमिगुल्मगरव्रणान् ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 153.

पाठा तिका गुरुष्णा च वातपित्तज्वरापहा ।

भग्नसन्धानकृत्पित्तदाहातीसारशूलहत् ॥

Rāja Nighaṇṭu, Pippalyādi varga, 121.

पाठा तु- राजपाठा पापचेली सुस्थिरा च प्रतानिनी ।

वत्सादनीसमा पीलुफला तिका च पिच्छिला ॥

लघुपाठा तु 'बांगा' स्यात् करेढकमिति स्मृतम् ।

फञ्जिकासदृशा वल्ली गुच्छपुष्पा च पीलुनी ॥

Kaiyadeva Nighaṇṭu.

‘पाठाऽतिसारशमनी लघ्वी दोषत्रयापहा ।’

Rājaballabha Nighaṇṭu.

हृदामयचिकित्सायां पाठादिचूर्णम्

Cakradatta, Hṛdroga cikitsā, 31-17.

शोधे

‘गुणैस्तद्वच्च पाठायाः पञ्चकोलेन साधिता ।’

Aṣṭāṅga Hṛdaya, Cikitsā, 17-21.

पाठा तित्तरसा वृष्या (बल्या) विषघ्नी कुष्ठकण्डूनुत् ।

छर्दिहृद्रोगज्वरजित्त्रिदोषशमनी परा ॥

पामाऽतिसारशूलघ्नी कफपित्तज्वरापहा ।

Dhanvantari Nighaṇṭu.

प्लीहोदरे

‘मूलं समं तण्डुलधावनेन प्रपोषितं श्वेतपुनर्नवायाः ।’

पीतं भवेत् प्लीहविनाशहेतुः पाठाजटः..... ॥

Rāja Martanḍa, 7-5 (pp. 18-125).

‘पीतं भवेत्प्लीहविनाशहेतुः पाठाजटा छिन्नरुहाजटा वा ।’

अर्धावभेदके

अर्धशीर्षं शमं गच्छेत् पाठामूलस्य नस्यतः ।

Gadanigraha, 3-1-61 (pp. 411).

सुखप्रसवार्थम्

पाठा.....जटाः पृथक् ।

नाभिबस्तिभगालेपात्सुखं नारी प्रसूयते ॥

Gadanigraha, pp. 610.

अन्तर्विद्रधौ

शमयति पाठामूलं क्षौद्रयुतं तण्डुलाम्बुना पीतम् ।

अन्तर्भूतविद्रधिमुख्यतमाश्वेव मनुजस्य च ॥

Cakradatta, Vidradhi cikitsā, 43-15.

सुखप्रसवार्थम्

पाठायास्तु शिफां योनौ या नारी सम्प्रधारयेत् ।

शिरःप्रसवकाले तु सा सुखेन प्रसूयते ॥

Cakradatta, Strīroga cikitsā, 63-14.

अतिसारे

‘माहिषेण तु तक्रेण पाठापत्रं तथैव च ।’

Baṅgasena, Atisāra, 171.

अतिसारे

पाठा पिष्ट्वा च गोदध्ना..... ।

अतिसारव्यथादाहं हरन्त्येदाशु न संशयः ॥

Bhāvaprakāśa, Cikitsā, 2-42.

अर्शःसु

दुःस्पर्शकेन बिल्वेन यमान्या नागरेण वा ।

एकैकेनापि संयुक्ता पाठा हन्त्यर्शसां रुजम् ॥

Caraka Samhitā, Cikitsā, 9-100.

अतिसारे

लोणिकायाः स पाठायाः शुष्कशाकेन वा पुनः ।

दधिदाडिमसिद्धेन बहुस्नेहेन भोजयेत् ॥

Caraka Samhitā, Cikitsā, 10-36.

लवणमेहे

‘पाठाऽगुरुकषायं लवणमेहिनाम् ।’

Suśruta Samhitā, Cikitsā, 11-8.

‘लवणमेहिनं पाठाऽगुरुकषायम् ।’

Suśruta Samhitā, Cikitsā, 11-5.

ग्रन्थिभूते आर्तवे

‘ग्रन्थि पिबेत् पाठात्र्यूषणं वृक्षकाणि च ।’

Suśruta Samhitā, Śārīra, 2-14.

अर्शःसु वायोः अनुलोमनार्थम्

‘पाठ्या वा युतं तक्रं वातवर्चोऽनुलोमनम् ।’

Suśruta Samhitā, Cikitsā, 8.

राजयक्ष्मचिकित्सार्थं पाठादिचूर्णम्

पाठा बिल्वं यमानी च पातव्यं तक्रसंयुतम् ।

दुरालभा शृङ्गवेरं पाठा च सुरया सह ॥

Caraka Samhitā, Cikitsā, 8-126.

अतिसारे पाठाऽऽद्यालवालम्

पाठा पिष्टा च गोदध्ना तथा मध्यत्वगाम्रजा ।

अतीसारं व्यथादाहं हन्त्येवाशु न संशयः ॥

Bhāvaprakāśa, Jvarādhikāra, 1-42.

PAṬOLA

Botanical name : *Trichosanthes dioica* Roxb.

Family : Cucurbitaceae

Classical name : Paṭola

Sanskrit names

Paṭola, Kulaka, Karkaśacchada, Rājīphala, Bījagarbha.

Regional names

Parval (Hindi); Patol (Beng.); Patolam (Mal.); Parval (Guj., Mar.); Kambupudalai (Tam.); Koummupotala (Tel.); Katu-padval (Kann.), Pointed Gourd (Eng.).

Description

A dioecious climber, very long; arising from perennial rootstock. Leaves cordate or ovate-oblong, rough, 3-4 in. long and 2 in. broad, acuminate or pointed. Flowers dioecious; male flower : male peduncles paired, both 1-flowered; female flower : solitary. Fruits globose, oblong, both ends points, surface smooth, 5-12 cm. × 2-6 cm.; striped, strips light green on the young fruits and red on the ripe ones; Fruit whitish-green when raw or unripe and they become yellow or reddish in matured or ripen stage.

Flowering and fruiting time

Farming seasons. Summer-season crop (in north-western states) and rainy season crop (in western Uttar Pradesh, Delhi, Haryana and Punjab).

Distribution

Plant is found wild in the plains of north India from Punjab to Assam. It is also cultivated extensively all over the warmer regions of India, particularly gangetic plains areas; Uttar Pradesh, Bihar and West Bengal.

Kinds and varieties

Several cultivated types differing in size, shape and markings on fruits are grown. Two or more important forms are : one with large, oblong, deep green fruits, with longitudinal and somewhat obscure, white bands; and the other shorter thicker pale-green fruits without marking on fruit-surface.

Practically there are chiefly two kinds of Paṭola which are mentioned in texts of Indian medicine : grāmya-madhura (cultivated-sweet variety) which is used as fruit vegetable (phala śāka); and vanya-kātu (wild-bitter variety)

which is employed in medicine (auśadha) and its whole plants (all the parts) are bitter (tikta).

Chemical composition

Fruit (consisting edible matter 95%) has the following composition : moisture 92.0, protein 2.0, fat 0.3, fibre 3.0, calcium 30.0, oxalic 7.0, phosphorous-total 40.0, phytin 8.0, iron-total 1.7, ionizable 0.5, magnesium 9.0, sodium 2.6, potassium 83.0, copper 0.11, sulphur 17.0, chlorine 4.0, thiamine 0.05, riboflavin 0.06, nicotinic acid 0.5 and vitamin C 29.0 mg./100 g. and carotene 153 g./100 g. of edible matter.

Pharmacodynamics

Rasa	: Tiktā
Guṇa	: Laghu, rūkṣa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣaśāmakā

Properties and action

Karma	: Jvaraghna
	Pittaśāmakā-pittasāraka
	Dīpana-pācana-bhedana-anulomana
	Vāmaka-recaka (higher dose or excess use)
	Tṛṣṇānigrahaṇa
	Recana-kṛmighna
	Vātaghna
	Medohara
	Dāhahara
	Avṛṣya
	Raktaśodhaka-śothaghna
	Vāmaka
	Kaphaghna
	Kuṣṭhaghna-kaṇḍūghna
	Balya
	Viśaghna
	Pathya
	Phalaśāka-vegetable fruit

Roga	: Pittajvara-jīrṇajvara-sarva jvara Aruci-agnimāndya-ajīrṇa- udararoga-vibandha Tṛṣṇā-dāha Atisāra Amlapitta Arśa Kṛmiroga Yakṣdvikāra-kāmalā Raktapitta-raktavikāra-śoṭha Kāsa-śvāsa Dourbalya Viṣa Śirahśūla Vraṇaśoṭha Vraṇa-vidārikā Khālitya Kuṣṭha-kaṇḍū-visarpa-visphoṭa- pāmā Masūrikā Upadamśa Śoṭha Madātyaya Mukharoga Netraroga Medoroga.

Therapeutic uses

The drug Paṭola is antipyretic (jvaraghna), rakta-śodhana (blood purifier), śoṭahara (anti-inflammatory), vedanāsthāpana, keśya, kaphaghna, balya, viṣaghna, vraṇaśodhana-ropaṇa, pittasāraka (cholagogue), anulomana-sāraka and kṛmighna. It is emetic as well as purgative in overdose.

The fruits are prescribed for patient suffering from the disorders of circulatory system. Fruits are reported to have some prospect in the control of cancer-like conditions. The fruits and leaves are recommended in various diseases.

The fruits are commonly used as vegetable

(phalaśaka) of house hold utility. They are pickled and also used in confectionary. The fruits are considered suitable particularly as food for convalescence. The vegetable is easily digestible and it is laxative and diuretic. It is wholesome (pathya) in several diseases.

Parts used : Fruits, leaves.

Dose : Juice 10-20 ml., Decoction 50-100 ml.

Formulations

Paṭolādi kvātha, Paṭolādyā cūrṇa, Kalingakādi kvātha, Paṭolyādi kvātha, Paṭolaśuṇṭhī ghr̥ta.

Groups

Tṛptighna, Tṛṣṇānigrahaṇa (Caraka Saṁhitā), Paṭolādi, Āragvadhādi (Suśruta Saṁhitā).

PATOLA (पटोल)

पटोलः कटुतिक्तोष्णः रक्तपित्तदाहजित् ।

कफकण्डूतिकुष्ठासृक्ज्वरदाहार्तिनाशनः ॥

Rāja Nighaṇṭu, Guḍūcyādi varga, 24.

पटोलः कटुकस्निग्धः सरोष्णः कफपित्तनुत् ।

कण्डूदाहतृष्णाकोठकुष्ठरक्तज्वरान् जयेत् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 564.

पटोलफलम्

फलं तस्य कटु स्वादु पाके तिक्तं रसं लघुः ।

मलानुलोमनं वृष्यं हृद्यं दीपनपाचनम् ॥

स्निग्धोष्णं रोचनं हन्ति दोषश्चासृक्ज्वरकृमीन् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 565-566.

पटोलपत्रादि

पटोलपत्रं पित्तघ्नं वल्ली चास्य कफापहा ।

फलं त्रिदोषशमनं मूलं तस्य विरेचनम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 566.

मूलं सरं वातहरं पलाशनालं ज्वरघ्नं तु फलं पटोल्याः ।

तिक्तं त्रिदोषज्वरमेहकुष्ठकासकृमिघ्नं रुचिकृत्पटोलम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 567.

पटोलपत्रम्

पटोलपत्रं पित्तघ्नं दीपनं पाचनं लघु।
स्निग्धं वृष्यं तथोष्णं चोदरकासक्रिमिप्रणुत् ॥

Bhāvaprakāśa Nighaṇṭu, Śāka varga, 40.

पटोलं पाचनं हृद्यं वृष्यं लघ्वग्निदीपनम्।
स्निग्धोष्णं हन्ति कासास्त्रज्वरदोषत्रयक्रिमीन् ॥

Bhāvaprakāśa Nighaṇṭu, Śāka varga, 70.

पटोलस्य मूल-नाल-पत्र-फलानि

पटोलस्य भवेन्मूलं विरेचनकरं सुखात् ॥

नालं श्लेष्महरं पत्रं पित्तहारी फलं पुनः ।

दोषत्रयहरं प्रोक्तं तद्वक्तिका पटोलिका ॥

Bhāvaprakāśa Nighaṇṭu, Śāka varga, 71-72.

‘प्रायः सर्वं तिक्तं वातलं अवृष्यं च अन्यत्र वेत्राग्रपटोलात् ।’

Caraka Samhitā.

पटोलं कटुकं तीक्ष्णमुष्णं पित्ताविरोधि च ।

कफासृक्कण्डूकुष्ठानि ज्वरदाहौ च नाशयेत् ॥

Dhanvantari Nighaṇṭu.

‘पटोलं....कफपित्तहरं तिक्तं शीतं कटु विपच्यते ।’

Caraka Samhitā, Sūtra, 27.

कफपित्तहरं वर्ण्यमुष्णं तिक्तमवातलम् ।

पटोलं कटुकं पाके वृष्यं रोचनदीपनम् ॥

Suśruta Samhitā, Sūtra, 46-268.

पटोलनिम्बयूषौ तु कफमेदोविशोषिणौ ।

पित्तघ्नौ दीपनौ हृद्यौ कृमिकुष्ठज्वरापहौ ॥

Suśruta Samhitā, Sūtra, 46-370.

‘पटोलमुद्रामलकं यवानपि,

निषेव्यमाणस्य नरस्य यत्नतो

भयं सुधीरात् तिमिरान्न विद्यते ।’

Suśruta Samhitā, Uttara, 17-48.

उपदंशचिकित्सायां पटोलादिकाथः

Cakradatta, Upadāṁśa cikitsā, 47-3.

अतिसारे

पटोलायवधान्याककाथः पेयः सुशीतलः ।

शर्करामधुसंयुक्तच्छर्द्यतीसारनाशनः ॥

Vṛndamādhava, 3-32.

व्रणचिकित्सायां पटोलादितैलम्

सिद्धं कषायकल्काभ्यां पटोल्याः कटुतैलकम् ।

दग्धव्रणरुजास्त्रावदाहविस्फोटनाशनम् ॥

Bhāvaprakāśa, Vraṇaśothādhikāra, 47-107.

विदारिकायां पटोलः

पक्कां विदार्य शस्त्रेण पटोलपिचुमर्दयोः ।

कल्केन तैलयुक्तेन सर्पिर्मिश्रेण लेपयेत् ॥

Suśruta Samhitā, Cikitsā, 20-45.

मसूरिकायां पटोलप्रयोगः

पटोलमूलं कृत्थितं मोरटस्वरसं तथा ।

आदावेव मसूर्यां तु पित्तजायां प्रयोजयेत् ॥

Bhāvaprakāśa, Masūrikādhikāra, 60-40.

अहिपूतनारोगे पटोलादिघृतम्

Cakradatta, 55-138.

इन्द्रलुप्तविनाशाय

तिक्तपटोलीपत्रस्वरसैर्घृष्टा शमं याति ।

चिरकालजाऽपि रुद्धा नियतं दिवसत्रयेणापि ॥

Bhāvaprakāśa, Kṣudrarogādhikāra, 61-8.

पित्तकफप्रधानाम्लपित्ते पटोलादिक्वाथः (द्वितीयो योगः)

Cakradatta, Amlapitta cikitsā, 51-9.

अम्लपित्तचिकित्सायां पटोलादिक्वाथः

(कण्डूपामाऽऽर्त्तिशूलघ्नं कफपित्ताग्निमान्द्यजित्)

Cakradatta, Amlapitta cikitsā, 51-8.

अम्लपित्ते तृतीयपटोलादिक्वाथः

(मन्दानलं पित्तबलासदाहच्छर्दिज्वरामानिलशूलरोगान्

विनिहन्ति शीघ्रम्)

Cakradatta, Amlapitta cikitsā, 51-17.

पटोलादिगणक्वाथः

Aṣṭāṅga Hṛdaya, Sūtra, 15-15.

अम्लपित्तशमनार्थं पटोलादिक्वाथः

पटोलत्रिफलानिम्बशृतं मधुयुक्तं पिबेत् ।

पित्तश्लेष्मज्वरच्छर्दिदाहशूलोपशान्तये ॥

Vṛndamādhava, 26-41.

Cakradatta, Amlapitta cikitsā, 51-19.

कफपित्ताम्लपित्ते पटोलशुण्ठीघृतम्

पटोलशुण्ठयोः कल्काभ्यां केवलं कुलकेन वा ।

घृतप्रस्थं विषक्तव्यं कफपित्तहरं परम् ॥

Cakradatta, Amlapitta cikitsā, 52-55.

मसूरिकायां पटोलक्वाथः

पटोलारिष्टकं चापि क्वाथयित्वा समाक्षिकम् ।

पिबेत्तेन प्रशाम्यन्ति मसूर्यः कफसम्भवाः ॥

Bhāvaprakāśa, Cikitsā, 60-45.

विसर्प-विस्फोटचिकित्सायां पटोलादिक्वाथद्वयम्

Cakradatta, Visarpa-viṣphoṭa cikitsā, 53/21-23.

व्रणशोधनार्थं पटोल्यादिक्वाथः

ततः प्रक्षालनं क्वाथः पटोलीनिम्बपत्रकैः ।

अविशुद्धे विशुद्धे च न्योग्रधादित्वगुद्भवः ॥

Cakradatta, 44-25.

‘मदात्यये पटोलस्याथवा भिषक् ।’

Caraka Samhitā, Cikitsā, 12.

‘विषदोषे शाकञ्च कुलकं हितम् ।’

Caraka Samhitā, Cikitsā, 25.

मसूरिकाशमनार्थं पटोलादिक्वाथः

Cakradatta, Masūrīkā cikitsā, 54/21-22.

मसूरिकायाम्

‘.....पटोलमूलं क्वाथितं..... ।

आदावेव मसूर्यास्तु पित्तजायां प्रयोजयेत् ।’

Bhāvaprakāśa.

मसूरिकायां पटोलादिक्वाथद्वयम्

(रोमान्तिका-विस्फोटज्वरशान्तये)

Cakradatta, Masūrīkā cikitsā, 54/23-24.

मेदोरोगे

कर्कशदलवहिसलिलं शतपुष्पा हिङ्गुसंयुतम् ।

पिबतो निहन्ति नियतं सर्वभवां मेदसां वृद्धिम् ॥

Bhāvaprakāśa, Cikitsā, 39-20.

शिरोरोगे

पटोलमूलसम्भूतं भालस्थलविलेपनम् ।
सद्यः करोति यस्तस्य याति सर्वशिरोव्यथा ॥

Soḍhala.

इन्द्रलुप्ते

रसः तिक्तपटोलस्य पत्राणां तद्विलेपनात् ।
इन्द्रलुप्तं शमं याति त्रिभिरेव दिनैर्ध्रुवम् ॥

Śāraṅgadhara Samhitā, Uttara, 11-20.

दन्तजिह्वारोगेषु (विशेषेण जिह्वारोगेषु कर्त्तव्यमिदमौषधम्)

Cakradatta, Mukharoga cikitsā, 56-38.

मदात्यये

पटोलयूषमम्लं वा यूषामलकस्य वा ।
प्रभूतकटुसंयुक्तं सयवान्नं प्रदापयेत् ॥

Caraka Samhitā, Cikitsā, 24-171.

वातव्याधौ

‘पटोलफलकैर्यूषो वृष्यो वातहरो लघुः ।’

Cakradatta, 22-80.

ज्वरिणः शाकार्थम्

‘पटोलपत्रं.....शाकार्थं ज्वरिताय प्रदापयेत् ।’

Cakradatta.

शोथरोगे

‘सुवर्चिका गृञ्जनकं पटोलम् ।

शाकार्थिनां शाकमति प्रशस्तम् ॥’

Caraka Samhitā, Cikitsā, 12-63.

ज्वरे शाकार्थं पटोलाद्याः

पटोलपत्रं सफलं कुलकं पापचेलिकम् ॥

कर्कोटकं कठिलं च विद्याच्छाकं ज्वरे हितम् ॥

Caraka Samhitā, Cikitsā, 8-189/190.

गुददाहपाके

पटोलयष्टिमधुकक्काथेन शिशिरेण हि ।

गुदाप्रक्षालनं कार्यं तेनैव गुदसेचनम् ॥

Bhāvaprakāśa, Cikitsā, 2-65.

व्रणशोथे

ततः प्रक्षालनं क्वाथः पटोलीनिम्बपत्रजः ।

अविशुद्धे विशुद्धे तु न्यग्रोधादित्वगुद्भवः ॥

Vṛndamādhava, 44-22.

रक्तपित्ते

हीबेरमूलानि पटोलपत्रं..... ।

पृथक् पृथक् चन्दनयोजितानि तेनैव कल्पेन हितानि तत्र ॥

Caraka Samhitā, Cikitsā, 4-75/76.

वीसर्पे

पटोलपत्रमुद्गानां रसमामलकस्य च ।

पाययेत् घृतोन्मिश्रं च नरं वीसर्पपीडितम् ॥

Caraka Samhitā, Cikitsā, 21-61.

मुखरोगे

पटोलनिम्बजम्बवाप्रमालतीनवपल्लवाः ।

पञ्चपल्लवकः श्रेष्ठः कषायो मुखधावने ॥

Vṛndamādhava, 58-79.

कुष्ठे पटोलादिक्वाथः

पटोलखदिरारिष्टः त्रिफलाकृष्णवेत्रजम् ।

तिक्ताशनः पिबेत् क्वाथं कुष्ठं कुष्ठं व्यपोहति ॥

Cakradatta, 50-61.

नेत्ररोगे

‘पटोल.....शाकानि.....हितानि वृष्टवृत्तसाधनानि ।’

Sūsruta Samhitā, Uttara, 17-51.

ज्वरे

पटोलादिक्वाथः

Cakradatta, 1-128/131.

कलिङ्गकादिक्वाथः

Cakradatta, 1-205/206.

पटोलशाकाद्याः

Cakradatta, 1-83, 134. Caraka Samhitā, Cikitsā, 3-189.

PATTANĠA

Botanical name : *Caesalpinia sappan* Linn.

Family : Caesalpinaceae

Classical name : Pattaṅga-Patrāṅga

Sanskrit names

Pattaṅga, Patrāṅga, Pattarañjaka, Raktasāra.

Regional names

Patang, Bakam (Hindi); Patang (Mar., Guj.); Patungam (Tam.); Vakamu (Tel.); Pattang (Kann.); Sappanam (Mal.); Bakam (Pers.); Baggam (Arab.); Sappan (Eng.).

Description

Shrub or small tree, freshy cut surface of the wood is light yellow but quickly changes to red; Orang-red heart wood finding use in the dyeing (cotton, silk and fabrics); heart-wood orange-red ('raktasāra', Sanskrit term of Pattaṅga) indicating conspicuous characteristic.

Distribution

It is usually cultivated as a hedge plant. Plant occurs in south India, Bengal, Ceylon, Burma and Malaya.

Kinds and varieties

Kucandana (incorporated in Dhanvantari Nighaṇṭu and Rāja Nighaṇṭu) is considered to be Pattaṅga.

Chemical Composition

Leaves contain 0.16-0.25% of a pleasant-smelling essential oil containing d-a-phellandrene as the chief constituent. Oscimene is also reported to be present.

Brazilin is source of the colouring matter in Pattaṅga (heart wood of *Caesalpinia sappan* Linn.). Brazilin ($C_{16}H_{16}O_3$), soluble in water and alcohol and crystallising in colourless silky needles. It is converted into brazilein on exposure to atmospheric oxygen.

For extracting the colouring matter, the wood is cut into chips or rasped into powder and extracted twice with hot water. The deep orange, extract is allowed to ferment before use, so that brazilin is converted into brazilein. Sappan wood extract finds use for colouring and dyeing textiles (fabrics cotton and silk) by producing bright orange-red shade and other colours and shades.

The pod-cases and bark contain tannin (C. 40% in the former). Both these materials in combination with iron have been used in dyeing to produce black shades.

The leaves contain 0.16-0.25% of a pleasant-smelling essential oil containing phellandrene, and also oscimene.

Pharmacodynamics

Rasa	: Kaṣāya, tiktā, madhura
Guṇa	: Rūkṣa
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśamaka.

Properties and action

Karma	: Ārtavaśaṅgrahaṇīya Śonitasthāpana Pramehaghna Kuṣṭhaghna Dāhapraśamana Mastiṣkaśāmaka-ākṣepahara Stambhana Vraṇaropaṇa-raktastambhana (kṣataja-vraṇaja-abhighātaja) Sugandhi.
Roga	: Raktapradara-(asrgdara)- śvetapradara-atyārtava-yonivyāpad Prameha Kuṣṭha Dāha Unmāda-apasmāra-mānasikavikāra Raktapitta Bhūta vādhā Vraṇa-kṣata-raktasrāva-visphoṭa Jvara-pittajvara Rohiṇī Mukharoga

Therapeutic uses

The Pattaṅga kāṣṭha or sappan wood is astringent

and is administered as a decoction (1 in 20) in doses of 0.5-2.0 fluid oz. (as prescribed in B. P. C.). The decoction gives relief in mild cases of dysentery and diarrhoea. It is given internally in certain affections.

The drug Pattaṅga is ārtavaśaṅgrahaṇīya and it checks the excess flow of menstruation (menses) abnormally. It is used in rakta pradara or meno-metrorrhagia, menstrual and vaginal disorders (Rājah tathā yonivyāpad) especially vaginal discharges (including pradara of both kinds śveta and rakta) for which the decoction and ariṣṭa or āsava are orally taken, and also uttaravasti (vaginal douche) of pattaṅga kvātha or decoction is administered.

The drug is soṇitasthāpana or haemostatic and used in haemorrhage (raktasrāva) and intrinsic haemorrhage (raktapitta). It is useful in diarrhoea, epilepsy and insomnia. The drug is given in prameha roga and it reduces the frequency and quantity (being anti-diuretic properties-mutrasaṅgrahaṇīya and other action on urination).

It is used for allaying burning sensation (dāha), leprotic and skin affections. Externally it is also applied to leprosy kṣudra roga, skin diseases, ulcers and haemorrhage (incised wound or cuts etc.).

Patrāṅgādi lepa is prescribed in facial complaints (skin disorder) for external application (Rājamārtanḍa, 5-23). Being the drug Patrāṅga or Pattaṅga is specifically effective in leucorrhoea and diseases of female genital tract, Patrāṅgāsāva is a prominent alcoholic-formulation or āsava yoga based on major ingredient Patrāṅga (Bhaiṣajya ratnāvalī, strīroga, 118-122) which is widely prescribed in leucorrhoea and allied female ailments.

In rohiṇī, the powder of Pattaṅga heart wood (kāṣṭha-sāra) mixed with honey and sugar is topically applied (pratisāraṇa).

Parts used : Heart-wood.

Dose : Decoction 50-100 ml.

Formulation : Patrāṅgāsava.

PATTAṄGA-PATRĀṄG (पत्तङ्ग-पत्राङ्ग)

मुखरोगे

पत्राङ्गादिलेपः

Rāja Mārtaṇḍa, 5-23.

रोहिण्याम्

‘पत्तङ्गशर्कराक्षौद्रैः पैत्तिकीं प्रतिसारयेत्।’

Suśruta Samhitā, Cikitsā, 22-61.

Vṛndamādhava, 58-55.

योनिव्यापदि

पत्राङ्गासवः

Bhaiṣajya Ratnavālī, Strīroga, 118/122.

PERUKA

Botanical name : *Psidium guajava* Linn.

Family : Myrtaceae

Classical name : Peruka

Sanskrit names

Amṛta, Amṛtaphala, Bahubija, Dr̥ḍhabija, Parevata, Peruka.

Regional names

Amarud, Saphari (Hindi); Jamphal; Amarukh (Guj.); Peru, Jam (Marathi); Piyas, Goachiphal (Bengla); Guavha, Guava (Eng.).

Description

Small trees or large shrubs, pubescent on herbage; bark greyish-black, rough, longitudinally fissured, peeling off in irregular flakes; bark colour smooth brown, peeling off frequently.

Leaves opposite, short-petioled, oblong or elliptic-oblong, acuminate, coriaceous, prominently nerved, entire and pubescent beneath. Peduncles short axillary, 1-3-flowered.

Flowers white or creamy white, 2.5-4 cm. across. fls. pale-white, 4-merous. Petals caducous. Stamens numerous inserted on the calyx tube.

Berry 5 or 6-10 cm. (or more) in diam., globose, ovoid or pyriform, fleshy dark green when fresh and sulphur-yellow or rosy-purple on ripening with white or rosy-purple pulp. Seeds minute, ellipsoid, smooth, hard pale-brown.

Flowering and fruiting time

Almost throughout the year. Plant flowers in April-May and begins fruiting stage in August-January.

Distribution

It is native of South America. Plant is very common in India, extensively cultivated in gardens and fruit yards, often in house premises for edible fruits.

Kinds and varieties

There are several types of guava (Peruka) are cultivated in different states of country. Many varieties and hybrids. Guava is often referred as the apple of the tropics.

Chemical composition

A typical analysis of Peruka phala (Indian fruit of guava) gave followig values : moisture 8.17, protein 0.9, fat 0.3, fibre 5.2, other carbohydrates 11.2, and mineral matter 0.7%, calcium 10, magnesium 8, oxalic acid 14, phosphorous 28, iron 1.4, sodium 5.5, potassium 91, copper 0.3, sulphur 14, chlorine 4, thiamine 0.03, riboflavin 0.03, nicotinic acid 0.4, and vitamin C 212 mg./100 g. and vitamin A nil.

Pharmacodynamics

Rasa	: Kaṣāya, amla, madhura
Guṇa	: Guru, tikṣṇa
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Kaphāpittaśāmaka-vātanāśaka (vātavardhana).

Properties and action

Karma	: Kāsaghna Balya Śukrājanana Vidāhanāśaka Kṛmighna Trṣāpraśamana

	Śramahara
	Tṛptikara
	San̄grāhi
	Kṣudhāvardhana
	Mastiṣkabalya
	Pācana
	Jvaraghna
Roga	: Kāsa-kaphavikāra
	Śukrakṣaya-dhātukṣaya
	Vidāha-dāha-Dourbalya
	Kṛmi
	Tṛṣṇā
	Śrama
	Atisāra-āmātiśāra-pravāhikā
	Gudabhramśa
	Kṣudhānāśa
	Ajīrṇa-viṣṭambha-ādhmāna-visūcikā
	Jvara-viṣamajvara-cāturthika jvara
	Netravikāra-netrābhiṣyanda
	Śiraḥśūla-ardhāvabhedaka
	Mastiṣka roga
	Kampavāta
	Apasmāra.

Therapeutic uses

The drug Peruka or Pārevata are medicinally important besides the fruits belong to most popular catagory of common edible fruits which are also medicinally useful alongwith some other parts of plant drug i.e. bark, flowers and leaves. Fruits are of high nutritive value which makes it more medicinally potent.

Extracts of leaves, flowers and fruits have been found to be active against *Micrococcus pyogenes* Var aureus and *Escherichia coli*. Extracts of the fruits are found to be moderately active against enteria pathogens like *Salmonella typhosa* and *shigella antidysenterica* BH.

The seeds constitute 6-12 per cent of the whole fruit and contain upto 14 per cent of an orange-yellow, aromatic, fatty oil.

The leaves boiled in water which is useful in cough. The decoction of leaves when gargled relieves toothache and gum boils.

The bark is valued for its astringent properties, and the bark is employed in diarrhoea of children. The decoction form of bark is generally used. The bark is tonic and the ash caustic.

The flowers are used to cool body and they are useful in bronchitis. Flowers are applied to eye sores.

The fruits are tonic, laxative and cooling. They are useful to bleeding gums.

The leaves are used for wounds, ulcers and as an astringent for bowels. The young leaves are used as a tonic in the diseases of the digestive system or functions. The decoction of leaves has been used in cholera with some success in arresting vomiting and diarrhoea. An infusion of the leaves and roots is a popular astringent drink. A decoction of the young leaves and shoots is prescribed in febrile and antispasmodic baths. Infusion of leaves is used as cerebral affections, nephritis and cohexia. The pounded leaves are locally applied in rheumatism and an extract is used in epilepsy and chorea. The tincture is rubbed over the spine of children suffering from convulsions.

Peruka or Pārevata (guava) is a sweet, juicy, pulpy and highly flavoured fruit, eaten mostly as fresh fruit. It may also be canned, preserved, spiced or made into jam, butter, marmalades, pies, ketchups and chutneys. Guava juice is said to make an excellent substitute for orange or tomato juice in child feeding.

The fruit of Peruka is one of the richest natural sources of Vitamin C and contains 4 to 10 times more of this vitamin than the citrus fruits. In comparison to āmra (mango) and apricot, Peruka is deficient in Vitamin A, but superior in most of the other major nutrients.

Parts used : Fruits, leaves, bark.

Dose : Flowers, Fruit edible.

PHALGU

Botanical name : *Ficus carica* Linn.

Family : Moraceae

Classical name : Phalgu

Sanskrit names

Phalgu, Rājodumbara, Anjīra.

Regional names

Anjir (Hindi); Shimi-atti (Tam., Tel., Mal.); Anjura, Manjimedi (Tel.); Simayiatti tenatti (Tam.); Tin (Arab.); Anjir (Pers.); Common Fig (Eng.).

Description

Small or moderate-sized, deciduous tree, 15-30 ft. (4.57-9.14 meters) high.

Leaves broad ovate or nearly orbicular, more or less deeply 3-5 lobed, rough above and pubescent below, leathery, dark green above, hairy down.

Fruits axillary, usually pear-shaped, variable in size and colour. Fruit a syconium - a fleshy hollow receptacle with a narrow aperture at the tip and numerous small flowers, male and female and gall types, lining and inner surfaces; fruits depending upon the nature of the flowers and the method of pollination; each female flowers converted into achene or drupe; cyconium (sycomes or syconium) produce the fruit (achene or drupe) like of those of other *Ficus* species (e.g. *Ficus glomerata* Roxb.); flesh or pulpy portion of fruit receptacle.

Dried figs, pressed flat, are put into a garland which is general available in trade.

Flowering and fruiting time

Farming season.

Distribution

The fig plant is considered to be a native of Carica in Asia minor (base of botanical name *Ficus carica* Linn.); and it is grown in nearly all tropical and sub-tropical countries. It is now cultivated chiefly in Mediterranean region from Turkey in the east to Spain and Portugal in the west; it is also grown commercially in parts of U.S.A. and Chile,

and (earlier to a small extent or now becoming large) in Arabia, Persia, India, China and Japan.

In India, its commercial production is limited to few centres (for the instance, Poona in Maharashtra, Bellary and Anantapur districts in Southern India and other various places). It is mostly grown scattered in gardens and homeyards, particularly Punjab, Uttar Pradesh and Mysore, alongwith some other provinces.

Kinds and varieties

It is usual to distinguish pomologically four distinct classes of figs viz. common fig, Carpifig, Sinurna and Sen Pedro Fig. The common fig is the only type grown in India which is considered to be hybrid between the imported *F. carica* and the indigenous species. A large number of cultivated forms are known in which the fruits vary in shape, size, colour of skin, colour and flavour of flesh and period of ripening.

Some of the forms tried or grown in India are Black Ischia, Brown Turkey, Turkish White, Kabul and Marseilles. The particular area's is known as Poona Fig.

Chemical composition

Fresh fig (fruit) consists of C. 34% pulp and 16% skin. The chemical composition of fig varies with type. The average composition of the edible part of the fresh Indian fig is as follows : moisture 80.8, protein 103, ether extr. 0.2, mineral matter 0.6, carbohydrates 17.1, calcium 0.06 and phosphorous 0.03%, iron 1.2 mg.; carotene 270 I.U. vitamin A; nicotinic acid 0.6 mg., riboflavin 50 ug.; and ascorbic acid 2 mg./100 g.

The total sugar contents of fresh fig is 13-20% (av. 13.5%) and that of dried fig is 42-62% (av. 51.4%) of reducing sugars. The principal acids in fresh figs are citric and acetic; small amounts of malic, boric and oxalic acids are reported to be present. The acid contents range from 0.1 to 0.44% (as citric acid) and pentosans (0.83%). A phosphatide with a nitrogen : phosphorous ratio at 1 : 2 and containing palmitic and oleic acids is reported to be present.

Pharmacodynamics

Rasa	: Madhura
Guṇa	: Guru, snigdha
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittaśāmaka

Properties and action

Karma	: Mṛdivirecana Snehana-anulomana Yakṛduttejaka Viṣṭambhī (excess or overdose use) Raktaśodhaka-raktapittahara Tarpaṇa Kaphaniḥsāraka Mūtrala Vṛṣya Dāhapraśamana-visphoṭaśāmaka Jvaraghna Balya-br̥ṇhaṇa.
Roga	: Koṣṭhagata roukṣya-baddhatā (Vibandha) Yakṛdvikāra-yakṛdvṛddhi-kāmalā Plīhavṛddhi Sandhivāta-raktapitta-raktavikāra Kāsa-śvāsa-vakṣadāha- kaphaniḥsāraka Aśmarī-vṛkkaśūla-mūtrakṛcchra Śukradourbalya Varṇavikāra-dāha-masūrikā- visphoṭa Jvara-jvarottara dourbalya Dourbalya.

Therapeutic uses

The drug Phalgu is used in constipation being an esteemed laxative fruit-medicine. It is given in liver enlargement, jaundice, spleen enlargement, gout, intrinsic haemorrhage, cough, asthma, calculus, renal colic, dysuria, disorders, sexual debility, discolouration, burning sensation, measles, fever, general debility and worms affec-

tions. Externally the fruits are pasted warm on boils and inflammation. Fruits are useful for allaying the vāta disorders. Phalgu is a good tonic, vitalizer and aphrodisiac and it promotes lusture of skin. It is useful as fruit and medicine. The figs are consumed fresh, dried, preserved, candied or canned. Figs belong to important dry fruits group.

The fresh or dried fruit is valued for its laxative property. It is diuretic, demulcent, emollient and nutritive. It is used in the form of confection and syrups. The preparations sold under the name of Syrup of Figs contain senna as one of the constituents. Figs are considered useful in the prevention of nutritional anaemias. The ash of fig is highly alkaline seminal.

The latex of fig (phalgu kṣīra) is used as an anthelmintic. The anthelmintic is traced to ficin, a proteolytic enzyme which has remarkable power of digesting living helminths. Ficin present in fig is effective against both Trichurus and Ascaris.

Green fresh fruits, by contact, may cause redness, rushes etc. Latex is toxic parenterally to animals but not toxic orally. The fresh fig is a delicious fruit with high nutritive value. Figs owe their food value chiefly to their mineral and sugar contents.

The fig leaves are used as a fodder.

Fig coffe is also prepared. Some fig products are made.

Parts used : Fruit (fig).

Dose

Juice 10-20 ml., Paste 5-10 ml., Dried fruit 2-3. Fruits edible.

Formulation (yoga)

Syrup Fig—Sharbat Anjir.

PHALGU (फल्गु)

‘विष्टम्भि मधुरं शीतं फल्गुजं तर्पणं गुरु।’

Suśruta Saṁhitā, Sūtra, 46.

‘तर्पणं बृंहणं फल्गु गुरु विष्टम्भि शीतलम्।’

Garaka Saṃhitā, Sūtra, 27.

अञ्जीरं शीतलं स्वादु गुरु पित्तास्रवातजित्।

तस्मादल्पगुणं ज्ञेयमञ्जीरं लघु तद्गुणैः ॥

Ma. Vi.

रक्तपित्ते

‘समाक्षिकः फल्गु फलोद्भवो वा

पीतो रसः शोणितमाशु हन्ति।’

Vṛndamādhava, 9-144.

PĪLU

Botanical name : *Salvadora persica* Linn.

Family : Salvadoraceae

Classical name : Pilu

Sanskrit names

Pilu, Guḍaphala, Sraṁsī, Śītaphala, Dhānī, Virecanaphala, Karavallabha, Śākhi śyāma.

Regional names

Pilu, Pilua, Pilkhan, Jhak (Hindi); Pilu (Punj.); Jhal (Beng.); Pilu, Khakhana, Khakharh (Mar.); Khari Jal (Guj.); Udhaiputtai (Tam.); Baragogu (Tel.); Gonimara (Kann.); Arak (Arab.); Darakhte misvan (tooth-powder tree—mañjan perh or dantamañjana vṛkṣa); Tooth brush tree (Eng.).

Description

Shrubby, small-sized tree and curved (not straight); stem small, not straight, branches plenty, downwards. Leaves leathery, often fleshy, opposite, ovoid, 3.125-5 cm. long (1.5-2 in. long) and broad upto 1 in., round at both ends. Leaves camel's fodder, much relished by camels.

Flowers minute (small), greenish-white, peduncled; fls. axillary (or not), flowers on often multi-divided spikes 2-3 in. long.

Fruit drupes, 1/8 in. (0.31 cm.) diam., round, smooth; fruits become red when ripen; single seeded.

Fruits fleshy and smell intense odorously; fruits tasty sweet and bitter slightly, ripe fruit edible.

Flowering and fruiting time

Plant flowers in spring season and fruiting during summers. Flowering begins by autumn or cold season and fruits ripen in hot months.

Distribution

Plant occurs in tropical; drier, desert and coastal regions in India. It is found in Rajsthan, Uttar Pradesh, Gujarat, Bihar, Punjab, Deccan, Konkan and Karnataka and other regions including Madhya Bharat (the region of M.P. bordering Uttar Pradesh inhabiting particularly Etawah district Jamuna and Chambal ravines).

Kinds and varieties

There are two kinds of Pīlu viz. Pīlu or Kṣudra pīlu and Bṛhat pīlu, the small and big types mainly based on fruit-size. Bṛhat pīlu or Vṛddha pīlu is botanically known as *Salvadora oleoides* Decne. (Salvadoraceae) having lanceolate and acuminate leaves, axillary spikes and flowers as well as fruits in bigger size. Flowers sessile and greenish-white in colour and fruit 0.41 cm.—0.5 cm. in diameter (size comparatively bigger than Kṣudra pīlu) and becoming yellow when ripens.

Chemical composition

Root bark contains resin, colouring matter, tannin, saponin and alkaloids salvadorine, tri-methyl-amine, salts having chlorides in good proportion.

Fruits contain sugar, fat, colouring matter and an alkaloid. Ash content is 27 per cent.

Seeds yield oil. Seeds contain solid fat 39.3 per cent and upto 40-50% fat in the fruits of Bṛhat pīlu.

Pharmacodynamics

Rasa	: Tikta, madhura
Guṇa	: Laghu, snigdha, tikṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

Properties and action

Karma	: Virecanopaga

	Anulomana (ripe fruit)-recana (seeds)
	Stambhana-raktapittaśāmaka (leaves)
	Kāśahara-śvāsahara (leaves)
	Mūtrala-aśmarighna (fruits)
	Ārtavajanana (bark)
	Svedajanana
	Jvaraghna
	Viśaghna
Roga	: Udara-gulma-arśa
	Raktapitta
	Pratiśyāya-kāsa-śvāsa
	Mūtrakṛchra
	Rajorodha
	Jvara
	Sarpaviṣa
	Āmavāta
	Carमारoga.

Therapeutic uses

The drug Pīlu is virecanopaga that helps in purgation or used as subsidiary with purgative drugs; it is, hence, included in virecanopaga daśemani by Caraka (Caraka Saṁhitā, Sūtra, 4-8).

Pīlu pacifies provoked vāta and kapha doṣa and it is alleviate useful to the ailments caused by these two body humors. Pīlu is useful in several diseases and its various parts are therapeutically used other than utility of fruits as tasty forest product almost limited to the areas (pockets) of wild growth (population) of plant drugs (Pīlu vrkṣa).

Seeds oil is anti-inflammatory and analgesic; it is locally applied as message in sandhivāta (characterised by swelling and pain in joints) and other similar diseases including vātavyādhi.

Root bark is visphoṭajanana. Branches are dantaśodhana or dentrifice particularly cleaning the teeth; the branches are utilised as medicated tooth brush. Fruits are śirovirecaka. Seeds powder and root-bark are topically applied to snake-bite. Leaves are duly warmed up with suit-

able oil and they are applied or pasted in rhumatic arthritis, piles and tumors etc. Seeds oil is also known as 'Khankhan ka tail' (as sold in Bombay market, Maharastra).

Ripe fruit is carminative and laxative; and the seeds are purgative. Leaves are stambhana (haemostatic) and raktapitta śāmaka (allaying intrinsic haemorrhage).

Fruits are diuretic and useful to destroy calculus (aśmarighna). Fruits are tasty and eaten in ripen state. Fruits are useful in fever. Fruit, leaves and other parts used in skin diseases. Fruits are taken in cough, coryza and asthma for snuffing or smelling (being śirovirecana). Root bark is emmenagogue and it is used in dysmenorrhoea.

Parts used : Fruit, seeds, leaves, rootbark.

Dose : Seeds powder 1-3 gm., Decoction 50-100 ml.

PĪLU (पीलु)

क. पीलुगुडफलः खंसी तथा शीतफलोऽपि च ।

ख. पीलु श्लेष्मसमीरघ्नं पित्तलं भेदि गुल्मनुत् ॥

स्वादु तिक्तञ्च यत्पीलु तन्नात्युष्णं त्रिदोषनुत् ।

Bhāvaprakāśa Nighaṇṭu, Āmrādiphala varga, 128.

पीलुः

अ. पीलुस्तीक्ष्णतरुः खंसी शाखी करभवल्लभः ।

शीतसहो गुडफलः सहस्राङ्गी विरेचनः ॥

पीलुगुणाः

ब. पीलूष्णमूषणं पाकरसयोर्भेदि दीपनम् ।

तीक्ष्णं विदाहि पित्तास्रजननं सन्नियच्छति ॥

गुल्मार्शः कफवातास्रप्लीहानाहगरोदरम् ।

तत् स्वादु तिक्तं दोषघ्नं सोष्णं रूक्षं रसायनम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 452-454.

अ. पीलुः

पीलुः शीतः सहस्रांशो धानी गुडफलस्तथा ।

विरेचनफलः शाखी श्यामः करभवल्लभः ॥

अङ्गाहः कटुकः पीलुः कषायो मधुराम्लकः ।
सरः स्वादुश्च गुल्मार्शः शमनो दीपनः परः ॥

Rāja Nighaṇṭu, Āmrādi varga, 83-84.

ब. बृहत्पीलुः

अन्यश्चैव बृहत्पीलुर्महापीलुर्महाफलः ।
राजपीलुर्महावृक्षो मधुपीलुः षडाह्वयः ॥
मधुरस्तु महापीलुर्वृष्यो विषविनाशनः ।
पित्तप्रशमनो रुच्य आमघ्नो दीपनीयकः ॥

Rāja Nighaṇṭu, Āmrādi varga, 85-86.

पीलुफलगुणाः

रक्तपित्तहरः पीलुः फलं स्वादु विपाकि च ।
अर्शोघ्नं बस्तिशमनं सस्त्रेहं कफवातजित् ॥
पीलुजं च रसं स्वादु गुल्मार्शोघ्नं तु तीक्ष्णकम् ॥

Dhanvantari Nighaṇṭu.

तिक्तं पित्तकरं तेषां सरकटुविपाकि च ।
तीक्ष्णोष्णं कटुकं पीलु सस्त्रेहकफवातजित् ॥

Suśruta Saṁhitā.

कल्पद्रुमफलम्

धन्याः सूक्ष्मफला अपि प्रियतमास्ते पीलुवृक्षाः क्षितौ
क्षुत्क्षीणेन जनेन हि प्रतिदिनं येषां फलं भुज्यते ।
किं तैस्तत्र महाफलैरपि पुनः कल्पद्रुमाद्यैर्द्रुमैः
येषां नाम मनागपि श्रमनुदे छायापि न प्राप्यते ॥

अर्शःसु

पीलून्याद्राणि सेवेत पक्षं पक्षार्धमेव वा ।
न चान्नं शीलयेत्किञ्चित् तेभ्यः सौख्यमवाप्नुयात् ॥
एतदर्शांसि शमयेत् श्रेष्ठं पीलु रसायनम् ।
ग्रहणीकृमिदोषानां गुल्मिनाममृतोपमम् ॥

Śodhala.

Gadanigraha, 2-4-68/69.

अर्शःसु

‘तक्रानुपानानि खादेत् पीलुफलानि वा ।’

Aṣṭāṅga Hṛdaya, Cikitsā, 8-36.

मदात्ययस्य पिपासायाम्

‘परुषकानां पीलूनां रसं.... ॥’

Caraka Samhitā, Cikitsā, 24-149.

आनाहे

‘पीलुकल्कोपसिद्धं वा घृतमानाहभेदनम् ।’

Caraka Samhitā, Cikitsā, 18. 145.

गुल्मे

‘एवं पीलूनि पिष्टानि पिबेत् सलवणानि तु ।’

Suśruta Samhitā, Uttara, 42-64.

अर्शःसु पीलुफलम्

‘पीलूनि वा तक्रानुपानानि प्रातः पक्षं पक्षार्धं वा प्रयोजयेत् ।’

Aṣṭāṅga Saṅgraha, Cikitsā, 10-12.

PIPPALĪ

Botanical name : *Piper longum* Linn.

Family : Piperaceae

Classical name : Pippalī

Sanskrit names

Pippalī, Vaidehi, Kṛṣṇā, Kaṇā, Capalā, Uṣaṇā, Śoundī, Upakulyā, Kolā, Tīkṣṇataṇḍulā.

Regional names

Pipal (Hindi); Pipul (Beng.); Pipali (Mar.); Pipal (Guj.); Magha (Punj.); Tipili (Tam.); Pipul (Tel.); Dar philphil (Arab.); Philphil daraj (Pers.); Long Pepper, Indian Long Pepper (Eng.).

Description

Slender aromatic climber with perennial woody roots; stems creeping below (and climbing on supports); young shoots downy; branches prostrate or creeping with broad leaves; flowering shoots erect. Lower leaves 0.5-7.5 cm., often rounded ovate, acuminate, 7-nerved, sinus rounded but narrow, basal leaves, equal; petiole 2.5-7.15 cm.; upper leaves much narrower with often unequal basal lobes; male spikes 2.5-7.5 cm., female 1.25-2 cm.; fruit about 0.22 cm. Spike cylindrical pedunculate, male larger

and slender; fruits ovoid, yellowish-orange sunk fleshy spike.

Fruit Drug : In transaction of the fruiting spikes are seen one seeded fruitlets, arranged in a circle on the main axis. The pericarp of the fruit has zones of epicarp, mesocarp and endocarp. Secretory cells are present in the outer parts of epicarp and round and oval type cells of sclerenchyma. Mesocarp has thin walled collapsed parenchymatous cells. Epicarp is waxy and filled dark brown contents. Sometimes the outer end of endocarp forms a dome like structure covering a few cells of endosperm and embryo. The major portion of the fruit under endocarp consists of perisperm, the cells of which are stocked with starch grains.

The fruits and roots form the drug Pippali and Pippalimūla respectively.

Flowering and fruiting times

Plant bears fruits during rainy season and fruiting afterwards, in autumn months.

Distribution

Plant occurs throughout the country extending upto 1,800 meters altitude (m.a.s.l.) specially in sub-montane tracts. It is cultivated to some extents in Karnataka, Tamilnadu, Uttar Pradesh, Bihar and West Bengal. In tropical regions of India, it is cultivated; Madras (Annamali Hills) and Assam, East Nepal, Konkan-Travancore etc.

The Long-Pipper (Pippalī) is cultivated on large scale in limestone soil, 450-500 meters (below the Cherrapunji region). It is cultivated mainly by layering of mature branches or by suckers planted at the beginning of the rainy season. The vines are well-matured with cowdung cake and start bearing three or four years after planting. The spikes are harvested in January, while still green and unripe, as they are most pungent at this stage.

They are dried in the sun when they turn grey. They yield increases from 560 kg. per hectare in the first year to 1,680 kg. (per hect.) in third year, and then decreases.

Kinds and varieties

The fruits of Pippalī or Long pepper as crude drug (in trade) appears to be derived from two or more (three) species, including one which is Indonesian. Indian Long Pepper is a product either of *Piper longum* Linn. or *Piper prepuloides*, while the Indonesian or Java Long Pepper imported from Malaysia is *Piper retrofractum*. The products of these species are used for the same purposes, though they vary in their effectiveness. Indian Long Pepper is mostly procured from the wild plants grown in some particular regions of its availability in more or less quantity (with varying frequency). Some other relevant species include *Piper sylvaticum* Roxb.

There are four kinds of Pippalī as incorporated in textual sources of Indian medicine (*materia medica*) viz. Pippalī, Gajapippalī, Sainhalī and Vanapippalī—Cavikā which are indicated (Rāja Nighaṇṭu, prabhadrādi, 13-20) with medicinal properties in particular.

Gajapippalī is classically named as Cavya which botanically identified as *Piper chava* Hunter. Pippalimūla forms the roots and thicker parts of stem are cut and dried (which are collected from the plants other than fruits) for trading and utilisation as drug having individual place in medicine.

There are three grades of Pippalimūla viz. Grade I, II and III. Grade I with thick roots and underground stems fetching higher price than Grade II or III which comprises either thin roots, stems or broken fragments. Commercial drug consists almost entirely of transversely cut pieces (length 5-25 mm., diam. 2-7 mm.) which are cylindrical, straight or slightly curved and some with distinct, swollen internodes showing a number of leaf and rootlet scars. The surface of the pepper root piece is dirty, light brown in colour. This root-drug has a peculiar odour and pungent bitter taste.

In crude drug market, there are two types of pipal (Pippalī) are sold and procured for catering the requirement of drug, under the current names of raw material of

chhoṭi pipal (small) and barhi pipal (large) which are indigenous and imported respectively, for practical purpose of drug utilisation.

Chemical composition

The dried fruit (on steam-distillation) yields 0.7 per cent of an essential oil with spicy odour resembling that of pepper and ginger oil. Fruit contains piperine 4.5% and pipalatine alkaloids. Two new monocyclic sesquiterpenes 15.5 and 11.1% respectively. Sesamin and pipalsterol are also present. The roots contain piperine (0.15-0.18%) and pippalartine (0.13-0.20%), piperlonguminine, a steroid and glycoside.

Besides the traces of a yellow crystalline pungent alkaloid, other constituents found in the drug include triacontane, dihydrostigmasterol, and an unidentified steroid.

Two new liquid alkaloids have been isolated from root, one of which is designated as alkaloid A which is closely related to pellitorine producing marked salivation, numbness and a tingling sensation of mucous membranes of the mouth. Alkaloid A showed significant in vitro antitubercular activity against m. tuberculosis.

Pharmacodynamics

Rasa	: Kaṭu, madhura (green or fresh fruit)
Guṇa	: Laghu, snigdha, tīkṣṇa
Vīrya	: Anuṣṇāṣīta, Śīta (green or fresh fruit)
Vipāka	: Madhura
Doṣakarma	: Vātakaphaśāmaka Vātakaphavardhaka-pittaśāmaka (ārdra phala-green or fresh fruit)

Properties and action

Karma	: Kāśahara-śvāsahara-hikkānigrahaṇa Kṣayahara (kṣaya jīvāṇu niṣūdana) Rasāyana Mēdhya-vātahara Mūtrala

	Dīpana-tr̥ptighna-vātānulomana- śūlapraśamana-mṛdurecana Yakṛduttejaka-plihavṛddhihara Kṛmighna Garbhāśayaśaṅkocaka-vṛṣya Raktotkleśaka-jantughna Śirovirecana Kuṣṭhaghna Jvaraghna-viṣamajvara- prativandhaka Balya.
Roga	: Kāsa-śvāsa-hikkā Aruci-agnimāndya-ajīrṇa-vibandha Gulma-udaravikāra Arśa Yakṛdvikāra-plihavṛddhi Kṛmiroga Hṛddourbalya-pāṇḍu-raktavikāra- āmavāta-vātarakta Kṣaya-Rājayakṣmā Śukradourbalya Rajorodha-kaṣṭaprasava (mūla-root) Kuṣṭha Jvara-jīrṇajvara-viṣamajvara Dourbalya Mastiṣkadourbalya-vātāvyaḍhi.

Therapeutic uses

The drug Pippalī is alterative, digestive, febrifuge, stimulant and tonic. It is used in abdominal distention, ascites, colic, consumption, cough, emaciation, fever, piles, weakness and worms.

The drug is very much considered useful for consumption. The study conducted on the drug Pippalī has shown antitubercular activity in the active constituents derived from the plant drug. Piperine isolated from the drug possesses anticolitic and analeptic potentialities.

The drug has a peculiar odour and a pungent bitter

taste producing numbness of on the tongue. The fruits are used as spice and also in pickles and preserves. They have a pungent pepper-like taste and produce salivation and numbness of the mouth.

The fruits as well as roots, known as Pippalī and Pippalimūla respectively, are attributed with numerous medicinal uses, and may be used for diseases of respiratory tract viz. cough, bronchitis, asthma and other allied ailments. It is used as counter-irritant and analgesic when applied locally for muscular pains and inflammations. A snuff in coma and drowsiness is used and internally as carminative; as sedative in insomnia and epilepsy. It is given as general tonic and haematinic. As cholagogue in obstruction of bile duct and gall bladder it is taken. It is used as an emmenagogue and abortifacient, and for miscellaneous purposes as anthelmintic and in dysentery and leprosy. Root is also employed in some tribal areas to ferment rice beer, and the leaves are chewed like betel leaves ('*atha pippalikāvallīḥ nāgavallī mṛduḥ*' Śivadattta).

The drug Pippalī is a prominent drug of Indian medicine and it is most common and highly valuable medicine finding clinical, pharmaceutical and therapeutical uses in early classical texts of ancient medical system (having background from Vedic and oriental literature), and the presently the role of Pippalī as an effective and potential drug predominantly continues in medical practice carrying support of experimental studies and multi-disciplinary investigations.

Pippalī is chiefly an esteemed drug in cough (kāsa) hiccough (hikkā) and asthma (śvāsa), bronchitis, pulmonary tuberculosis (yakṣmā) and allied diseases of respiratory system. It is specifically useful in chronic fever (jīrṇa jvara). Pippalī belongs to valuable Rasāyana group of drugs.

Therapeutically, the drug Pippalī covers large number of clinical managements where Pippalī is employed various forms, modes and formulations in addition to a single drug as well as as a component of Trikaṭu (compris-

ing Śunthī, Marica and Pippalī), trio-pungent drugs group occupying significant role in therapeutics of indigenous system of medicine. Pippalī acts as Rasāyana and its use as Vardhamāna pippalī is well appreciated for the purpose of rasāyana.

The drug Pippalī is administered for treatment of several diseases. It is frequently used in liver disorders, splenic enlargement, anaemia, piles, worms, dyspepsia, anorexia, loss of appetite, constipation, abdominal colic, heart complaints, gout, rheumatism, urinary complaints, vātavyādhi, kaphaja vikāra, brain and nerve complaints, dysmenorrhoea, fever chronic and malarial fever, seminal disorders and general debility.

The use of Pippalī in the mode yogavāhī (synergistic or potentiating way) may be preferred. The prolonged and excess use of single or individual drug may produce (due to atiyoga) some adverse effects as cautioned by Caraka.

Besides as a major drug, Pippalī is commonly used as a spice.

Parts used : Fruit, root.

Dose : Powder 500 mg.-1 gm.

Formulation

Pippalī khaṇḍa, Guḍa pippalī, Kaṇādi cūrṇam, Kolādi maṇḍūram, Pippalyādi varti, Pippalyādi leha, Pippalyādi cūrṇa, Pippalī rasāyanam, Vardhamāna pippalī, Pippalyāsava, Pippalī ghṛtam.

Groups

Kāsahara, Hikkānigrahaṇa, Śirovirecana, Vamana, Tṛptighna, Dīpanīya, Śūlapraśamana (Caraka Saṁhitā), Pippalyādi Urdhvaabhāghara, Śirovirecana (Suśruta Saṁhitā).

PIPPALĪ (पिप्पली)

आर्द्रपिप्पली

पिप्पल्यार्द्रा हिमा गुर्वी स्वाद्वी स्निग्धा कफप्रदा ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1166.

शुष्कपिप्पली

शुष्का लघुः स्वादुपाका स्निग्धानुष्णा रसे कटु ॥
 कफवातहरा रुच्या सरा वृष्या रसायनी ।
 दीपनी पाचनी हृद्या पित्तला श्वासकासनुत् ॥
 निहन्ति कफगुल्मार्शोमेहप्लीहज्वरोदरान् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1166-1167.

पिप्पलीकामुकत्वम्

तीक्ष्णोष्णभावान् श्लेष्मघ्नो तस्माच्चैवाग्निदीपनी ।
 शैत्यप्रसादमाधुर्यात् पित्तं हन्ति च पिप्पली ।
 औष्ण्यात् सरत्वात् पाकाच्च वातस्याप्यनुलोमनी ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1168-1169.

पिप्पली

पिप्पली दीपनी वृष्या स्वादुपाका रसायनी ।
 अनुष्णा कटुका स्निग्धा वातश्लेष्महरी लघुः ॥
 पिप्पली रेचनी हन्ति श्वासकासोदरज्वरान् ।
 कुष्ठप्रमेहगुल्मार्शः प्लीहशूलाममारुतान् ॥

Bhāvaprakāśa Nighaṇṭu, Harītakṛyādi varga, 54-55.

पिप्पली शुष्काद्रा च

आर्द्रा कफप्रदा स्निग्धा शीतला मधुरा गुरुः ।
 पित्तप्रशमनी सा तु शुष्का पित्तप्रकोपिणी ॥

Bhāvaprakāśa Nighaṇṭu, Harītakṛyādi varga, 56.

मधुसंयुक्तपिप्पली

पिप्पली मधुसंयुक्ता मेदःकफविनाशिनी ।
 श्वासकासज्वरहरी वृष्या मेध्याऽग्निवर्द्धिनी ॥

Bhāvaprakāśa Nighaṇṭu, Harītakṛyādi varga, 57.

क्षौद्रोपकुल्यासंयोगः कासश्वासज्वरापहः ।
 प्लीहानं हन्ति हिक्काञ्च बालानाञ्च प्रशस्यते ॥

Cakradatta, Jvara cikitsā, 1-112.

गुडसंयुक्तपिप्पली

जीर्णज्वरेऽग्निमान्द्ये च शस्यते गुडपिप्पली ।
 कासाजीर्णारुचिश्वासहृत्पाण्डुकृमिरोगनुत् ॥

Bhāvaprakāśa Nighaṇṭu, Harītakṛyādi varga, 58.

नक्तान्धे कणाप्रयोगः

कणाच्छागयकृन्मध्ये पक्त्वा तद्रसपेषिता ।
अचिराद्भन्ति नक्तान्धं तद्वत् सक्षौद्रमूषणम् ॥

Cakradatta, 59-159.

राजयक्ष्मरोगे पिप्पलीघृतम्

पिप्पली गुडसंसिद्धं छागक्षीरयुक्तं घृतम् ।
एतदग्निप्रवृद्ध्यर्थं सर्पिश्च क्षयकासिनाम् ॥

Cakradatta, 10-64.

पिप्पलीगुडमानम्

द्विगुणः पिप्पलीचूर्णाद् गुडोऽत्र भिषजां मतः ।

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 59.

क. पिप्पली

पिप्पली ज्वरहा वृष्या स्निग्धोष्णा कटुतिक्तका ।
दीपनी मारुतश्वासकासश्लेष्मक्षयापहा ॥

Rāja Nighaṇṭu, Pippalyādi varga, 13.

ख. सैंहिली

सैंहिली कटुरुष्णा च जन्तुघ्नी दीपनी परा ।
कफश्वाससमीरार्तिशमनी कोष्ठशोधनी ॥

Rāja Nighaṇṭu, Pippalyādi varga, 18.

ग. वनपिप्पली

वनपिप्पलीलिका चोष्णा तीक्ष्णा रुच्या च दीपनी ।
आमा भवेदुगुणाढ्या तु शुष्का स्वल्पगुणा स्मृता ॥

Rāja Nighaṇṭu, Pippalyādi varga, 20.

राजयक्ष्मरोगे सक्षौद्रपिप्पलीयोगः

घृतं खर्जूरमृद्धीकाशर्कराक्षौद्रसंयुतम् ।
सपिप्पलीकं वैस्वर्यकासश्वासज्वरापहम् ॥

Caraka Samhitā, Cikitsā, 8-96.

सूतिकाकुक्षिवृद्धिनाशनाय

प्रसूता वनिता वृद्धकुक्षिह्रासाय सम्पिबेत् ।
प्रातर्मथितसम्मिश्रं त्रिसप्ताहात्कणाजटाम् ॥

Bhāvaprakāśa, Yonirogādihikāra, 70-131.

बालानां रोदने चूर्णम्

पिप्पलीत्रिफलाचूर्णं घृतक्षौद्रपरिप्लुतम् ।

बालो रोदिति यस्तस्मै लीढं दद्यात्तम् ॥

Bhāvaprakāśa, Bālarogādhikāra, 71-175.

पक्काशयगतविषे पिप्पल्यादियोगः

Caraka Samhitā, Cikitsā, 23-185.

श्लीपदे कृष्णाद्यमोदकः

Cakradatta, 42-23.

पिप्पलीरसायनम्

पञ्चाष्टौ सप्त दश वा पिप्पलीर्मधुसर्पिषा ।

रसायनगुणान्वेषी समामेकां प्रयोजयेत् ॥

तिस्रास्तिस्रस्तु पूर्वाह्ने भुक्त्वाग्रे भोजनस्य च ।

पिप्पल्यः किंशुकक्षारभाविता घृतभर्जिताः ॥

प्रयोज्या मधुसम्मिश्रा रसायनगुणैषिणा ।

जेतुं कासं क्षयं शोषं श्वासं हिक्कागलामयान् ॥

अर्शांसि ग्रहणीदोषं पाण्डुतां विषमज्वरम् ।

वैस्वर्यं पीनसं शोफं गुल्मं वातवलासकम् ॥

Caraka Samhitā, Cikitsā, 1-3/32-35.

पिप्पलीवर्धमानं रसायनम्

क्रमवृद्ध्या दशाहानि दशपैप्पलिकं दिनम् ।

वर्धयेत् पयसा सार्धं तथैवापनयेत् पुनः ॥

जीर्णे जीर्णे च भुञ्जीत षष्टिकं क्षीरसर्पिषा ।

पिप्पलीनां सहस्रस्य प्रयोगोऽयं रसायनम् ॥

पिष्टास्ता बलिभिः सेव्याः शृता मध्यबलैर्नरैः ।

चूर्णीकृता ह्रस्वबलैर्योज्या दोषामयान् प्रति ॥

दशपैप्पलिकः श्रेष्ठो मध्यमः षट् प्रकीर्तितः ।

प्रयोगो यस्त्रिपर्यन्तः स कनीयान् स चावलैः ॥

बृंहणं स्वर्यमायुष्यं प्लीहोदरविनाशनम् ।

वयसः स्थापनं मेध्यं पिप्पलीनां रसायनम् ॥

Caraka Samhitā, Cikitsā, 1-3/36-40.

पिप्पली वर्धमानकम्

‘पिप्पलीनां क्षीरपिष्टाः पञ्चाभिवृद्ध्या सप्ताभिवृद्ध्या

दशभिवृद्ध्या वा पिबेत् क्षीरौदनाहारी दशरात्रम् ।
 दशरात्राद् भूयश्चापकर्षयेद् यावत्पञ्चः सप्त दश वेति ।
 एतत्पिप्पलीवर्द्धमानं वातशोणितविषमज्वरारोचक-
 पाण्डुरोगप्लीहोदरार्शः श्वासशोफाग्निसादहृद्रोगोदराण्यपहन्ति ।'

Suśruta Samhitā.

परिणामशूले गुडपिप्पलीघृतम्

Cakradatta, 27-25.

अर्शःसु पिप्पलीसुरसाधूपनम्

‘बृहती चाश्वगन्धा च पिप्पल्यः सुरसा घृतम् ।’

Caraka Samhitā, Cikitsā, 14-48.

बालानां दन्तोद्धेदजरोगशमनोपायान्तर्गतं पिप्पलीप्रयोगः

‘पिप्पली समधुना चूर्णेन प्रतिसारयेत् ।’

Bhāvaprakāśa, Bālarogādhikāra, 71-184.

Gadanigraha, 6-11-33.

विविधामयानां पिप्पल्यादिघृतयोगाः

Caraka Samhitā, Cikitsā, 3/219-221;

Cikitsā, 5/74-74; Cikitsā, 8/169-170;

Cikitsā, 13/112-114; Cikitsā, 14/103-104;

Cikitsā, 14/113-116; Cikitsā, 18/36-38;

Cikitsā, 18/135-137; Cikitsā, 25-258.

विविधामयानां पिप्पल्यादिचूर्णयोगाः

Caraka Samhitā, Śārīra, 8-48; Cikitsā, 12-41;

Cikitsā, 13/79-80; Cikitsā, 15/106-107;

Cikitsā, 15/138-139; Cikitsā 16/188-189.

विविधामयानां पिप्पल्यादियोगाः

Caraka Samhitā, Sūtra, 2-18; Cikitsā, 13/158-160;

Cikitsā, 14/86-91; Sūtra, 24-57; Cikitsā, 7-16;

Cikitsā, 18-94; Cikitsā, 18-109-110;

Cikitsā, 10-135; Cikitsā, 19-106; Cikitsā, 20-64;

Cikitsā 30/54-55; Cikitsā, 30-84.

अर्शःसु पिप्पल्यादिलेपः (पिप्पल्याद्यो द्वितीयः प्रलेपः)—

Caraka Samhitā, Cikitsā, 14-54.

पिप्पल्यादिलेहः

Caraka Samhitā, Cikitsā, 18-94;

Cikitsā, 18/135-137.

अम्लपित्ते

‘पिप्पलीमधुसंयुक्ता चाम्लपित्तविनाशिनी ।’

Cakradatta, 51-23.

चक्षुरोगे पिप्पल्यादिवर्त्तिः

Cakradatta, 59-121.

कफघ्नः पिप्पल्यादिबस्तियोगः

Caraka Samhitā, Cikitsā, 10-24.

ज्वरे पिप्पल्यादिशृतलाजपेया

Caraka Samhitā, Cikitsā, 3 179.

अपस्मारे पिप्पल्यादिप्रदेहः

Caraka Samhitā, Cikitsā, 10/17-18.

अतिसारे पिप्पल्यादिप्रमथ्या

Caraka Samhitā, Cikitsā, 19-20.

उरुस्तम्भे अष्टकद्वरं (सपिप्पलीमूलं) तैलम्

Cakradatta, Urustambha cikitsā, 24/12-13.

उरुस्तम्भे वर्द्धमानपिप्पलीयोगः

‘पिप्पलीवर्द्धमानं वा माक्षिकेण गुडेन वा ।’

Cakradatta, 24-8.

पिप्पलीमूलम्

कोलमूलं कणामूलं मागधं मागधी जटा ।

रुद्रकं ग्रन्थिकं मूलं षड्ग्रन्थि चटकाशिरः ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1172.

गजपिप्पली

तस्याः फलं गजाह्वा स्याद् गजकृष्णा च श्रेयसी ॥

इभकृष्णा करिकणा वा शिरो हस्तिपिप्पली ।

हस्तिकृष्णा कटुः पाके वीर्योष्णा दीपनी कटुः ॥

वातश्लेष्मकृमिश्वासकण्ठरोगातिसारजित् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1175-1177.

क. चविकायाः फलं प्राज्ञैः कथिता गजपिप्पली ।

कपिवल्ली कोलवल्ली श्रेयसी वशिरश्च सा ॥

ख. गजकृष्णा कटुर्वातश्लेष्महृद्बहिर्वर्धनी ।

उष्णा निहन्त्यतीसारं श्वासकण्ठामयक्रिमीन् ॥

Bhāvaprahāśa Nighaṇṭu, Haritakyādi varga, 68-69.

सुखप्रसवार्थम्

कृष्णा वचा चापि जलेन पिष्टा सैरण्डतैला खलु नाभिलेपात् ।
सुखं प्रसूतिं कुरुतेऽङ्गनानां निपीडितानां बहुभिः प्रसादैः ॥

Bhāvaprakāśa, Yonirogādhikāra, 70-109.

वातकफज्वरे पिप्पलीकाथः

पिप्पलीभिः शृतं तोयमनभिष्यन्दि दीपनम् ।
वातश्लेष्मज्वरं हन्ति सेवितं प्लीहनाशनम् ॥

Bhāvaprakāśa, Madhyakhaṇḍa, Jvarādhikāra, 1-414.

Cakradatta, 1-139.

अपतानके पिप्पलीचूर्णम् (दशमूलकाथमिश्रितम्)

अपतानकिने शस्तं दशमूलीशृतं जलम् ।
पिप्पलीचूर्णं संयुक्तं जीर्णे मांसरसौदनम् ॥
तैलेन मर्दनं चैव तथा तीक्ष्णं विरेचनम् ।
स्रोतोविशोधनं पश्चात् सर्पिष्यानं हितं स्मृतम् ॥

Bhāvaprakāśa, Vātavyādhyaadhikāra, 24-201/202.

आध्माने

नारायणचूर्णम् (पिप्पली-त्रिवृत्ता-खण्डः)

Bhāvaprakāśa, Cikitsā, 24-15.

शोथे चूर्णप्रयोगः

कणानागरजं चूर्णं सगुडं शोथनाशनम् ।
आमाजीर्णप्रशमनं शूलघ्नं बस्तिशोधनम् ॥

Bhāvaprakāśa, Śothādhikāra, 42-45.

नक्ताब्ध्ये

‘कणाच्छागयकृन्मध्ये पक्त्वा तद्रसपेषिता ।’

Bhāvaprakāśa, Netrarogādhikāra, 63-231.

वृष्यप्रयोजनार्थं पिप्पलीबस्ताण्डयोगः

पिप्पलीलवणोपेतो बस्ताण्डौ क्षीरसर्पिषा ।
साधितौ भक्षयेद् यस्तु स गच्छेद् प्रमदाशतम् ॥

Cakradatta, Vṛsyādhikāra, 66-1.

पिप्पलीमूलमामयानां प्रतिकारार्थम्

उरुस्तम्भे

पिप्पली पिप्पलीमूलं भल्लातकफलानि च ।

एतत्कल्कश्च सक्षौद्र उरुस्तम्भनिवारणः ॥

Gadanigraha, 2-21-22, 28.

स्तन्यवर्धनार्थम्

‘मरिचं पिप्पलीमूलं क्षीरं क्षीरविवृद्धये ।’

Hārīta Samhitā, 3-53-3.

क्रिमिज्वरे

‘पिबेद् वा पिप्पलीमूलमजामूत्रेण संयुतम् ।’

Suśruta Samhitā, Uttara, 54-32.

विषमज्वरे

यः पिप्पलीमूलविमिश्रताज्यं मध्वन्वितं सुक्कथितञ्च गव्यम् ।

पयः पिबन्त्याशु विनश्यतो हृद्रोगकासो विषमज्वरश्च ॥

Gadanigraha, 2-1-614.

अर्शःसु

‘पिप्पलीपिप्पलीमूल.....पूर्वदेव ।’

Suśruta Samhitā, Cikitsā, 6-13.

निद्रानाशे

गुडं पिप्पलीमूलस्य चूर्णमालोडितं लिहन् ।

चिरादपि च सन्नष्टां निद्रामाप्नोति मानवः ॥

Bhāvaprakāśa, Cikitsā, 1-326.

गुल्मे

पिप्पलीपिप्पलीमूलाजजीचित्रकसैन्धवैः ।

युक्ता पीता सुरा हन्ति गुल्ममाशु सुदुस्तरम् ॥

Vṛndamādhava, 30-31.

क्षतक्षीणे सन्तर्पणार्थम्

शर्करापिप्पलीचूर्णः सर्पिषा माक्षिकेण वा ।

संयुक्तं वा शृतं क्षीरं पिबेत् कासज्वरापहम् ॥

Caraka Samhitā, Cikitsā, 11-79.

शीतपित्तरोगे

पिप्पलीवर्धमानं वा लशुनं सम्प्रयोजयेत् ।

सिता मधुकसंयुक्तां गुडमामलकैः सह ॥

Vṛndamādhava, 52-3.

अम्लपित्तरोगे

‘मधूत्कटा मागधिकां लिहेद् वा ।’

Vṛndamādhava, 53-17.

गुडपिप्पलीचव्यपथ्याभिस्तुल्याभिर्मोदकः कृतः ।

पित्तश्लेष्मापहः प्रोक्तो मन्दमग्निं च दीपयेत् ॥

Vṛndamādhava, 33-29.

तृष्णायाम्

‘मागधिका विशदमुखः सशर्करं वा पिबेन् मन्थम् ।’

Caraka Samhitā, Cikitsā, 22-53.

छर्द्याम्

‘सर्पिः क्षौद्रसितोपेतां मागधीं वा लिहेत्तथा ।’

Suśruta Samhitā, Uttara, 49-32.

शूले

‘पिप्पली शृङ्गवेरञ्च श्लेष्मशूलं भिषग्जितम् ।’

Suśruta Samhitā, Uttara, 42-110.

उर्ध्वजन्तुगतरोषु

मन्याहनुश्रवणलोचननासिकास्यभ्रूभागतालुगलशङ्खशिरोविकारान् ।

कृष्णा निहन्ति दशमूलकषायपीता क्वाथेन वा सतृफलत्रितयोद्भवेन ॥

Ci. Ka., 323.

अजीर्णे

.....अजीर्णे गुडपिप्पलीम् ।’

Śārāṅgadhara Samhitā, 2-7-24.

गण्डमालायाम्

‘पिप्पलीवर्धमानं वा गण्डमालासु योजयेत् ।’

Gadanigraha, 4-1-44.

कामलायाम्

‘कामलार्तस्य वैडङ्गं पिप्पल्यो नावनाञ्जने ।’

Gadanigraha, 2-7-52.

रक्तपित्ते

वासकस्वरसे.....सप्तधा परिभाविता ।

कृष्णा वा मधुना लीढा रक्तपित्तं द्रुतं जयेत् ॥

Cakradatta, 9-29.

गर्भनिरोधे

पिप्पलिविडङ्गटङ्कणसमचूर्णं वा पिबेत् पयसा ।

ऋतुसमयं न हि तस्या गर्भः सञ्जायते क्वापि ॥

Bhāvaprakāśa, Cikitsā, 70-33.

सूतिकायाम्

‘सशेषदोषां तु तदहः पिप्पलीमूलहस्तिपिप्पलीचित्रकशृङ्गवेरचूर्णं
गुडोदकेनोष्णेन पाययेत्। एवं त्रिरात्रं वा कुर्यादादुष्टशोणितात्।’

Suśruta Samhitā, Śārīra, 10-16.

अन्तर्वलीचिकित्सते

पिप्पल्यङ्कोठमूलानि वाजिलिण्डरसस्तथा।

दधि माहिषमित्येतत् कामलायाश्चिकित्सितम् ॥

Kāśyapa Samhitā, p. 300.

योनिदोषे

‘पिप्पल्यो रजः पथ्याप्रयोगाः मधुना हिताः।’

Caraka Samhitā, Cikitsā, 30-84.

शुक्रदोषे

मागध्यमृतलोहानां त्रिफलाया रसायनम्।

कफोत्थितं शुक्रदोषं हन्याद् भल्लातकस्य च ॥

Caraka Samhitā, Cikitsā, 30-150.

मसूरिकायाम्

कृष्णाभयारजो लिह्यान् मधुना कण्ठशुद्ध्ये।

तथाष्टाङ्गावलेहो वा कवलश्चार्द्रकादिभिः ॥

Vṛndamādhava, 26-37.

स्वरभेदे

‘लिह्याद् वा पिप्पली पथ्ये तीक्ष्णं मद्यं पिबेच्च सः।’

Caraka Samhitā, Cikitsā, 26-287.

वातव्याधौ हनुग्रहे

पिप्पलीमार्द्रकश्चापि सञ्चव्यं च मुहर्मुहुः।

निष्ठीवेत्तसतोयेन शोधयेत् वदनान्तरम् ॥

Bhāvaprakāśa, Cikitsā, 24-27.

गृध्रस्याम्

गोमूत्रैरण्डतैलाभ्यां कृष्णाचूर्णं पिबेन्नरः।

दीर्घकालोत्थितां हन्ति गृध्रसीं कफवातजाम् ॥

Bhāvaprakāśa, Cikitsā, 24-139.

वातरक्ते

पिप्पलीवर्धमानकम्।

Suśruta Samhitā, Cikitsā, 5-12.

प्लीहारोगे

‘पयसा वा प्रयोक्तव्याः पिप्पल्यः प्लीहशान्तये ।’

Cakradatta, 38-6.

परिणामशूलचिकित्सायां पिप्पलीयोगाः गुडपिप्पलीघृतम्

सपिप्पलीगुडं सर्पिः पचेत् क्षीरचतुर्गुणे ।

विनिहन्त्यम्लपित्तञ्च शूलञ्च परिणामजम् ॥

Cakradatta, 27-25.

पिप्पलीघृतम्

क्वाथेन कल्केन च पिप्पलीनां सिद्धं घृतं माक्षिकसम्प्रयुक्तम् ।

क्षीरानुपानस्य निहन्त्यवश्यं शूलं प्रवृद्धं परिणामसंज्ञम् ॥

Cakradatta, 27-26.

पिप्पलीघृतम्

Vṛndamādhava, 27-18/19.

पिप्पलीघटकद्रव्यम् (अप्रधानं प्रक्षेपकञ्च)

विडङ्गादिमोदकः

शम्बूकादिगुटिका

कोलादिमण्डूरम्

भीमवटकमण्डूरम्

चविकादिमण्डूरम्

तारामण्डूरगुडः इत्यादयः ।

Cakradatta, Parīṇāmaśūla cikitsā, 27.

कृष्णाऽऽदिचूर्णम्

कृष्णाऽभयालौहचूर्णं गुडेन सह भक्षयेत् ॥

पक्तिशूलं निहन्येत जठराण्यग्निमन्दताम् ।

आमवातविकारांश्च स्थौल्यञ्चैवापकर्षति ॥

Cakradatta, Parīṇāmaśūla cikitsā, 27/14-15.

प्लीहारोगे पिप्पल्यादिचूर्णम्

Cakradatta, 38-19.

उदररोगचिकित्सायां पिप्पलीयोगाः

क. सहस्रपिप्पलीयोगः

सुहीपयोभावितानां पिप्पलीनां पयोऽशनः ।

सहस्रञ्च प्रयुञ्जीत शक्तितो जठरामयी ॥

Cakradatta, Udara cikitsā, 36-24.

ख. वर्द्धमानपिप्पलीयोगः

पिप्पलीवर्द्धमानं वा कल्पदृष्टं प्रयोजयेत् ।

जठराणां विनाशाय नास्ति तेन समं भुवि ॥

Cakradatta, Udara cikitsā, 36-27.

प्लीहारोगे (क्षारभावित) पिप्पलीप्रयोगः

पिप्पलीं किंशुकक्षारभावितां सम्प्रयोजयेत् ।

गुल्मप्लीहापहां वह्निदीपनीयां रसायनीम् ॥

Cakradatta, Plīhayahṛccikitsā, 38-2.

प्लीहयकृच्चिकित्सायां पिप्पलीघृतम्

पिप्पलीकल्कसंयुक्तं घृतं क्षीरचतुर्गुणम् ।

पचेत् प्लीहाग्निसादादियकृद्रोगहरं परम् ॥

Cakradatta, 38-33.

यकृत्प्लीहाचिकित्सायां पिप्पलीवर्द्धमानानि

Cakradatta, Plīhayahṛc cikitsā, 38/20-24.

प्लीह-यकृदुदरविकाराणां चिकित्साऽर्थम्

पिप्पलीचित्रकघृतम्

पिप्पलीं चित्रकान्मूलं पिष्ट्वा सम्यग्विपाचयेत् ।

घृतं चतुर्गुणक्षीरं यकृत्प्लीहोदरापहम् ॥

Cakradatta, 38-25.

अम्लपित्तोपचारार्थं पिप्पलीघृतम्

पिप्पलीकाथकल्केन घृतं सिद्धं मधुप्लुतम् ।

पिबेच्च प्रातरुत्थाय अम्लपित्तनिवृत्तये ॥

Cakradatta, 51-56.

दन्तशूलशमनाय माक्षिकादिधारणम् (दन्तरोगचिकित्सायाम्)

माक्षिकं पिप्पलीसर्पिमिश्रितं धारयेन्मुखे ।

दन्तशूलहरं प्रोक्तं प्रधानमिदमौषधम् ॥

Cakradatta, Mukharoga cikitsā, 56-80.

Vṛndamādhava, 28-14.

अधिमांसे (दन्तचिकित्सायां) पिप्पलीकवलधारणयोगः

‘क्षौद्रद्वितीयाः पिप्पल्यः कवलाश्चात्र कीर्तिताः ।’

Suśruta Samhitā, Cikitsā, 22-25.

Cakradatta, Mukharoga cikitsā, 56-17.

मुखरोगचिकित्सायां कवलधारणार्थे पिप्पल्यादिचूर्णम्

Cakradatta, Mukharoga cikitsā, 56-17.

हिक्काश्वासयोः

कृष्णा क्षौद्रसमन्विता दिनमुखे लीढा जयेद् दुःस्थितम् ।

कासश्वासमरोचकं क्षयमपि प्राज्ञो यथा कित्त्विषम् ॥

Vaidyamanoramā, 3-20.

बद्धाऽथवा च गुटिका मधुना गुडेन सिन्धूद्भवेन मगधासमहौषधेन ।

आस्ये धृता निशि विशालगुणा भवन्ति श्वासं क्षयं क्षतजकासमिदं निहन्ति ॥

Hārīta Samhitā, 3-12-34.

.....पिप्पली शर्करान्विता ।.....हिक्काघ्नं नावनत्रयम् ॥'

Gadanigraha, 2-11-50.

'कृष्णा मयूरच्छदभस्मयुक्ता क्षौद्रेण लीढा विनिहन्ति हिक्काम् ।'

Rājamārtanda, 11-4.

साध्ये श्वासे दोषकालाग्निसत्त्वां सम्यग् वीक्ष्य प्रातरेव प्रपीतम् ।

कृष्णाशुण्ठीसैन्धवक्षौद्रयुक्तं राहूच्छिष्टोदसूतक्षारं प्रशस्तम् ॥

Vaidyamanoramā, 3-24.

अर्शसि

पिप्पलिकामभयां गुडयुक्तां प्रातर्भवे नरो भक्षयति चैताम् ।

तस्य गुदकीलकमाशु हन्ति सकामलापाण्डुजरोगवेगान् ॥

Hārīta Samhitā, 3-11-33.

दशादिदशकैर्वृद्धाः पिप्पलीर्द्विपिचुं तिलान् ।

पीत्वा क्षीरेण लभते बलं देहहुताशयो ॥

Aṣṭāṅga Hṛdaya, Cikitsā, 8-62.

विसूचिकायाम्

'उष्णाभिरद्भिर्मगधोद्धावानां कल्कं पिबेन्नागरकल्कयुक्तम् ।'

Suśruta Samhitā, Cikitsā, 6-13.

प्रवाहिकायाम्

पिप्पल्याः पिबतः सूक्ष्मं रजो मरिचजन्म वा ।

चिरकालानुषक्तापि नाशयत्याशु प्रवाहिका ॥

Aṣṭāṅga Hṛdaya, Cikitsā, 9-40.

PIŚĀCAKĀRPĀSA

Botanical name : *Abroma augusta* Linn. f.

Family : Sterculiaceae

Classical name : Piśācakārpāsa

Sanskrit names

Piśācakārpāsa, Pīvarī, Yoṣiṇī.

Regional names

Ulatkambal (Hindi); Olatkambal (Beng.); Devil's cotton (Eng.).

Description

Large shrub or small tree, about 10 feet tall; branches hairy; stem bark composed of silky fibres.

Leaves 4-6 in. long (upto 15 cm.) on short (small) petiole; lvs. 4-5 in. broad, dentate. Upper leaves smaller, entire (not lobed), lanceolate, cordate; upper surface almost smooth and lower surface (backside) hairy.

Flowers in umbels, dark violet in colour, opposite to leaves or on branches in small spikes. Sepals 4, yellowish green, 2.5 cm. (1 in.) long, lanceolate pointed; petals 5, dark violet in colour, ridged and swollen outside, 2.5 cm. (1 in.) long.

Fruits capsule, pentagonous, 5-valved, truncate, 5 cm. (or 2 in.) long; packed with many black seeds like mūlaka bīja or (radish seeds). Stout, silky hairs or bristles, inside the fruits and around seeds, irritating (by contact).

Flowering and fruiting time

Plant flowers in August-September and fruits in October-January.

Distribution

Plant occurs throughout India especially in warm regions, particularly from Uttar Pradesh to Sikkim at 914.40 (ascending to 3,000 meters), and West Bengal, Assam, Khasi hills (upto 4,000 feet) and other regions; wild and cultivated state. It is cultivated in gardens for beautiful flowers as an ornamental plant.

Chemical composition

Root bark contains gum-resin (exulate), mucilaginous, matter, non-crystalline substance and ash 11 per cent. Root contains resin, fixed oil and alkaloid in lesser percentage, and also magnesium.

Pharmacodynamics

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, rūkṣa, tūkṣṇa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka Pittavardhaka

Properties and action

Karma	: Ārtavajanana Garbhāśayottejaka-garbhāśayabalya Vedanāsthāpana
Roga	: Rajorodha Kaṣṭārtava Aniyamita ṛtusrāva-alpārtava.

Therapeutic uses

The drug Piśācakārpāśa is an emmenagogue agent acting chiefly on uterine (female genital system) organs and functions; it stimulates uterine function, tones up uterine (organic) system and physio-pharmacologically effects as emmenagogue resulting into regular and normal consistency in menstruation flow by supressing painful or difficult and scanty conditions.

Piśācakārpāśa allays provocation of kapha and vāta doṣa and it increases pitta doṣa. It is useful in kapha and vāta rogas.

The fresh juice of root bark is preferred for oral use. It may be given to females before three days of menstruation period and further for 2-3 days (afterwards the menses) as needed in menstrual problems.

Dried bark pieces form raw drug of Piśācakārpāśa, generally known as Ulatkambal in trade. Externally the outer surface of root bark is ash or dust and brownish coloured; the outer surface of bark is loughitudinally wrinkled and with warty markings. Internally it is whitish yellow and longitudinally striate. Dried bark generally 1/2-1 mm. thick but bark may be more thicker if obtained from matured (old) and thick stemmed plants. Root and bark, when soaked or macerated, given mucilaginous sub-

stance in water if kept for adequate time. Root bark almost tasteless, slimy, odourless and tough; and it contains other organic matters admixed portion upto 2% maximum as per pharmacognostic observations (pharmacopoeial standards). Root specially root-bark is administered for therapeutic purpose.

Parts used : Root, root-bark.

Dose

Root bark powder 1-3 gm., Root 4-8 gm., Root juice 5-10 ml.

PIŚACAKĀRPĀSA (पिशाचकार्पास)

‘पीवरी योषिणी सा स्याद् योनिव्यापद्विनाशिनी ।
रजोदोषप्रशमनी ।’

Ā. vi., A. 15.

PĪTAKĀRPĀSA

Botanical name

Cochleospermum religiosum (Linn.) Alston.
Syn. *Cochleospermum gossypium* Dc.

Family : Bixaceae

Classical name : Pītakārpāsa

Sanskrit name : Pītakārpāsa.

Regional names

Source plant or tree (vrkṣa) : Pili kapas, Kumbi, Galagal, Gabdi, Deshi Katira, Arlu (Hindi), Hupu (Kola); Hopo (Santhal); Ganeri (Mar.); Kandagogu (Tel.); Kongilam (Tam.); Kontopalas, Kantopalash (Oriya); Yellow cotton tree (Eng.).

Gum (niryāsa) : Gound deshi Katira, Katirae hindi (Hi.); Hop gum (Eng.).

Description

Small or medium-sized trees with very soft wood. Leaves palmately 3-5-lobed, tomentose beneath when young, glossy above. Tree trunk up to 1 ft. diam.

Flowers yellow, 10-12 cm. in diam., in few-flowered terminal panicles produced when leafless. Petals emarginate.

Capsules 7-10 × 6 cm., 5-celled at the base, dehiscing on different lines; seeds many, reniform, brown, clothed with floss; seeds small, reniform in shape, with hard shell.

Flowering and fruiting time

Plant flowers during colder to spring months, and it bears fruits onwards, till summer season. Generally flowering and fruiting during the period from January to June.

Flowers appear after leaf fall from December to April and are succeeded by large, pear-shaped capsular fruits (2-3 in. diam.) ripening in June-July.

Distribution

Plant occurs all over India from Garhwal, Bundelkhand and west sub-himalayan tracts to Bihar, Bengal, Orissa, Central India and Deccan Peninsula. It is particularly common in hot, dry and story regions. It is often planted in gardens and near temples for its beautiful yellow flowers.

Kinds and varieties

The gum of Pītakārpāsa (*Cochleospermum* sp.-Yellow cotton tree) (Hop gum) is adulterant or substitute of gum obtained from *Sterculia* species (gum Kullu, Gond Katira or Goñd Karai) particularly *Sterculia urens* Kosch. (*Sterculiaceae*.) The gum of Pītakārpāsa is also named as Katira gum which sometimes confused with Gond Katira (*Sterculia urens* Roxb.) but both are distinct.

Chemical composition

Analysis of seeds gave the following values : moisture 0.25, ether extr. 14.25, albuminoids 20.94, carbohydrates 35.78, crude fibre 14.63 and ash 5.15 per cent.

Gum contains over 50% pentosans and galactans and on hydrolysis with mineral acids yield 14% acetic acid, gonic acid, d-cochleospermic acid, xylose and galactose.

Pharmacodynamics

Rasa	: Tikta, kaṣāya
Guṇa	: Snigdha, picchila

Vīrya	: Śīta-Anuṣṇa śīta
Vipāka	: Kaṭu

Properties and action

Karma	: Raktastambhana Mṛdusāraka-picchila Dāhapraśamana Santāpahara Bṛmhāṇa Uromārdavakara.
Roga	: Raktasrāva Koṣṭhabaddhatā (vibandha) Dāha-santāpa Urorūkṣatva.

Therapeutic uses

The drug Pītakārpāsa is used as gum and some other parts are also as raktastambhaka (haemostatic), picchila, snehana (demulcent), mṛdusāraka (laxative), tonic (bṛmhāṇa) and uromārdavakara; it allays burning sensation (dāha-santāpa).

Besides the medicinal properties, the various parts of other utility. The floss covering the seeds is soft and resilient and can be used as substitute for Java kapok (semal cotton).

Seeds kernel has a sweatish somewhat almond-like flavour and a slight bitter taste. The expressed oil is brown when freshly prepared, turning pale yellow on exposure to diffused light for several days. It has a peculiar taste and smell. It is a non-drying oil (which can be used for making soaps).

Parts used : Gum

Dose : 1-3 gm.

PĪTAMŪLĀ-PĪTARAṄGĀ

Botanical name : *Thalictrum foliolosum* Dc.

Family : Ranunculaceae

Classical name : Pītamūla-Pītarāṅgā

Sanskrit names

Pitamūlā, Pītarāṅgā.

Regional names

Piyaranga, Pilijarhi, Mamiri, Pilijarhi (Hindi).

Description

Perennial, tall herb, erect, rigid; stem glabrous. Leaves pinnately decompose sheaths; lvs. 15-45 cm., many times divided into oblong-ovate, rounded-toothed, 3-lobed leaflets, 1-1.5 cm., oblong-ovate, crenate or sharply toothed.

Flowers small, white to dull greenish-purple, many in much-branched, often dense clusters borne on tall leafy stems; 1.2-2.6 meters. Petals ovate, 3-5 mm., green, soon falling; stamens much longer; filaments white; anthers bearded.

Achenes few or 2-5, acute at both ends, sharply or strongly ribbed, ellipsoid, stalkless, beak curved.

Root stock fibrous, yellowish brown resembling liquorice, but extremely bitter.

Flowering and fruiting time

Plant flowers during the rains to autumn, and fruiting onwards.

Distribution

Plant occurs in the Himalayas between altitudes of 1,300 and 3,400 meters. It is common forest shrubberies. It is found in the temperate Himalayas from 1,500 m. to 2,400 m., in the Khasi hills, between 1,200 m. to and 1,800 m., and in Kashmir, Himachal Pradesh and Uttar Pradesh and also in other provinces.

Kinds and varieties

The roots of Pitamūlā or Pītarāṅgā (*Thalictrum foliolosum* Dc.) are sometimes adulterant to roots of Trāyamāṇā (*Gentianaceae*).

The roots of Pitamūla (Pītarāṅgā Mamiri) are substitute and adulterant of Mamira (*Coptis teeta* Willd.). The crude drug is sometimes named as Mamira or Mamiri and confused with Mamira (*Coptis teeta* Willd.).

Chemical composition

Rhizomes contain large quantities of water soluble

salts of Berberine (0.35%), besides magnoflorine (thalictrine), palmatine (0.03%) and jatrorrhizine (0.02%).

It has been noted that the rhizome is appreciably hygroscopic in character and does not keep well. After storage of a sample for six months, it was found that the berberine content was reduced to about a quarter and magnoflorine to traces.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Rūkṣa, uṣṇa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarman	: Kaphavātaśāmaka

Properties and action

Karma	: Vedanāsthāpana
	Kaphaniḥsāraka-kaphaghna Viṣūcikāhara Viṣaghna Cakṣuṣya-dr̥ṣṭīśaktivardhaka Yakṛduttejaka Śothahara Mūtrala Kaṭupouṣṭhika.
Roga	: Śōtha-vedanā
	Viṣūcikā
	Viṣa-sarpaviṣa
	Kāsa-śvāsa-phupphusa śōtha
	Netravikāra-dr̥ṣṭimāndya- netrābhiṣyanda
	Kāsa-śvāsa Carmaroga.

Therapeutic uses

The drug Pītamūlā or Pītarāṅgā is medicinally useful and the medicinal properties are almost similar to Mamīra or Tiktamūla (*Coptis teeta* Wall.) but Pītamūla (*Thalictrum foliolosum* Dc.) is uṣṇa (hot) to higher extent, than Mamīra, and it possesses additional efficacy of

action as analgesic, expectorant, anti-cholera and anti-snake venom (antidote).

The rhizome of the plant drug is medicinally potent part which is chemically rich and pharmacologically active.

The rhizomatous roots are much valued for the treatment of ophthalmia, in the form of a decoction, extract or powder. The root is sometimes used as an antiperiodic, diuretic, aperient and purgative. It is a bitter tonic during convalescence. It is also given for atonic dyspepsia.

The rhizomes are considered a good medicine against gastro-enteritis and viṣūcikā. The drug is useful in cough, asthma, pleurisy and other similar ailments.

Externally and orally both, the roots of drug plant are suggested to be useful in snake-bite.

The roots are ground to make a paste which is applied topically on painful and swollen part or lesion.

The lotion prepared with root of plant drug is useful in eye affections especially conjunctivitis.

Parts used : Root.

Dose : 1-3 gm.

PĪTAMŪLĀ-PĪTARĀṄGĀ (पीतमूला-पीतरङ्गा)

तत्तादृशाऽनुल्बणवृक्षशूलदृगामयान् हन्तुमतीव वीरः ।

कल्याणकारी मलरोधहारी प्रशस्यते मध्याबिलो ममीरः ॥

Siddha Bhaisajya Maṇimālā.

पीतरङ्गा ममीरास्तुल्या किन्तु विशेषतः ।

वातश्लेष्महरा सर्पविषघ्नी सूचिकाहरा ॥

Dravyaguna Vijñāna, Vol. II, P. 94.

PLAKṢA

Botanical name : Ficus lacor Buch-Ham.

Family : Moraceae

Classical name : Plakṣa

Sanskrit names

Plakṣa, Parkaṭi, Vaṭi, Kṣīrī, Gardabhāṇḍa, Kamaṇḍalu, Śṛṅgī, Kapītaka (na), Varohaśākhi, Supārśva, Plavaka-plavaṅga, Mahābala.

Regional names

Pakhar, Pakar, Pakarhi (Hindi); Pakurh (Beng.); Vassari (Mar.); Pepari (Guj.) Jovi (Tam.); Badijubbu (Tel.); Bela (Mal.); Vasari, Jubbi (Kann.).

Description

Large, deciduous trees, upto 20 meters high. Tree spreading, large, epiphytic in early stages, sometimes sending down a few aerial roots. Leaves alternate, thinly coriaceous, ovate-lanceolate, abruptly obtusely-acuminate, rounded or truncate at base. Receptacles globular, glabrous, upto 1 cm. across, creamy-white. Basal bracts distinct. Male, female and gall flowers borne in some receptacle. Fruits in axillary pairs, usually sessile, sub-globose, white when ripe or flushed with red and dotted. Flowering hidden (in *Ficus* genus) as inflorescence in hollow receptacle.

Flowering and fruiting time

Plant flowers and fruits in September-December. Flowering (hidden) and fruiting from the summers to rains.

Distribution

Plant occurs almost throughout India. It is commonly planted in gardens, on railway platform, along way sides and other places. It is avenue and ornamental tree.

Kinds and varieties

The tree of Plakṣa (*Ficus lacor* Buch.-Ham. syn. *Ficus infectoria* Blume, *Ficus lucescens* Blume) is very variable. Three varieties are indicated viz. var. *infectoria*, var. *lambertiana* and var. *wightiana*.

Chemical composition

The average composition (dry matter basis) of the Plakṣa patra (leaves *Ficus lacor* Buch.-Ham.) is as follows : crude protein 10.18, ether extr. 2.67, crude fibre 22.77, N-free extr. 52.44 and total ash 12.14%. The digestible nutri-

ents and nutritive value (per 100 lb. of dry material) are : crude protein 5.38, ether extr. 2.10, crude fibre 9.06, N-free extr. 28.95, total digestible nutrients 48.11, starch equivalent 25.4 lb. and nutritive ratio 9.0 per cent.

The latex of the Plakṣa vṛkṣa (tree of *Ficus lacor* Buch.-Ham.) contains C. 3% caoutchoue, resin 90.6 and insolubles 0.5 per cent which belong to coagulation and under original latex, the analysis finds water and water solubles 57.2 and caoutchoue 3.0 per cent.

Pharmacodynamics

Rasa	: Kaṣāya
Guṇa	: Guru, rūkṣa
Vīrya	: Vipāka
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka

Properties and action

Karma	: Mūtrasaṅgrahaṇīya
	Stambhana
	Raktapittahara-raktaśodhaka
	Yonidoṣahara
	Raktaśothahara
	Dāhapraśamana
	Śothahara
	Vraṇaropaṇa
	Nāḍīśāmaka
Roga	: Prameha
	Raktapradara-śvetapradara
	Dāha
	Mūrcchā-pralāpa-bhrama-mānasika
	vikāra
	Atisāra-pravāhikā-raktātisāra
	Raktapitta-raktavikāra
	Raktasrāva
	Śoṭha
	Visarpa
	Vraṇa
	Mukhapāka.

Therapeutic uses

The drug Plakṣa is mūtrasaṅgrahaṇīya or anti-di-

uretic and used in prameha roga; and it is astringent drug. It is given in diarrhoea, dysentery, raktapitta, raktapradara (menorrhagia), leucorrhoea, mental complaints bhrama, pralāpa, mūrchā, stomatitis, burning sensation and raktavikāra. Bark is useful as blood purifier and used in ailments caused by blood impurities.

The powder, paste and decoction bark are suitably applied locally in swelling, ulcers, erysepalas, haemorrhage and cuts. Gargle of decoction of bark is recommended in stomatitis.

A vaginal douche (uttarabasti) of bark decoction is administered in leucorrhoea and other vaginal complaints (including cervical erosion) and female genital tract (apatyapatha); and some other suitable drugs are also added keeping specific condition in view.

The leaves are succulent and relished when green by cattle as the leaves are nutritive and good for fodder cattle and elephants; the nutritive values and digestible nutrients alongwith coefficients have been studied in regard to Plakṣa leaves which are also of utility in animal husbandry and veterinary science. Investigations suggest that because of the low digestibility coefficients of the nutrients, the leaves are inferior to common cultivated fodders, but comparable to poor cereal straw.

Parts used : Tvak-bark.

Dose : Decoction 50-100 ml.

Group

Mūtrasaṅgrahaṇīya, Kaṣāyaskandha (Caraka Saṁhitā) Nyagrodhādi (Suśruta Saṁhitā), Kṣīri vrkṣa, Pañcavalka (Bhāvaprakāśa).

PLAKṢA (प्लक्ष)

क. प्लक्षो जटी पर्करी च पर्कटी च स्त्रियामपि ।

ख. प्लक्षः कषायः शिशिरो व्रणयोनिगदापहः ।

दाहपित्तकफास्त्रघ्नः शोथहा रक्तपित्तहृत् ॥

Bhāvaprakāśa Nighaṇṭu, Vaṭādi varga, 11-12.

पिप्परिः शृङ्गिका वाटी गर्दभाण्डः कमण्डलुः ॥
 प्लक्षः प्लक्षो गन्धमुण्डो मुण्डिकोऽथत्थपत्रकः ।
 पूगमुण्डश्चारुदारुः सुपार्श्वश्चारुदर्शनः ॥
 पिप्परिस्तु वरः शीतो व्रणयोनिविसर्पनुत् ।
 दाहपित्तकफास्त्रघ्नो मेदःपित्तास्त्रशोफजित् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 435-437.

प्लक्षः

प्लक्षः कपीतनः क्षीरी सुपार्श्वोऽथ कमण्डलुः ।
 शृङ्गी वरोहशाखी च गर्दभाण्डः कपीतकः ।
 दृढप्ररोहः प्लवकः प्लवङ्गश्च महाबलः ॥
 प्लक्षश्चैवापरो प्लक्षः सुशीतः शीतवीर्यकः ।
 पुण्ड्रो महाऽवरोहश्च ह्रस्वपर्णस्तु पिप्परिः ।
 मिदुरो मङ्गलच्छायो ज्ञेयो द्वाविंशधाभिधः ॥

प्लक्षगुणाः

प्लक्षः कटुकषायश्च शिशिरो रक्तदोषजित् ।
 मूर्च्छाभ्रमप्रलापघ्नो ह्रस्वप्लक्षो विशेषतः ॥

Rāja Nighaṇṭu, Āmrādi varga, 123-125.

शोफे

न्यग्रोधोदुम्बराश्चत्थप्लक्षवेतसवल्कलैः ।
 ससर्पिष्कैः प्रलेपः स्याच्छोफनिर्वापणः परम् ॥

Caraka Samhitā, Cikitsā, 25-46.

विसर्पे

....प्लक्ष....पल्लवैः ।
 त्वक्कल्कैर्बहुसर्पिभिः शीतैरालेपनं हितम् ॥

Caraka Samhitā, Cikitsā, 21-85.

रक्तपित्ते

‘.....प्लक्षवेतसपल्लवाः ।
 शाकार्थं शाकसात्म्यानां तण्डुलीयादयो हिताः ॥’

Bhāvaprakāśa, Cikitsā, 30-111.

रक्तातिसारे

‘.....प्लक्षशल्लकीतिनिशत्वचः ।
 क्षीरे विमृदिताः पीताः सक्षौद्राः रक्तनाशनाः ॥’

Suśruta Samhitā, Uttara, 40-119.

प्रदरे

प्लक्षत्वक्चूर्णपिण्डं वा धारयेत् मधुना कृतम् ।
यो न्या स्नेहाक्तया लोध्रप्रियङ्गुमधुकस्य वा ॥

Caraka Samhitā, Cikitsā, 23-119.

व्रणे

‘.....प्लक्ष.....कषाया व्रणरोपणाः ।’

Caraka Samhitā, Cikitsā, 25-87.

A. PRASĀRINĪ-RĀJABALĀ

Botanical name : *Sida cordata* (Burm. f.) Borss.

Syn. *Sida veronicufolia* Linn., *S. veronicaefolia* Lam., *Sida humilis* var. *veronicaefolia* (Lam.) Mast., *Melochia cordata* Burm. f., *Sida humilis* Cav.

Family : Malvaceae

Classical name : Prasārinī-Rājabalā

Sanskrit names

Prasārinī, Rājabalā, Bhūmibalā, Prasārā.

Regional names

Pharidbuti (Hindi); Joka (Beng.); Bhuibal, Bhuichikkan (Mar.); Bhaynbal (Guj.), Vemila (Tam.).

Description

Annual hairy herbs, mostly branching at the base with slender prostrate or ascending branches up to 50 cm. long; deep rooted, prostrate or ascending herbs upto 1 meter high. All parts variable in size, pubescent with patent, simple and minute, stellate hairs. Calyx glabrous within, except the ciliate margins. Petals ciliate near base. Mericarps tetrahedral with rounded angles, thin walled, indehiscent.

Leaves broadly ovate or orbicular, cordate, acuminate, 1.5 cm. long, crenate-serrate.

Flowers solitary racemed or paniced, pedicels slender, jointed in the middle. Calyx campanulate, ca 5 mm. across. Corolla 7-9 mm. across, yellow; petals obovate, ciliate at base. Mericarps 5, tetrahedral, Ca 2.5 mm. long, awnless; seeds ovoid, Ca 2 mm. long.

Mericarps tetrahedral with rounded angles, thin walled, indehiscent.

Flowering and fruiting time

Plant flowers and fruits throughout the year; August to May or flowering and fruiting begins after rains.

Distribution

Plant occurs in pantropics. It occurs almost throughout India; Central India. It is commonly grown in gardens, near canals or river banks, in wastelands, fallow-fields and forest margins.

The method of collection plant is suggested. The matured roots may be extracted out (by digging out) at the stage of leafless plant bearing no new foliage. Roots are washed properly and skinned out (detaching bark), and the material is sun-dried and stored in suitable container.

Kinds and varieties

Presently the drugs Prasāriṇī and Gandha prasāriṇī are accepted and botanically identified as *Sida veronicaefolia* Linn. and *Paederia foetida* Linn. respectively and crude drug material procured from relevant source plants are procurable for use in medicine.

Pharmacodynamics

Rasa	: Madhura
Guṇa	: Laghu, snigdha, picchila
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittaśāmaka Tridoṣahara.

Properties and action

Karma	: Balya Hṛdya Nāḍībalya Vātahara Grāhī Arśoghna Śothahara Anulomana-malaviṣṭambhahara Vṛṣya Teja kānti prada.

Roga	: Vātavyādhi Hṛdroga Nāḍīdourbalya Arśa Śoṭha Vātarakta-āṃavāta Vraṇa Bhagna Mūtrakṛcchra.

Therapeutic uses

The drug Prasāriṇī is much valued in the management of vātavyādhi; and the medicinal properties and uses are almost similar to Balā (Sida cordifolia Linn.).

Another allied drug Gandhaprasāriṇī is one of the valued drugs used in the group of diseases under vātavyādhi and allied disorders in different modes and forms.

Parts used : Root.

Dose : Juice 10-20 ml., Powder 3-6 gm.

Formulation (yoga)

Various formulations (Prasāriṇī and Gandhaprasāriṇī).

PRASĀRIṆĪ (प्रसारिणी)

प्रसारणी सरा तित्ता वीर्योष्णा शुक्रला गुरुः ॥

व्रणसन्धानबलकृत् वातरक्तत्रिदोषहा ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1061-1062.

गन्धप्रसारिणी

प्रसारिणी गुरुर्वृष्णा बलसन्धानकृत्सरा ।

वीर्योष्णा वातहृत्तित्ता वातरक्तकफापहा ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 235.

प्रसारिणी

प्रसारिणी गुरुष्णा च तित्ता वातविनाशिनी ।

अर्शःश्वयथुहन्त्री च मलविष्टम्भहारिणी ॥

Rāja Nighaṇṭu, Parpatādi varga, 38.

प्रसारणी गुरुस्तित्ता सरा सन्धानकृन्मता ।
त्रिदोषशमनी वृष्या तेजःकान्तिबलप्रदा ॥

Dhanvantari Nighaṇṭu.

‘वातपित्तहरा सोष्णा बल्या वृष्या प्रसारणी ।’

Rāja vallabha Nighaṇṭu.

मूत्रकृच्छ्रे

जलेन नारिकेलस्य पिबेत् प्रातः प्रसारणीम् ।

मूत्रकृच्छ्रविनाशाय शर्करापातनाय च ॥

Cakradatta, 7-6.

Vaidya Manoramā.

स्तनन्धयस्य बालस्य हिक्कायाम्

प्रसारणीकल्ककषायसिद्धं तिलोद्भवं नावनपानलेपैः ।

हिक्का निजां नाशयति त्रिमासात् पौलस्त्यलक्ष्मीमिव रामभद्रः ॥

Vaidya Manoramā, 14-22.

आमवाते

प्रसारण्याढकक्काथे प्रस्थे गुडरसोनयोः ।

पक्कः पञ्चौषणराजः पादस्यादामवातहा ॥

Cakradatta.

वातव्याधौ

क्काथकल्कपयोभिर्वा बलादीनां पचेत् पृथक् ।

(बलाप्रसारिणी-अश्वगन्धायाम्)

Caraka Saṃhitā, Cikitsā, 28-161.

आमवाते प्रसारिणीतैलम्

प्रसारण्या रसे सिद्धं तैलमेरण्डजं पिबेत् ।

सर्वदोषहरश्चैव कफरोगहरं परम् ॥

Bhāvaprakāśa, Āmavātādhikāra, 26-113.

आमवाते प्रसारिणीलेहम्

प्रसारण्याढके क्काथे प्रस्थो गुडरसो मतः ।

पक्कः पञ्चौषणरजोयुक्तः स्यादामवातहा ॥

Bhāvaprakāśa, Āmavātādhikāra, 26-103.

वातव्याधिचिकित्सायां प्रसारिणीतैलयोगाः

त्रिशतीप्रसारिणीतैलम्

सप्तप्रस्थप्रसारिणीतैलम्

कुब्जप्रसारिणीतैलम्

सप्तशतिकप्रसारिणीतैलम्

एकादशशतिकप्रसारिणीतैलम्

अष्टादशशतिकप्रसारिणीतैलम्

Cakradatta, Vātavyādhi cikitsā, 22/173-254.

महाराजप्रसारिणीतैलम्

Cakradatta, 22/258-282.

आमवाते प्रसारिणीसन्धानम्

प्रसारण्याढकक्काथे प्रस्थो गुडरसोनयोः ।

पक्कः पञ्चोषणरजः पादः स्यादामवातहा ॥

Cakradatta, Āmavāta cikitsā, 25-70.

B. GANDHAPRASĀRINĪ

Botanical name : *Leptadenia pyrotechnica* (Forsk.) Decne.

Syn. *Paederia foetida* Linn, *Leptadenia spartium* W.

& A. V.

Family : Rubiaceae

Classical name : Gandhaprasārini

Sanskrit name : Gandhaprasārini

Regional names

Pasaran, Gandhprasarani (Hindi); Gandhabhaduliya (Beng.); Khinp (Rajsthani); Hiran-bel (Mar.); Gandhan (Guj.); Pinarisengai (Tam.); Savirel (Tel.).

Description

Branches slender, terete, rigid, green, glabrescent. Leaves when present, linear or linear lanceolate, leathery, pubescent on both surfaces.

Flowers greenish-yellow, in short peduncled, umbellate cymes. Bracts puberulous, ciliate. Calyx cupular, pubescent, segments ovate-deltoid, acute. Pollen masses attached to pollen carrier with a minute caudicle.

Follicle glabrous solitary, lanceolate, shortly beaked, upto 11 cm. long. Seeds with coma 2.5-4.0 cm. long.

Flowering and fruiting time

Plant flowers and fruits in March-May; spring to summer seasons. Practically the flowering in end of rains and beginning of autumn season (August-October) and fruiting in cold season (December).

Distribution

Plant occurs in Indian subcontinent, Mauritius, Madagascar, Comoro Island. It is occasional in sandy mounds of rivers. Plant is found in the Himalayan region, from Dehradun to Bengal and Assam upto 6,000 feet elevation.

Kinds and varieties

Prasāriṇī is considered Rājabalā which is botanically identified as *Sida veronicaefolia* Linn., and Gandha-prasāriṇī is different drug which is botanically known as *Paederia foetida* Linn. Presently both the source plants stand distinctively and they are suggested for accordingly medicinal uses in therapeutics.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Guru
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

Properties and action

Karma	: Vedanāsthāpana-nāḍībalya
	Vātaghna
	Śothahara
	Vātānulomana
	Stabdhatānāśana
	Raktaprasādana
	Raktavāta śāmaka
	Mūtrala-aśmaribhedana
	Vṛṣya
	Balya
	Sandhānīya
Roga	: Vātavyādhi
	Sandhivāta-āmavāta-sandhijāḍya
	Anulomana-vātahara

Udaraśûla-vibandha-gulma
 Vātarakta
 Mūtrakṛcchra-aśmarī
 Śukradourbalya
 Jvara-dourbalya.

Therapeutic uses

The drug Gandhaprasāriṇī (*Paederia foetida* Linn.) is chiefly analgesic (vedanāsthāpana), anti-inflammatory (śōthahara) and anti-stiffness (stabdhātāhara) drug which is among major vātahara general auśadhis, (drugs alleviating vāta and checking aggravated vāta doṣa, with general action of pacifying aggravation of vāta and kapha doṣa) recommended in various kinds of vāta vikāra (disease caused by vāta).

The drug Gandhaprasāriṇī is anabolic, astringent, emetic and laxative. It is used in all types of nervine and neurological diseases, anasarca, constipation and impotency. The drug is used in paraplegia, rheumatism and sciatica in traditional medicine.

Gandhaprasāriṇī is one of the major drugs which are therapeutically administered in clinical management of vātavyādhi and allied disorders; the plant drug Gandhaprasāriṇī (the roots and leaves of source plant *Paederia foetida* Linn.) is employed frequently in various forms and modes e.g. decoction, oil, powder, leha, lepa and other yoga and several formulations are prepared by using Gandhaprasāriṇī as a major ingredient, and they are prescribed in treatment of various such diseases e.g. sandhivāta, āmavāta, sandhijāḍya and several other ailments under a major group of vātavyādhi. The drugs recipes or formulations are used both externally as well as internally.

The leaves paste (patrakalka) is given warm (sukhoṣṇa), in udaraśûla (abdominal colic) and leaves are cooked as vegetable (patraśāka); the drug is used in ānāha, vibandha and gulma.

The massage of Prasāriṇī taila (abhyāṅga) and other similar formulations are generally indicated.

Parts used : Roots, leaves.

Dose : Juice 10-20 ml., Decoction 50-100 ml.

Formulations

Prasāriṇī taila, Prasāriṇī lauha.

PRATIVIṢĀ

Botanical name : *Aconitum palmatum* D. Don.

Family : Ranunculaceae

Classical name : Prativiṣā

Sanskrit names

Prativiṣā, Śyāmakanda, Virūpa, Aruṇā.

Regional names

Vikhma, Bikhama (Hindi); Vakhama (Mar., Bomb.); Vakhma, Vikhma (Indian trade); Bakhmo, Vakhmo (Guj.).

Description

Herbaceous perennial, erect; stem 60 cm. to 150 cm. (2-5 feet) high, often smooth and leafy. Tuberous roots (likewise *Aconitum* spp.).

Leaves stalked, kidney-shaped in outline, 10-15 cm. in diam. (5-6 in.) and 5-deeply lobed; petiole very long.

Flowers large, greenish blue, long peduncled.

Fruits in follicles, 2.5-3.75 cm. long; many seeded.

Distribution

Plant occurs in the temperate Himalayas; from eastern Himalayan region, Sikkim to Western Himalayan region, Garhwal and southern region in Tibet and also in Mishmi hills in north-eastern region. It is found generally from 3,045 meters to 4,874.8 meters (10,00-15,000 feet) altitude in the Himalayas.

Chemical composition

Tubers contain alkaloid atisine which is non-crystalline and very bitter alkaloid present in Ativiṣā (*Aconitum heterophyllum* Wall. tubers).

Kinds and varieties

There are two varieties of Ativiṣā in classical texts

(Saṃhitās and also nighaṇṭus) viz. Atiṣā and Pratiṣā, and Aruṇā (or Kṛṣṇā) variety is referred to as Pratiṣā and it is non-poisonous (non-toxic) variety named as 'Pratiṣā' meaning anti-poison or anti-dote to poison though it belongs to category of poisons or toxic drugs (viṣavarga). Tubers of drug plant is of whitish black colour in Pratiṣā (Śyāmakanda) while colour of tubers is white in case of Atiṣā, botanically known as *Aconitum palmatum* D. Don. and *Aconitum heterophyllum* Wall.

Pharmacodynamics

Rasa	: Tikta, Kaṭu
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣahara-Vātaghna

Properties and action

Karma	: Dipana-pācana
	Vātaghna
	Śūlapraśamana
	Vātānulomana
	Kṛmighna
	Jvaraghna
	Vāntihara
	Nirviṣā (pratiṣā).
Roga	: Udaravikāra
	Udaraśūla-ādhmāna-ānāha
	Ajīrṇa-agnimāndya-viṣūcikā
	Vamana
	Atisāra
	Jvara-Jīrṇajvara
	Kṛmiroga.

Therapeutic uses

The drug Pratiṣā is stomachic, appetizer, anti-colic, febrifuge and anthelmintic. Tubers are used in dyspepsia, loss of appetite, vomiting caused by dyspepsia, flatulence, diarrhoea and similar ailments of digestive system. In various gastro-intestinal disorders, the tuber out root is mixed with pepper (marica), mace (jāti patrī),

lesser cardamum (kṣudra elā) and also some other suitable drugs (if needed) and the powder of these drugs is suggested to be orally given as a good recipe. This drug is similarly used effectively in gastro-enteritis (viṣūcikā), chronic fever (jirṇa jvara) and worms affections.

Prativiṣā (Aconitum palmatum D. Don.) possesses medicinal properties similar to that of Ativiṣā (Aconitum heterophyllum wall.) but the tuberous roots forming drug of Prativiṣā is also not poisonous or toxic (nirviṣā) *exceptionally*, in comparison to Ativiṣā and despite its categorisation under aconites (with toxic nature and properties). Hence, the drug Prativiṣā is ('viṣam prati viruddhā iti prativiṣā'; 'ativiṣā suklakandaparā prativiṣā' : Kaiyadeva Nighaṇṭu) a peculiar aconite having medicinal potentialities useful in various diseases. Ativiṣā ('atikrāntā viṣam' non-poisonous drug despite its inclusion in poisonous group) also belongs to non-poisonous aconites which remarkably include Prativiṣā.

Parts used : Tubers.

Dose : 25.0 mg.-62.5 mg.

PRATIVIṢĀ (प्रतिविषा)

‘श्यामकन्दा प्रतिविषा विरूपा घुणबल्लभा ।’

Nighaṇṭu Saṅgraha.

‘अतिविषा शुक्लकन्दापरा प्रतिविषा ।’

Kaiyadeva Nighaṇṭu.

‘श्यामकन्दा प्रतिविषा शृङ्गी चोपविषा विषा ।’

Dhanvantari Nighaṇṭu.

विषा त्वतिविषा विश्वा शृङ्गी प्रतिविषारुणा ।

शुक्लकन्दा चोपविषा भङ्गुरा घुणबल्लभा ॥

Bhāvaprakāśa Nighaṇṭu.

अङ्कोटस्य त्रयो भागाः भागश्चैकोऽरुणाभवा ।

तण्डुलोदकसम्पीतः सर्वकुक्ष्यामयापहः ॥

Dravyaguṇa Vijñāna, 296.

PRIYĀLA

Botanical name

Buchnanania lanzan spreng.

Syn. *Buchanania latifolia* Roxb.

Family : Anacardiaceae

Classical name : Priyāla

Sanskrit names

Priyāla, Kharaskandha, Bahula valkala, Tāpaseṣṭa, Sannakadru, Dhanuṣpāṭa, Cāra.

Regional names

Piyar, Piyal, Chirounji (Hindi); Charoli (Mar., Guj.); Karaka (Tam.); Sorad (Tel.); Lurkal, Nurkal (Kann.).

Description

Deciduous trees, up to 20 meters tall; bark rough, tessellated; young branches; under surface and petiole of young leaves tomentose, glabrescent with age.

Leaves 8-20 × 4-12.5 cm. oblong or elliptic-oblong, glabrescent above, tomentose beneath margin entire; apex obtuse or emarginate, base rounded; petiole 1.2-2 cm. long, tomentose.

Flowers greenish-white, sessile, bi-sexual, in 5-15 cm. long panicles. Calyx 3-5 lobed, Ca 1 mm. long, ovate, apex obtuse. Petals 4-5, Ca 3 mm. long ovate, subacute. Disc fleshy, 5-lobed. Stamens 10, inserted at the base of the disc; filaments linear. Ovary of 5-6 free carpels, situated inside the disc only 1 carpel fertile.

Drupe black, 5-8 mm. across, lenticular; stone woody; seeds edible.

Flowering and fruiting time

Plant flowers and fruits during the period from to June.

Distribution

Plant occurs in the Siwaliks, foot hills and other lower hilly regions, Central India, Southern India, Orissa, Chhota Nagpur and other areas in India, ascending to 3,000 ft. elevation, specially growing in dry hilly regions.

Chemical composition

Seeds kernel contain fixed oil 51.8%, protein 21.6%, starch 12% and sugar 5%. Bark (of source tree) contains tanning about 13.4 per cent. Trunk exudes gum-resin by incision.

Pharmacodynamics

Rasa	: Madhura
Guṇa	: Snigdha, guru, sara
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittaśāmaka

Properties and action

Karma	: Udardapraśamana Vṛṣya-vājikaraṇa Bālya-br̥mhana Dāhapraśamana Varṇya-saundaryavardhana Kuṣṭhaghna Tṛṣṇānigrahaṇa Viṣṭambhī-durjara Vraṇaropaṇa-sandhānīya Prīṇana Nāḍībālya Śothahara Keśarañjana Sāraka-anulomana-āmadoṣakara Raktaprasādana-hṛdya Mūtrala
Roga	: Udarda-kuṣṭha-dāha-tvagvikāra- kaṇḍū Vyaṅga-nyakka-varṇavikāra Raktavikāra-hṛddourbalya Raktapitta-raktātisāra Śukrakṣaya-śukradourbalya-klaivya Pālitya-dāruṇaka Tṛṣṇā Vibandha Kāsa-kṣata-kṣaya Mūtrakṛcchra-pūyameha-uṣṇavāta

Vātavyādhi-śiraṣśūla-mūrcchā
 Dourbalya
 Jīrṇajvara
 Bhagna
 Vraṇa-visarpa
 Vātavyādhi-vātarakta.

Therapeutic uses

The drug Priyāla is tonic, aphrodisiac, cardi tonic, diuretic, nervine tonic, anti-inflammatory, lusture or complexion promotor, anti-dermatosis, laxative, uneasily digestible, antipyretic, hair colourant, expectorant and demulcent; it alleviates udarda and pacifies overthirst.

Priyāla is useful in debility, nervine complaints, heart complaints, dysuria, impotency, gonorrhoea, spermatorrhoea, chronic fever, syncope, vātavyādhi, cough, blood impurities, seminal disorders, headache burning sensation, skin and colour disorders.

The seeds oil is applied in pālitya. The seeds paste is applied over skin, face and other parts of body (lepa-udvartana-mardana etc.) for alleviating skin diseases, kuṣṭha, lumphatic glands enlargements, scabies, pruritis and pigmentation anomalies. The paste of seeds-kernel is conventional by applied (by rubbing or udvartana) for promoting lusture or complexion of face and eradicating vyaṅga.

Parts used : Seeds-kernel, bark.

Dose : Seed-kernel 10-20 gm., Bark 50-100 ml.

Formulation

Priyālabījādi lepa, Priyāla lepa-Priyāla udvartanam, Priyāla tailam.

Gaṇa

Udardapraśamana, Śramahara (Caraka Saṁhitā), Nyagrodhādi (Suśruta Saṁhitā).

PRIYĀLA (प्रियाल)

क. प्रियालस्तु खरस्कन्धश्चरो बहुलवल्कलः ।

राजादनः तापसेष्टः सभ्यकदुर्धनुष्रदः ॥

ख. चारः पित्तकफास्रघ्नश्चरो मधुरं गुरु ।

स्निग्धं सरं मरुत्पित्तदाहज्वरतृषापहम् ॥

Bhāvaprakāśa Nighaṇṭu, Āmrāphalādi varga, 83.

प्रियालमज्जगुणाः

प्रियालमज्जो मधुरो वृष्यः पित्तानिलापहः ।

हृद्योऽतिदुर्जरः स्निग्धो विष्टम्भी चामवर्द्धनः ॥

Bhāvaprakāśa Nighaṇṭu, Āmrāphalādi varga, 85.

प्रियालः

अ. धनुष्यटः खरस्कन्धश्चरो द्राक्षाफलः परः ।

प्रियालोऽम्लफलस्त्वक्कः सन्नकद्रुमुनिप्रियः ॥

शालः शाखामृगश्चाधः पुटोऽथ लालनो वरः ।

प्रियालगुणाः

प्रियालः कफपित्तघ्नः कषायोऽस्य फलं गुरु ॥

स्वाद्वम्लं मधुरं पाके सुस्निग्धं शीतलं सरम् ।

विष्टम्भि बृंहणं वृष्यं बल्यं श्लेष्मविवर्धनम् ॥

जयेन् मारुतपित्तास्रदाहतृषाक्षतक्षयान् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 394-397.

चारः

चारः खट्वः खरस्कन्धो ललनश्चारकस्तथा ।

बहुवल्कः प्रियालश्च नवद्रुस्तापसप्रियः ।

स्नेहबीजश्चोपवटो भक्षबीजः करेन्दुधा ॥

चारस्य बीजं फलञ्च

चारस्य च फलं पक्वं वृष्यं गौल्याम्लकं गुरु ।

तद्बीजं मधुरं वृष्यं पित्तदाहार्तिनाशनम् ॥

Rāja Nighaṇṭu, Āmrādi varga, 64-65.

वातपित्तहरं वृष्यं प्रियालं गुरु शीतलम् ।

चारस्य च फलं पक्वं स्वाद्वम्लं दुर्जरं प्रियम् ॥

चारमज्जा समधुरा वृष्या पित्तानिलापहा ॥

Dhanvantari Nighaṇṭu.

रक्तपित्ते

‘....प्रियालमधुकेन वा....रक्तजित् साधितं पयः ।’

Bhāvaprakāśa, 9-43.

रक्तातिसारे

‘शल्लकीबदरीजम्बुपियालामार्जुनत्वचः ।

पीताः क्षीरेण मध्वाढ्यः पृथक् शोणितनाशनाः ॥’

Cakradatta, 3-69.

पियालतैलम्

पियालतैलं मधुरं गुरु श्लेष्माभिवर्धनम् ।

हितमिच्छन्ति नात्यौष्ण्यात् संयोगे वातपित्तयोः ॥

Caraka Samhitā, Sūtra, 27-283.

प्रियालफलम्

‘वातपित्तहरं वृष्यं पियालं गुरु शीतलम् ।’

Suśruta Samhitā, Sūtra, 46-156.

पियालफलमज्जा

‘पियालमज्जो मधुरो वृष्यः पित्तानिलापहः ।’

Suśruta Samhitā, Sūtra, 46-205.

‘पियालतैलं मधुकं पयश्च सिद्धं घृतं माहिषमाजकं वा ।’

Caraka Samhitā, Cikitsā, 4-99.

मधुरवर्ग-न्यग्रोधादिगणः

Suśruta Samhitā, Sūtra, 42-18; Sūtra, 38-48.

व्रणरोपणार्थं भग्नसन्धानार्थञ्च प्रियालतैलम्

Suśruta Samhitā, Cikitsā, 3-67.

महावातव्याधौ प्रियालतैलम्

Suśruta Samhitā, Cikitsā, 5-67, 10-12.

पित्तसंसृष्टवाते प्रियालतैलम्

Suśruta Samhitā, Cikitsā, 31-5.

वातरक्ते प्रदेहार्थं प्रियालप्रयोगः

Caraka Samhitā, Sūtra, 3-19;

Cikitsā, 29-131.

फलासवानां प्रियालयोजना (आसवकल्पना)

Caraka Samhitā, Sūtra, 25-41.

स्थावरसंज्ञितैलानां प्रियालयोजना

Caraka Samhitā, Sūtra, 13-8.

दारुणक (शिरोगत) रोगे पियालबीजादिलेपः

Cakradatta, Kṣudra roga cikitsā, 55-86.

प्रीणने

प्रियालमज्जमधुकमधुलाजासितोपलैः ।

अपस्तनस्य संयोज्यः प्रीणनो मोदकः शिशोः ॥

Aṣṭāṅga Hṛdaya, Uttara, 1-39.

PRIYAṅGU

Botanical name : *Callicarpa macrophylla* Vahl.

Family : Verbenaceae

Classical name : Priyaṅgu

Sanskrit names

Priyaṅgu, Phalinī, Śāntā, Gandhaphalī, Śyāmā, Aṅganāpriyā.

Regional names

Priyaṅgu, Dahiya, Daya (Hindi); Mathara (Beng.); Sumali (Punj.); Mattraiya (Beng.).

Description

An erect shrub, with 2-4 feet height. Branches, leaf-stalks and inflorescence densely clothed with wool like structure. Leaves shortly stalked, lanceolate 15-22 × 5-7 cm., crenate or sharply toothed, long pointed upper surface wrinkled, stellately pubescent; lower tomentose. Flowers 1.5 cm. long, pink, crowded in axillary, stalked cymes; calyx bell-shaped, 4-toothed; corolla tube short; limb 4-lobed; lobes nearly equal, spreading stamens equal, far protruding; ovary 2-4-celled; style long; stigma minutely capitate. Fruit succulent, globose, white; fruit containing 4-one seeded nutlets.

Flowering and fruiting time

Plant flowers during the period from July to November and fruiting begins after wards and fruits during cold months.

Distribution

Plant occurs in the sub-himalayan tracts from Hazara eastwards to Assam (India) to Burma.

Kinds and varieties

There are two types of Priyaṅgu (in Nighaṇṭu texts)

viz. Priyaṅgu and Gandha priyaṅgu. Gandha priyaṅgu is highly odorous and its botanical source is known as *Prunus mahaleb* Linn. belonging to family Rosaceae.

Chemical composition

Root yields an aromatic oil which is medicinally potent.

Pharmacodynamics

Rasa	: Tikta, Kaṣāya, madhura
Guṇa	: Guru, rūkṣa
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣaśāmaka Kaphapittaśāmaka

Properties and action

Karma	: Raktastambhana Raktaśodhaka-raktapittaśāmaka Vedanāsthāpana Durgandhanāśana Dīpana-anulomana-stambhana Mūtravirecaniya Tvagdoṣahara Jvaraghna-dāhapraśamana Kaṭupouṣṭika-viṣaghna Vraṇaropana Vaktrajādyahara- mukhadourgandhyahara
Roga	: Raktapitta-raktavikāra Āmavāta-sandhivāta Agnimāndya-śūla-gulma- pariṇāmaśūla Raktātisāra Paittika Prameha Dourbalya Viṣa Jvara-dāha Chardi Dāha-śiraḥśūla-atisveda Dehadourgandhya Durgandhi vraṇa

Carmavikāra
Vraṇa-vidradhi
Visarpa (Kaphaja).

Therapeutic uses

The drug Priyaṅgu is analgesic, aromatic, carminative, febrifuge, stomachic and styptic drug. It is used in anorexia, arthritis, burning sensation in the body, dyspepsia, hemophilic conditions, rheumatism and skin diseases. The drug is extensively used to reduce the pain in rheumatism, arthritis and allergic conditions.

The leaves (priyaṅgu patra) are warmed and applied in rheumatic joints to relieve pain. They are externally applied in burning sensation, headache, excess sweating (atisveda) and foul ulcers (durgandhita). It is used in painful conditions (organs and joints) such as rheumatic and gouty complaints.

The flowers (priyaṅgu puṣpa) are used in loss of gastric power or fire (mandāgni), colic, abdominal lump (gulma), diarrhoea with blood (raktātisāra), intrinsic haemorrhage, blood impurities or diseases (raktavikāra), paittika prameha, cutaneous affections, fever, burning sensation, debility poisoning adverse effects (viṣa), vomiting (chardi) and pariṇāmaśūla.

Priyaṅgu is externally applied in dental complaint (śītāda). It is used in erysepals (kaphaja visarpa). The drug is frequently recommended in raktātisāra, raktapitta and raktasrāva. Priyaṅgu taila (priyaṅgvādi taila) is prescribed in abscess (vidradhi ropāṇa).

Parts used : Flowers, leaves.

Dose : 1-3 gm.

Formulation : Priyaṅgvādi taila

Group : Mūtravirecanīya, Puriṣasaṅgrahaṇīya (Caraka Saṁhitā), Priyaṅgvādi, Añjanādi (Suśruta Saṁhitā).

PRIYAṅGU (प्रियङ्गु)

प्रियङ्गुर्गन्धप्रियङ्गुश्च

प्रियङ्गु शीतला तिक्ता तुवराऽनिलपित्तहृत्॥

रक्तातीसारदौर्गन्ध्यस्वेददाहज्वरापहा ।

(वान्तिभ्रान्त्यतिसारघ्नी वक्त्रजाड्यविनाशिनी) ॥

गुल्मतृड्विषमोहघ्नी तद्वद् गन्धप्रियङ्गुका ॥

Bhāvaprakāśa Nighaṇṭu, Karpūrādi varga, 102-103.

प्रियङ्गुफलम्

तत्फलं मधुरं रूक्षं कषायं शीतलं गुरु।

विबन्धाध्मानबलकृत्सङ्ग्राहि कफपित्तजित् ॥

Bhāvaprakāśa Nighaṇṭu, Karpūrādi varga, 104.

प्रियङ्गुः

प्रियङ्गु फलिनी कान्ता प्रियाऽऽहः वनितालता ॥

श्यामा गोदन्तिनी वृत्ता कङ्गुणी प्रियवल्लीका ।

गन्धप्रियङ्गुः

गन्धप्रियङ्गुर्महिला करम्भा वर्णमेदनी ॥

गुन्द्रा गन्धफली श्यामा विश्वक् सेनाङ्गनाप्रिया ।

प्रियङ्गु(द्वय)सामान्यगुणाः

अ. फलिनी शीतला तिक्ता तुवरानिलपित्तहा ॥

रक्तातियोगदौर्गन्ध्यस्वेददाहज्वरापहा ।

गुल्मतृणविषमोहघ्नी तद्वद् गन्धप्रियङ्गुका ॥

फलगुणाः

ब. तत्फलं मधुरं रूक्षं कषायं शीतलं गुरु।

विबन्धाध्मानबलकृत् सङ्ग्राहि कफपित्तजित् ॥

Kaṭyadeva Nighaṇṭu, Oṣadhi varga, 1352-1356.

प्रियङ्गु

प्रियङ्गुः फलिनी श्यामा प्रियवल्ली फलप्रिया ।

गौरी गोचन्दनी वृत्ता कारम्भा कङ्गु कङ्गुनी ॥

भङ्गुरा गौरवल्ली च सुभगा पर्णभेदिनी ।

शुभा पीता च मङ्गल्या श्रेयसी चाङ्गभूमिता ॥

प्रियङ्गुगुणाः

प्रियङ्गुः शीतला तिक्ता दाहपित्तास्रदोषजित् ।

वान्तिभ्रान्तिज्वरहरा वक्त्रजाड्यविनाशिनी ॥

Rāja Nighaṇṭu, Āmrādi varga, 44-46.

विद्रधिचिकित्सायां पाठाचूर्णम्

शमयति पाठामूलं क्षौद्रसंयुक्तं तण्डुलाम्बुना पीतम् ।

अन्तर्भूतं विद्रधिमुद्धतमाश्वेव मनुजस्य ॥

Cakradatta, 43-16.

प्रियङ्गुपुष्पकल्कः रक्तातिसारे

पीतः प्रियङ्गुकाकल्कः सक्षौद्रस्तण्डुलाम्भसा ।

रक्तस्त्रावं जयेच्छीघ्रं धन्वमांसरसाशिनः ॥

Caraka Samhitā, Cikitsā, 19-83.

प्रियङ्गवादिपेयं रक्तपित्ते

प्रियङ्गुकाचन्दनलोध्रसारिवामधूकमुस्तामयधातकीजलम् ।

समृत्प्रसादं सह यष्टिकाम्बुना सशर्करं रक्तनिबर्हणं परम् ॥

Caraka Samhitā, Cikitsā, 4-81.

प्रियङ्गुचूर्णं रक्तपित्ते

खदिरस्य प्रियङ्गूणां कोविदारस्य शाल्मलेः ।

पुष्पचूर्णानि मधुना पद्मानां केशरस्य च ॥

Caraka Samhitā, Cikitsā, 4-70.

प्रियङ्गु शीतला तिक्ता मोहदाहविनाशिनी ।

ज्वरवान्तिहरा रक्तमुद्रिकं च प्रसादयेत् ॥

Dhanvantari Nighaṇṭu.

‘गन्धप्रियङ्गु शोणितपित्तातियोगप्रशमनानाम् ।’

Caraka Samhitā.

प्रियङ्गुः शीतला वान्तिदाहपित्तज्वरास्त्रजित् ।

मुखकान्तिप्रजनना गात्रदौर्गन्ध्यनाशना ॥

Madanapāla Nighaṇṭu.

‘प्रियङ्गुकाचन्दनरुषितानां स्पर्शाः प्रियानाञ्च वराङ्गनानाम् ।’

Caraka Samhitā, Cikitsā, 4-106.

विद्रधिरोपणार्थं प्रियङ्गवादि तैलम्

Cakradatta, 43-19.

परिणामशूले

‘प्रियङ्गुपत्रक्वाथेन वमनं परिशस्यते ।’

Baṅgasena, Parīṇāmaśūla, 9.

गर्भनिष्क्रामणयोगे

वासापरुषफलनी काकमाची शिफाः पृथक् ।

पिष्टा नाभेरयो लिप्ता गर्भनिष्क्रामणप्रदाः ॥

Vaidya Manoramā, Paṭola, 13-28.

वमने

तण्डुलसलिलनिपिष्टं यः पीत्वा वमति नरः पूर्वाह्णे ।
फलिनीवल्कलमुष्णं हरति परं सकफपित्तरुजम् ॥

Brndamādhava, Vamanādhikāra.

रक्तातिसारे

पीतः प्रियङ्गुकाकल्कः सक्षौद्रस्तण्डुलाम्बुना ।
रक्तस्त्रावं जयेच्छीघ्रं धन्वमांसरसाशिनः ॥

Caraka Samhitā, Cikitsā, 19-87.

रक्तपित्ते

‘कोविदारप्रियङ्गूणां..... ।
पुष्पचूर्णानि, मधुना लिह्यान्ना रक्तपित्तिकः ॥’

Caraka Samhitā, Cikitsā, 4-68.

कफविसर्पे

शैवालं नलमूलानि वीरा गन्धप्रियङ्गुकौ ।
पृथगालेपनं कुर्याद् द्वन्द्वशः सर्वशोऽपि वा ॥
प्रदेहाः सर्व एवैते देयाः स्वल्पघृताप्लुताः ॥

Caraka Samhitā, Cikitsā, 21-91/92.

दन्तरोगे शीतादे

‘प्रियङ्गवश्च मुस्ता च त्रिफला च प्रलेपनम् ।’

Cakradatta, 56-11.

विषे

तण्डुलसलिलनिपिष्टं यः पीत्वा वमति नरः पूर्वाह्णे ।
फलिनीवल्कलमुष्णं हरति परं सकफपित्तरुजम् ॥

Vṛndamādhava, 73-7.

फलिनीद्विनिशाक्षौद्रसर्पिभिः पद्मकाह्वयः ।

अशेषलूताकीटानामगदः सार्षकार्मिकः ॥

Aṣṭāṅga Hrdaya, Uttara, 37-11.

रक्तातिसारे

तेन (तण्डुलोदकेन) वा समाक्षिकं फलिनीकल्कम् ।

अथवा ससिताक्षौद्रं चन्दनम् ॥

Aṣṭāṅga Saṅgraha, Cikitsā, 11-24.

PRŚNIPARNĪ

Botanical name : *Uraria picta* Desv.

syn. *Hedysarum pictum* Jacq.

Classical name : *Prśniparnī*

Sanskrit names

Prśniparnī, Śṛgālavinnā, *Prṥhakparnī*, *Kalaśī*, *Dhāvanī*, *Guhā*, *Citraparnī*, *Aṅghriparnī*.

Regional names

Pithvan (Hindi); *Shankarjata* (Beng.); *Pithavan*, *Pithavarh* (Mar.); *Pithavana* (Guj.); *Kolpola* (Tam.); *Kolkuponnaa* (Tel.); *Bonnaipad* (Oriya); *Bir or teed* (Mund.); *Daterdime seeds* (Punj.).

Description

Erect, robust, perennial, suffrutescent herbs or undershrubs 40-80 cm. high; stem sparsely branched, finely downy, pubescent cylindrical branches.

Lower leaves 1-3-foliolate, upper ones, 5-9-foliolate, leaf rachis 10-15 cm. long; petioles 2.5-5 cm. long; stipules lanceolate; leaflets sublinear, very gradually narrowed from a rounded base, 3-20 × 0.4-3 cm., excurved at margins, glabrous above, faintly pubescent below, variegated along the costa on the upper surface.

Upper leaves, 5-9-foliolate, lower 3-5-foliolate; leaflets linear-lanceolate, apiculate, rigidly coriaceous, with a median glaucous band, glabrous above, minutely pubescent beneath; stipules free, lateral, persistent.

Racemes cylindrical 20-35 cm. long, bristly. Numerous minute, purple flowers arranged in elongated cylindrical racemes; bracts brown, scarious, deciduous. Flowers Ca 15 mm. long; pedicels 5-15 mm. long, clothed with short hooked bristles; abruptly recurved at tip. Calyx bilipped, Ca 4 mm. long; tubes cordate, acuminate, hirsute. Corolla violet or purple, slightly exserted standard with 2 yellow spots.

Pods glabrous, pale, red coloured or whitish, 3-6-jointed; 8-10 mm. long, glabrescent, folded in one another; seeds shining white.

Flowering and fruiting time

Plant flowers and fruits during period from July to November.

Distribution

Plant occurs in tropical Africa and Indo-Malaysia. It grows as undergrowth of forests and also along railway tracks, amidst bushes and tall grasses; Plant is growing throughout India in dry and open forests upto 6,000 feet.

Pharmacodynamics

Rasa : Madhura, tikta

Guṇa : Laghu, snigdha

Vīrya : Uṣṇa

Vipāka : Madhura

Doṣakarma : Tridoṣaśāmaka

Properties and action

Karma : Aṅgamardapraśamana
 Saṅgrāhī-dīpana-pācana
 Vātahara-nāḍibalya
 Tṛṣṇānigrahaṇa
 Vṛṣya
 Dāhapraśamana
 Jvaraghna
 Chardinigrahaṇa
 Kāsaghna-kaphaniḥsāraka
 Hṛdya-sonitāsthāpana-śothahara
 Mūtrala
 Viśaghna
 Sandhānīya
 Vraṇaropaṇa
 Arśoghna
Roga : Vātavyādhi
 Tṛṣṇā-koṣṭhavāta
 Raktātisāra
 Raktārśa
 Grahaṇī
 Hṛdroga-raktavikāra
 Śoṭha vikāra
 Jvara
 Vraṇa-vidradhi

Netraroga
 Vātarakta
 Raktapitta
 Bhagna-asthibhagna
 Śoṭha
 Raktārśa
 Unmāda
 Dāha
 Raktaroga
 Madātyaya
 Udararoga
 Netraroga
 Viṣa-sarpaviṣa.

Therapeutic uses

Prśniparnī is one of the useful drugs for treating vātavyādhi, vātarakta and tridoṣaja (vātapradhāna) vikāra. The drug is used in cough, asthma, spermatorrhoea, dysuria, fever, burning sensation, bleeding piles, excess thirst, grahaṇī, oedema, intrinsic haemorrhage and snake-bite.

The drug Prśniparnī is cardiogenic, expectorant, diuretic, febrifuge and nervine tonic. It is used in general anasarca, blood diseases, bleeding piles, colitis, cough, difficult micturition, fever and respiratory disorders.

Prśniparnī (*Uraria picta* Desv.) is one of the component-drugs of Daśamūla. It is credited with fracture healing properties. Its total extract has been found to effect better and quicker healing of fractures in experimental animals due to early accumulation of phosphorous and more deposition of calcium. The plant is employed for treating heart trouble.

The roots is credited with aphrodisiac properties. Its decoction is prescribed for cough, chills and fevers. The leaves are considered antiseptic and used in gonorrhoea. The roots and pods are employed to treat prolapse of anus in infants; the pods are also applied for the treatment of soremouth in children. It is also used in ulcers and eye ailments.

The drug *Prśniparnī* is *aṅgamardapraśamana* that is pacifying bodyache; it is used in *śoṣa*, *dourbalya* and *aṅgamarda*. Roots are given in bodyache, consumption and general debility.

Parts used : Root.

Dose : Decoction 50-100 ml.

Formulation : *Daśamūlāriṣṭa*.

Group

Aṅgamardapraśamana, *Sandhāniya*, *Śothahara*, *Madhuraskandha* (*Caraka Saṁhitā*), *Vidārigandhādi*, *Haridrādi*, *Laghupañcamūla* (*Suśruta Saṁhitā*).

PRŚNIPARNĪ (पृश्निपर्णी)

पृश्निपर्णी रसे स्वादु लघूष्णाऽस्त्रिदोषजित् ।

कासश्वासप्रशमन्युदरतृड्दाहनाशिनी ॥

Dhanvantari Nighaṇṭu.

पृश्निपर्णी त्रिदोषघ्नी वृष्योष्णा मधुरा सरा ।

हन्ति दाहज्वरं श्वासरक्ततिसारतृड्वमीः ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 48.

पृश्निपर्णी त्रिदोषघ्नी वृष्योष्णा मधुरा सरा ।

हन्ति दाहज्वरश्वासरक्तातीसारतृड्वमीः ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 35.

वातरक्ते

‘शृगालवित्रासिद्धं (अजाक्षीरं) वा शर्करामधुमधुरम् ।’

Suśruta Saṁhitā, Cikitsā, 5-7.

व्रणरोपणे

पृथक्पर्ण्यात्मगुप्ता च हरिद्रे मालती सिता ।

काकोल्यादिश्च योज्याः स्याद् भिषजा रोपणे घृते ॥

Suśruta Saṁhitā, Sūtra, 37-25.

रक्तपित्ते

मसूरपृश्निपर्ण्यैर्वा स्थिरा मुद्गरसोऽथवा ।

इत्युक्ता रक्तपित्तघ्न्यः शीताः समधुशर्कराः ॥

यवागवः कल्पना चैषा कार्या मांसरसेष्वपि ।

Caraka Saṁhitā, Cikitsā, 4-46/48.

अस्थिभग्ने

‘मूलं शृगालविन्नायाः पीत्वा मांसरसेन तु ।
चूर्णीकृत्य त्रिसप्ताहादस्थिभग्नमपोहति ॥’

Bhāvaprakāśa, Cikitsā, 48-30.

नेत्ररोगे

ताम्रपात्रे गुहामूलं सिन्धूत्वणमरिचान्वितम् ।
आरणालेन सङ्घृष्टमञ्जनं पिल्लनाशनम् ॥

Cakradatta.

रक्तातिसारे

‘पयस्यद्धोदके छागे.... ।
पेयाः रक्तातिसारघ्नी पृश्निपर्ण्या च साधिता ॥’

Caraka Samhitā, Sūtra, 2-21.

Cakradatta.

ऐकाहिकज्वरे

पृश्निपर्णी त्वपामार्गस्तथा भृङ्गराजो द्रुमः ।
एषामन्यतमं मूलं पुष्पमौद्धृत्य यत्नतः ॥
रक्तमूत्रेण संवेष्ट्य बद्धमेकाहिकं जयेत् ॥

Cakradatta.

शोथरोगे पृश्निपर्ण्यादिक्वाथः

‘पृश्निपर्णीघनोदीच्यशुण्ठीसिद्धन्तु पैतिके ।’

Cakradatta, Śoṭha cikitsā, 39-3.

भग्ने

मूलं शृगालविन्नायाः पीत्वा मांसरसेन तु ।
चूर्णीकृत्य त्रिसप्ताहादस्थिभग्नमपोहति ॥

Bhāvaprakāśa, Bhagnādhikāra, 48-30.

रक्ताशःसु

‘हन्त्याशु रक्तरोगं तथा बलापृश्निपर्णीभ्याम् ।’

Caraka Samhitā, Cikitsā, 14-199.

कफजमदात्ययस्य तृष्णायाम्

‘तृष्यते सलिलं चास्यै..... ।

बलायाः पृश्निपर्ण्याः वा....घृतम् ॥’

Caraka Samhitā, Cikitsā, 24-165.

वातप्रबले वातरक्ते

‘अजाक्षीरस्यार्द्धतैलं शृगालविन्ना सिद्धं वा ।’

Suśruta Samhitā, Cikitsā, 5.

पृश्निपर्णीगुणस्तुतिः (वैदिका)

शं नो देवी पृश्निपर्ण्यशं निर्ऋत्या अकः ।

उग्रां हि कण्वर्जननी तामभक्षि सहस्रतीम् ॥

Atharvaveda, 2/25/1.

सहसामानेयं प्रथमा पृश्निपर्ण्यजायतः ।

तथाहं दुर्णाम्नां शिरो वृक्षाभिशकुनेरिव ॥

Atharvaveda, 2/25/2.

अरायसृपक्कावानं वञ्च स्फाति जिहीर्षति ।

गर्भादं कण्वं नाशय पृश्निपर्णि सहस्वं च ॥

Atharvaveda, 2/25/3.

गिरिमेनां अविजय कण्वान् जीवितयोपनान् ।

तस्त्विं देवि पृश्निपर्ण्याग्निरिवाऽनु दहन्निहि ॥

Atharvaveda, 2/25/4.

पृश्निपर्णीगुणाः

पृश्निपर्णी कटूष्णाम्ला तिक्तातीसारकासजित् ।

वातरोगज्वरोन्माद-व्रणदाहविनाशनी ॥

Rāja Nighaṇṭu, Śatāhvādi varga, 39.

प्रसारणी गुरुर्वृष्या बलसन्धानकृत्सरा ।

वीर्योष्णा वातहृत्तिक्ता वातरक्तकफापहा ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 235.

PŪGA

Botanical name : Areca catechu Linn.

Family : Palmae

Classical name : Pūga

Sanskrit names

Pūga, Guvāka, Kramuka, Pūgīphala, Kebuka, Kaṣāyaphala, Udvega, Ghonṭāphala.

Regional names

Supari, Suparhi (Hindi); Shupari (Beng.); Supari,

Pophal (Mar.); Sopari (Guj.); Pakkugphak (Tam); Pika-vakka (Tel.); Adike (Kann.); Adakka (Mal.); Phophal (Arabic); Popal (Pers.) Areca nut, Betel nut (Eng.).

Description

Tree branchesless, 40-60 feet tall or with trees of 30-40 feet high (about 2.5 meters), coconut tree-like trees. Stem (trunk) smooth, whitish; bark brownish-grey.

Leaves fan-type or feather-like, pinnate leaves (Palmae), drooping; 120-180 cm. long. pinnate leaves, pinnae 30-90 cm. long; upper leaves (leaflets) often confluent; base of petiole stout, extended, cell-like or swollen base. Leaflets numerous, crowded, glabrous, linear, lanceolate, sheaths long, smooth.

Spadix axil of each leaf makes a spathe enclosing a spadix, strong (stout), many-branched, bearing flowers male and female; palm monoecious. Male flowers smaller than female flowers which are very large (comparatively), but a few in number; male flowers sessile on remaining spadix. Fls. monoecious, spadix bearing numerous close set pendulous spikes with spathes.

Fruit a nut, smooth, 2.5-5 cm. long (1-2 in.); green in unripe stage and nuts turned orange or reddish in colour when in ripen matured stage; outer coat fibrous (likewise coconut-shell); seeds (pūga or areca nut) common use and in trade inside, rounded comes in shape. Outer fibrous coat 65% and seeds (pūga) 35% after removal (of outer coat).

Flowering and fruiting time

Flowering in April-October and fruiting in October-February. Leaves falling by December and tree becomes leafless till June, afterwards the flowering begins and fruiting takes place subsequently. Finally the fruits attain maturity within 10 months (or period less than one year).

Distribution

Plant occurs in coastal regions of southern Bombay, (Mumbai, Maharashtra), Masore (Karnataka), Madras (Tamilnadu), Assam, Karala, West Bengal; it is cultivated widely. It is largely cultivated in Malaya Islands, Eastern Philippines and Madagascar and coastal regions of Africa.

Nut-Seed Drug : Fruits 3.5-5 cm., ovoid, orange, fleshy, fibrous; seed depressed, conicle, nearly globose, 2-2.5 cm. diameter, pale brown, rough, endosperm ruminate. Seeds rounded cones, 1.25 cm.-3.125 cm. long and 18.75 mm.-31 mm. broad; externally light redishness-brownish or yellowish; outer surface minute living network beginning from hilum resembling somewhat a Jātīphala or nutmeg (but nutmeg differs in shape); Seeds depressed at middle of base; mesocarp fibrous at base; endocarp white papery layer, remnant.

Market drug (areca nut or pūga phala, actually seed) endosperm and mesocarp portion maximum 2%; and other organic admixed part maximum 1% and ash 2.5%.

Kinds and varieties

Dried seeds of matured fruits are marketed generally popularly known as supari. Seeds obtained by boiling raw or unripe fruit form red and soft crude material is known as chikni supari.

Chemical composition

Areca nut contains tannin (tannic and gallic acid), a fixed oil, gummy substance, a volatile oil (in lower percentage), lignin 15% and a red colouring substance areca red, and several alkaloids. Among alkaloids, aricine 0.07-1 per cent, guvacine, guvacoline, aricine, arecaine, 0.1% and arecolidine etc. are important active constituents.

The colouring matter and tannin substances water when the nut is boiled in water are extracted out (present in water).

Pharmacodynamics

Rasa	: Kaṣāya, madhura
Guṇa	: Guru, rūkṣa
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka Tridoṣaśāmaka (svinna kvathita-boiled state)

Properties and action

Karma	: Vikāśi

Raktabhārahārāsaka-hṛdayāvasāda¹.a
 Raktapittaśāmaka
 Rocana-mukhavaiśadyakara-vaktra-
 durgandhahara-dīpana
 Lālāsrāvajanana-āsyavairasyahara
 Tivra kṛmighna-gaṇḍūpada
 sphītakṛmi
 Mohana-madakāri-bhramakāri
 (overdose or excess use)
 Maladourgandhyahara

Roga

: Pradara-śvetapradara
 Vātavyādhi-kaṭiśūla
 Aruci-Atisāra-pravāhikā
 Kṛmiroga-gaṇḍūpada-sphīta kṛmi
 Raktapitta
 Śukrameha
 Bahumūtra
 Vraṇa
 Mukhapāka-śītāda
 Galaroga
 Upadamśa

Therapeutic uses

The drug Pūga is vikāśī which is depressant that acts as 'dhātu vandhana vimokṣana-dhātuśaithilyakara'; it is ojohara (unwholesome for oja or energy) and bhramajanana (causing vertigo). It is stambhana and mukhavaiśadyakara, rocana, mukhavairasyanāśana and dīpana. It stimulates lālāsrāva or salivation (lālāsrāvajanana). It is depressant to heart and hypotensive; it allaviates intrinsic haemorrhage (raktapitta śāmaka). It makes taste of mouth good and pleasant or checks foul or bad taste (mukhavairasyahara). It is diaphoretic (svedajanana), śukrastambhana, garbhāśayasothahara and mūtrasaṅgrahaṇīya and kṛmighna. It acts as strong anthelmintic which is attributed to aricoline present in drug specifically countering roundworms. It is very astringent.

The pūgaphala is commonly used in tradition as an

important component of betel chewing (tāmbūla) and accordingly known as betel-nut.

The gargle of pūga phala (betel nut) is taken in diseases of mouth particularly stomatitis, śītāda and throat affections; the decoction of nut is used for this purpose. The vaginal douche (uttarabasti) is administered in case of leucorrhoea (śveta pradara). A dusting of powder (pūga avacūrṇana) is suggested for wounds and ulcers. Pūga is also added with tooth powders. The oil prepared with pūga is applied in backache, waist pain and vātavyādhi.

Pūga is useful in bahūmūtra (urination of excess), śukrameha (spermatorrhoea), leucorrhoea (śveta pradara), upadaṁśa (soft chancre) and masūrikā (measles). The powder of nut, mixed with lime juice (nimbūka svarasa) or milk, is suggested to be taken in anorexia, diarrhoea, dysentery and worms.

The use of water ghee milk is to check ill-effect of pūga. The excess or constant use of pūga is adversely affecting. Fried (in sand) or boiled (than dried) nut in purified for use. Pūga is advised to consume in combination with milk, ghee etc.

Parts used : Fruit (seed), root, bark.

Dose : Decoction 50-100 ml., Seed powder 1-3 gm

Formulation : Pūgakhaṇḍa, Supāripāka.

PŪGA (पूग)

क. घोरण्टः पूगी पूगश्च गुवाकः क्रमुकोऽस्य तु ।

फलं पूगीफलं प्रोक्तमुद्वेगं च तदीरितम् ॥

ख. पूगं गुरु हिमं रूक्षं कषायं कफपित्तजित् ।

मोहनं दीपनं रुच्यमास्यवैरस्यनाशनम् ॥

Bhāvaprakāśa Nighaṇṭu, Āmrāphalādi varga, 49-50.

आर्द्रस्विन्नफलगुणाः

आर्द्रं तद् गुर्वभिष्यन्दि वह्निदृष्टिहरं स्मृतम् ।

स्विन्नं दोषत्रयच्छेदि दृढमध्यं तदुत्तमम् ॥

Bhāvaprakāśa Nighaṇṭu, Āmrāphalādi varga, 51.

पूगम्

- अ. क्रमुकं केबुकं पूगं कषायफलपुष्पकम् ।
स्यात्पूगफलमुद्वेगं खंसि घण्टाफलं फलम् ॥
चिकणं चिकं गुवाकं खपुरं पूगकं तथा ।

पूगगुणाः

- ब. पूगं रूक्षं सरं किञ्चित्कषायं मधुरं गुरु ॥
रोचनं मोहनं हृद्यं कफपित्तनिबर्हणम् ।
दीपनं वक्त्रवैरस्यमलदौर्गन्ध्यनाशनम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 514-516.

पूगवृक्षः

पूगस्तु पूगवृक्षश्च क्रमुको दीर्घपादपः ।
वल्कतरुर्दृढवल्कचिकणश्च सुनिर्मितः ॥

गुणाः

पूगवृक्षस्य निर्यासो हिमः सम्मोहनो गुरुः ।
विपाके सोष्णकक्षारः साम्लो वातघ्नपित्तलः ॥

पूगफलम्

पूगन्तु चिकणी चिक्का चिकणं श्लक्ष्णकं तथा ।
उद्वेगं क्रमुकफलं ज्ञेयं पूगफलं वसु ॥

Rāja Nighaṇṭu, Āmrādi varga, 233-235.

गौल्यफलम्

गौल्यं गुहागरं श्लक्ष्णं कषायं कटुपाचनम् ।
विष्टम्भं जठराध्मानहरणं द्रावकं लघु ॥

Rāja Nighaṇṭu, Āmrādi varga, 238.

पूगीफलगुणाः

पूगीफलं चेउलसंज्ञकं यत्तत्कोङ्कणेषु प्रथितं सुगन्धि ।
श्लेष्मापहं दीपनपाचनञ्च बलप्रदं पुष्टिकरं रसाढ्यम् ॥

Rāja Nighaṇṭu, Āmrādi varga, 240.

देशभेदेन पूगीफलविशेषगुणाः

- क. यत्कोङ्कणे बल्लिगुलाभिधानकं ग्रामोद्भवं पूगफलं त्रिदोषनुत् ।
आमापहं रोचनरुच्यपाचनं विष्टम्भतुन्दाभयहारि दीपनम् ॥
ख. चन्द्रापुरोद्भवं पूगं कफघ्नं मलशोधनम् ।
कटुस्वादु कषायं च रुच्यं दीपनपाचनम् ॥

ग. आन्ध्रदेशोद्भवं पूगं कषायं मधुरं रसे।
वातजिद्वक्त्रजाड्यघ्नमीषदम्लं कफापहम् ॥

Rāja Nighaṇṭu, Āmrādi varga, 241-243.

पूगफलविशेषगुणाः

पूगं सन्मोहकृत्सर्वं कषायं स्वादु रेचनम्।
त्रिदोषशमनं रुच्यं वक्तृक्लेदमलापहम् ॥

Rāja Nighaṇṭu, Āmrādi varga, 244.

शुष्काशुष्कतो विभिन्नवस्थतया पूगस्य विशेष गुणाः

आमं पूगं कषायं सुखमलशमनं कण्ठशुद्धिं विधत्ते
रक्तामश्लेष्मपित्तप्रशमनमुदराध्मानहरं सरञ्च।
शुष्कं कण्ठामयघ्नं रुचिकरमुदितं पाचनं रेचनं स्यात्
तत्पर्णेनायुतं चेत् झटिति वितनुते पाण्डुघातञ्च शोषम् ॥

Rāja Nighaṇṭu, Āmrādi varga, 245.

पूगमदप्रतीकारः

सच्छर्दिमूर्च्छाऽतीसारं मदं पूगफलोद्भवम्।
सद्यः प्रशमयेत् पीतमातृतेर्वारि शीतलम् ॥
वन्यकरीसम्राणाञ्जलपानाल्लवणभक्षणाद्वाऽपि ।
शाम्यति पूगफलमदक्षूर्णरुजा शर्कराकवलात् ॥

Cakradatta, Madātyaya cikitsā, 18-18.

उपदंशे पूगफलप्रयोगः

लेपः पूगफलेनाश्वमारमूलेन वा तथा।
सेवञ्चित्यं यवान्नञ्च पानीयं कौपमेव च ॥

Cakradatta, Upadamsa cikitsā, 47-11.

मसूरिकाप्रतिकाराय पूगमूलप्रयोगः

‘मध्यामूलं शिफा वा मदनकुसुमजा....योगा
वास्यम्बुर्नते प्रथममघगदे दृश्यमाने प्रयोज्याः ।’

Cakradatta, 54-5.

उपदंशे

‘लेपः पूगफलेनाश्वमारमूलेन वा तथा ।’

Cakradatta, 47-11.

अनुलोमने

ततः क्रमुककल्काक्षं पाययेताम्लसंयुतम्।

औष्ण्यक्षणात् सरत्वाच्च बस्तियोऽस्यानुलोमयेत् ॥

Caraka Samhitā, Cikitsā, 4-37.

वातव्याधौ

शल्लकी चिकणी त्वक् च क्वाथतैलेन संयुतः ।

कुर्याद् वातादितः स्वस्थमेक विंशदिनैः नरम् ॥

Hārīta Samhitā, 3-20-75.

रक्तपित्ते

किराततिकं

क्रमुकं

समुस्तं..... ।

पृथक् पृथक् चन्दनयोजितानि तैनेव कल्पेन हितानि तत्र ॥

Caraka Samhitā, Cikitsā, 4-74/77.

A. PUNARNAVĀ

Botanical name : Boerhaavia diffusa Linn.

Family : Nyctaginaceae

Classical name : Punarnavā

Sanskrit names : Punarnavā, Śothaghñī, Varṣābhū.

Regional names

Gadahpurna, Gadahvindo (Hindi); Punarnava, Gadapunya (Beng.); Itsit (Punj.); Gnetuli (Mar.); Satodi, Basedo (Guj.); Sukuetti (Tam.); Atatasamidi (Tel.); Handkuki (Arab.); Spreading hogweed (Eng.).

Description

A spreading diffusely branched pubescent or nearly glabrous herb; roots stout and often perennial. Herb dries up in summer season and it grows up (regenerates) with new plants during rainy season (making the classical name 'Punarnavā' meaningful). Roots thick, stout, white often 1 foot or 30 cm. long; finger-like in thickness, fleshy when green or fresh, with 2-3 branches. Slight bitter in taste and nauseous.

Leafstalk upto 5 cm. leaves rather thick in unequal pairs, broadly ovate or somewhat circular, rounded at tip, green and glabrous above, white beneath; petiole about 2.5 cm. lvs. opposite, two leaves of a node differ in size.

Flowers in umbels of 4-10, arranged in panicles, pe-

rianth pink, funnel shaped, 5-lobed; stamens 2-3. Fls. small or minute, white or pink.

Fruit 5-ribbed with glands on ribs; ft. 0.625 cm. (1/4 in. long) packed with many minute seeds.

Flowering and fruiting time

After the herbs come up in the rains and further grow well they begin to flower and later bear fruits during cold season (from rains to autumn or winters).

Distribution

Plant occurs throughout as a common weed almost in all parts of country, generally on flat land and along road sides, also near water course. It ascends to 1,500 meters in the Himalayan regions. Plant is found in Andhra Pradesh, Bihar, Gujarat, Jammu & Kashmir, Karnataka, Kerala, Assam, Tamilnadu, Uttar Pradesh, Madhya Pradesh and other regions in country.

Kinds and varieties

There are two kinds of Punarnavā in classical texts of materia medica (Nighaṇṭu) viz. Rakta and sveta (red and white variety) which are botanically identified as Boerhaavia (Boerhavia) diffusa Linn. and Trianthema species respectively. Another plant Boerhavia repanda Willd. is also referred in context of Punarnavā. In all 'Punarnavā traya' mentioned in texts (Nighaṇṭu) comprising three kinds of Punarnavā also indicate to Nīla Punarnavā (blue variety) as included and referred particularly by Narahari (Rāja Nighaṇṭu, prabhadra. 116).

Classically it is observed about two or three kinds of Punarnavā in texts (Nighaṇṭus), generally two varieties are white (śveta) and red (red) and rarely third one is blue (nīla) variety.

Botanically another species of Boerhaavia i. e. Boerhaavia repanda Willd. syn. B. repens L. is also referred botanical sources of Punarnavā.

Presently the Punarnavā traya, triogroup of Punarnavā, includes Punarnavā Rakta (Boerhaavia diffusa Linn.), Punarnavā Śveta-Vṛściva (Boerhaavia verticillata Poir) and viṣakharpara (Trianthema portulacastrum Linn.) which have been dealt separately.

Chemical composition

Plant contains punarvine 0.01-0.04%, a slightly bitter alkaloid, potassium nitrate 0.52, chlorides and oils. Ash contains sulphate, chlorides, nitrate and chlorate.

Pharmacodynamics

Rasa	: Madhura, tikta, kaṣāya.
Guṇa	: Laghu, rūkṣa
Virya	: Uṣṇa
Vipāka	: Madhura
Doṣakarma	: Tridoṣahara

Properties and action

Karma	: Mūtrala (mūtra virecanīya) Lekhana-śothahara Dīpana-anulomana-recana-vāmaka (higher dose) Hṛdya-raktavardhaka-śothahara- raktabhāravardhana Kāsa Vṛṣya Mūtrajanana Svedajanana Kuṣṭhaghna Jvaraghna Rasāyana Viśaghna Arśoghna
Roga	: Śotha-mūtrakrcchra-mūtrāghāta Pāṇḍu-kāmalā-yakṛtphlihavikāra Hṛdroga-sarvāṅgaśotha Agnimāndya-udararoga-vibandha- plihodara Kāsa-śvāsa-uraḥkṣata- raktaniṣṭhivana Raktapradara Kuṣṭha Jvara-cāturthika jvara Dourbalya Viṣa-sarpaviṣa-mūṣikaviṣa- vṛścikaviṣa-alarkaviṣa

Netraroga
 Vidradhi-antarvidradhi
 Mūḍhagarbha
 Ślīpada
 Aśmari-śarkarā
 Garbhiṇīśoṭha
 Nidrānāśa
 Vraṇaśoṭha.

Therapeutic uses

The drug Punarnavā is antibilary, antipyretic, cardiotonic, diuratic, expectorant, laxative, sodorific and stomachic. It is used in anaemia, calculus, cough, colic, haemorrhage, heart diseases, insomnia, internal inflammation, jaundice, leprosy and oedema.

The drug is used in traditional medicine as an antidote against datura poisoning or Dhatūra viṣa (toxic affects of *Datura metel* Linn.), spider and snake bite poisons. The studies with petroleum ether extract and their fractions have revealed diuretic action.

Parts used : Roots, Whole plant, Seeds.

Dose : Juice 5-10 ml., Seeds powder 1-3 gm.

Formulations

Punarnavādi maṇḍūra, Punarnavāsava, Punarnavā-ṣṭaka kvātha, Punarnāvāmbu, Punarnavādyā tailam, Punarnavādi ghṛtam, Punarnavādīlepa, Punarnavādi cūrṇa, Punarnavādi guggulu, Punarnavādyavaleha.

Groups

Vayaḥsthāpana, Kāśahara, Svedopaga, Anuvāsano-paga (Caraka Saṁhitā), Vidārigandhādi (Suśruta Saṁhitā).

B. VRŚCĪVA-ŚVETA PUNARNAVĀ

Botanical name : *Boerhaavia verticillata* Poir.

Family : Nyctaginaceae

Classical name : Vṛścīva-Śvetapunarnavā

Sanskrit names

Vṛścīva-vṛścīra, Śveta Punarnavā, Śvetamūlā, Śothaghñī, Kāthillaka, Dīrghapatikā, Viśākha, Śāśivāṭikā, Pṛthvī, Sitavarṣā, Bhūdirghapatra.

Regional names

Safed gadahpurna, Safed punarnava (Hindi).

Description

Spreading or prostrate herb resembling to Boerhaavia spp. with characteristic distinction.

Pharmacodynamics

Rasa	: Tikta
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittahara

Properties and action

Karma	: Śothahara
	Viṣaghna
	Kāśahara
	Śūlahara
	Pāṇḍuhara
	Cakṣuṣya
Roga	: Śoṭha
	Hṛdroga
	Viṣa
	Kāsa
	Pāṇḍu
	Śūla
	Netraroga-drṣṭimāndya.

Therapeutic uses

The drug Vṛścīva or Śveta punarnavā is effectively useful in the management of oedema, dysuria, fever, anaemia, colic, eye diseases (visionary defects), cough, poisons, abdominal and heart troubles.

In splenomegaly (plīhodara), the roots of white punarnavā pounded with rice-water alleviates enlargement of spleen. The roots of plant drug are taken with cow's urine for alleviating all kinds of oedema and udararoga.

The milk boiled with vṛścīva and punrnava and taṇḍulīyaka is given to check discharges. Roots of white

punarnavā and varuṇa (*Crataeva religiosa*) decocted in water and taken for treating unripe abscess (āma or apakva vidradhi).

The oil cooked with root of white punarnavā is applied (by massage) For removing vātakaṇṭaka in the feet. In all types of fever, vṛścīva, punarnavā and Bilva are boiled with milk and water (reduced to milk only) and intaken for the alleviation of fever.

To counter poisons, the white type of punarnavā has been indicated in medical texts.

Parts used : Roots.

Dose : Juice 10-20 ml., Decoction 50-100 ml.

C. VIŠAKHARPARA

Botanical name : *Trianthema portulacastrum* Linn.

Family : Aiozaceae (Ficoidaceae)

Classical name : Viṣakharpara

Sanskrit name : Viṣakharpara

Regional names

Biskhapra, Pathara, Svet-sabuni, Lal-tahumi, Santhi (Hindi); Biskhapra, Itsit (Punj.); Gadahani (Beng.); Pundhar ghemttuli (Mar.); Anthatinudie (Tel.); Sluarenuj (Tam.); Macechugoni (Kan.); Pasalikkera (Mal.).

Description

***Trianthema portulacastrum* Linn.** Syns. *Trianthema monogyna* L., *Trianthema obcordata* Roxb. Prostrate glabrous or puberulus more or less succulent herbs; branches forked upto 60 cm. or more long; herb forming patches, reddish green to green in colour.

Leaves opposite or sub-opposite, in unequal pairs, linear or broadly obovate, apiculate, cuneate at base, 2.5-3 × 2.4-3 cm., petioles 5-10 mm. long, dilated into a sheath at the base; leaves paired unequally.

Flowers sessile in pouch like petiolar sheaths, pinkish white. Calyx tube scarious lobes 5, cuspidate, slightly petaloid. Stamens 10 or more; anthers pink or white. Ovary truncate, 1-celled, style 1.

Capsule small, almost concealed in the petiolar pouch or sheath, truncate slightly concave, with 2 spreading teeth, carrying away at least one seed, the lower part 3-5-seeded; seeds reniform muriculates, dull black, capsule 5 mm. long, 6-8-seeded; seeds muricate, black, about 2 mm. in diam.

Flowering and fruiting time

Plant flowers and fruits in July—January.

Distribution

Plant occurs neotropics. It is growing common in waste places, on ridges or wall crevices and in agricultural fields. Central India and various regions, drier and warm regions.

***Trianthema triquetrum* Rottl. ex Willd. syn.** *Trianthema crystallina* auct. non (Forsk) Vahl. Mat forming 2-chotomously branched, caespitose herbs. Flowers 1 or 2-3 in forks of branches. Perianth herbaceous, with many ribs, not sheathed by the base of petiole. Capsule up to 2 mm. long, 2-seeded. Seeds discoid, black, marked with raised lines.

Flowering and fruiting time

Plant flowers and fruits in August—December.

Distribution

Plant occurs in Asia and African tropics. It is growing ravines and waste places in Central India and other regions in India. It is occasional or rare in Uttar Pradesh plains, drier, warm, ravinous and other similar localities.

Kinds and varieties

Trianthema triquetra Willd. ex Rottl. (belonging to family Aiozaceae) is known as Kakkapaakakoora (Telugu), Sirusharama (Tamil), Nastoppa (Kan.), Alethi (Punj.) and Pathar phor (Rajsthan) and also some other names in various regions.

It is a small prostrate branched herb widely distributed in India. Stems and branches slender, usually red; leaves small, succulent; flowers several in an axil; capsules 2.3 mm. × 1.5 mm. 2-seeded; seeds compressed, orbicular-reniform black.

As the plant forms a green carpet on the sandy and dry soils, it may be tried as a sand-binder, it may sometimes also become an aggressive weed. The herb is suspected of poisoning livestock.

Two forms of *Trianthema portulacastrum* Linn. are reported to occur in this species : a red-coloured form in which the stem, leaf-margins and flowers are red; and a green-coloured form which has green-coloured stem, and white flowers.

Some other species of *Trianthema* genus are also worthreference, other than *Trianthema triquetra* Willd. ex Rottd. ex (syn. *T. crystallina* acuct. non Vahl.) *T. portulacastrum* Linn. is used as an adulterant of the roots of *Boerhaavia diffusa*, but does not contain punarnavine (as *T. portulacastrum* Linn. containing another alkaloid trianthemine) which also contains ecddly sterone possessing moulting-hormone activity. Other species include *Trianthema decandra* Linn., *Trianthema govindia* Buch-Ham. (syn. *T. pentandra*) etc.

Chemical composition

An analysis of the leafy vegetable gave the following values : moisture 91.3, protein 2.0, fat 0.4, carbohydrate 3.2, crude fibre 0.9 and ash 2.2 g., calcium 100, phosphorous 30, iron 38.5 and ascorbic acid 70 mg./100 g. of edible matter. Carotene (2.3 mg./100 g.) has also been reported.

The plant is rich in phosphorous and iron but poor in calcium. Herb also contains high quantity of potassium nitrate.

The chemical analysis of the weed indicated its potential value as a source of organic matter to the soil, when added to the soil, the weed considerably enriches the soil with nitrogen, phosphorous and potassium.

Therapeutic uses

In the plant drug *Viśakharpara* (*Trianthema portulacastrum* Linn.), the high content of soluble oxalate (as analysed by chemical investigations) affects the assimilation of calcium. Care may be taken to eliminate most of the soluble oxalates by preliminary boiling of the vegetable for

15 minutes and rejecting the water extracts. The contents of oxalate is the highest in immature plants and it varies with rainfall and probably with soil and other environmental factors. Plants also contain large amount of potassium nitrate-white variety 1.71 and red variety 2.64% as nutritive values and chemical potentiality have been studied and the observations indicate to particular medicinal activity of the plant drug.

The roots have cathartic and irritant properties and are used as an abortifacient, though the extract of roots showed little or no action on the isolated uterus. They are also used for the obstruction of the liver, asthma and amenorrhoea. The leaves are diuretic and used in oedema and dropsy and in ascites. A decoction of the herb is used as a vermifuge and is useful in rheumatism. It is also an antidote to alcoholic poison. Ethanol extract of the plant has shown some effect on blood-pressure of guinea-pigs and also on their ileum. The drug plant is used medicinally in various ailments.

An extract of the whole plant is toxic to American cockroaches when injected into the blood-streams. The seeds are found to be harmful containinuous in food-grains and other agricultural seeds.

The plant is potential source of organic matter to the soil. Herbs also contain large amount of potassium nitrate other mineral as indicated and considered from medicinal point of view.

Parts used : Whole plant

Dose : Juice 5-10 ml.

PUNARNAVĀ (पुनर्नवा)

वषाभूर्मधुरा तिक्ता कषाया कटुका सरा ॥
क्षारोष्णा दीपनी रूक्षा शोफानिलकफापहा ।
हृद्या रुच्या जयेदर्शोव्रणपाण्डुगरोदरम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 753-754.

कठिलकम्

कठिलकं हिमं तिक्तं विपाके कटुकं लघु ।
सङ्ग्राहि वातलं पित्तकफशोणितनाशनम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 756.

A. PUNARNAVĀ (पुनर्नवा)

श्वेतपुनर्नवा

कटुकषायानुरसा पाण्डुघ्नी दीपनीपरा ।
शोफानिलगरश्लेष्महरी ब्रध्नोदरप्रणुत् ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 231.

श्वेतपुनर्नवा सोष्णा तिक्ता कफविषापहा ।
कासहृद्रोगशूलास्रपाण्डुशोफानिलार्तिनुत् ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 116.

रक्तपुनर्नवा (रक्तपुष्पा)

पुनर्नवाऽरुणा तिक्ता कटुपाका हिमा लघुः ।
वातला ग्राहिणी श्लेष्मपित्तरक्तविनाशिनी ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 233.

रक्ता पुनर्नवा तिक्ता सारिणी शोफनाशिनी ।
रक्तप्रदरदोषघ्नी पाण्डुपित्तप्रमर्दिनी ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 120.

नीलपुनर्नवा

नीला पुनर्नवा तिक्ता कटूष्णा च रसायनी ।
हृद्रोगपाण्डुश्वयथुश्वासवातकफापहा ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 122.

पुनर्नवागुणाः

पुनर्नवा भवेदुष्णा तिक्ता रूक्षा कफापहा ।
सशोथपाण्डुहृद्रोगकासोरःक्षतशूलनुत् ॥

Dhanvantari Nighaṇṭu.

विद्रधिरोगे पुनर्नवादिकषायः

Cakradatta, Vidradhicikitsā, 43-14.

शोथरोगे पुनर्नवाऽऽर्द्रककल्कः

‘वर्षाभूशृङ्गवेराभ्यां कल्को वा सर्वशोथजित् ।’

Cakradatta, 39-19.

शोथरोगे स्वल्पपुनर्नवाऽद्यं घृतम्

‘पुनर्नवाक्काथकल्कसिद्धं शोथहरं घृतम् ।’

Cakradatta, Śōtha cikitsā, 39-30.

तस्यार्धपलं नवस्य पिष्टं पिबेद्यः पयसार्धमासम् ।

.....तत्त्रिगुणं समां वा जीर्णोऽपि भूयः स पुनर्नवः स्यात् ॥

Yoga Ratnākara.

....स्वादु तिक्तानि वातप्रशमनानि च ।

तेषु पौनर्नवं शाकं विशेषाच्छोथनाशनम् ॥

Suśruta Samhitā, Sūtra, 46.

व्रणशोथे पुनर्नवादिलेपः

Cakradatta, Vraṇaśōtha cikitsā, 44-9.

शोथरोगे पुनर्नवादिलेपः

Caraka Samhitā, Cikitsā, 12-73.

पाण्डुचिकित्साधिकारे पुनर्नवामण्डूरम्

Caraka Samhitā, Cikitsā, 16/93-96.

श्वयथुरोगे पुनर्नवाद्यरिष्टः

Caraka Samhitā, Cikitsā, 12/34-38.

पुनर्नवादिचूर्णः

Caraka Samhitā, Cikitsā, 11-26.

वातजमूत्रकृच्छ्रे पुनर्नवादिघृतम् (मिश्रकस्नेहः)

Caraka, Cikitsā, 26-46.

शोथचिकित्सायां पुनर्नवाद्यवलेहः

Cakradatta, 39/41-43.

वातजहृद्रोगे पुनर्नवादि तैलम्

पुनर्नवां दारु सपञ्चमूलं रास्नां यवान् बिल्वकुलत्थकोलम् ।

पक्त्वा जले तेन विपाच्य तैलमभ्यङ्गपानेऽनिलहृद्दघ्नम् ॥

Caraka Samhitā, Cikitsā, 26-82.

शर्कराऽश्मर्या पुनर्नवादिपेययोगः

पुनर्नवायोरजनीश्वदंष्ट्राफल्गुप्रवालाश्च सदर्भपुष्पः ।

क्षीराम्बुमद्येक्षुरसैः सुपिष्टं पेयं भवेदश्मरिशर्करासु ॥

Caraka Samhitā, Cikitsā, 26-63.

त्रिदोषजद्वन्द्वजामयानां पुनर्नवादिनिरूहबस्तियोगः
(सर्वदोषनाशकबस्तिः)

Caraka Samhitā, Siddhi, 3/65-68.

शोथे पुनर्नवादिकल्कः

Cakradatta, 39-7.

वातजशोथे पुनर्नवादिसिद्धक्षीरयोगः

Caraka Samhitā, Cikitsā, 12-23.

मूत्ररोगे पुनर्नवाऽऽद्यतैलम्

Bhāvaprakāśa, Aśmarīrogādhikāra, 37/95-99.

नेत्ररोगे पुनर्नवाया विविधप्रयोगाः

दुग्धेन कण्डू क्षौद्रेण नेत्रसादञ्च सर्पिषा ।

पुष्पं तैलेन तिमिरं काञ्जिकेन निशाऽन्धताम् ॥

पुनर्नवा हरत्याशु भास्करस्तिमिरं यथा ॥

Bhāvaprakāśa, Netrarogādhikāra, 63/209-210.

पुनर्नवारसायनम्

पुनर्नवास्यार्द्धपलं नवस्य पिष्टं पिबेद्यः पयसाऽर्द्धमासम् ।

मासत्रयं तत्त्रिगुणं समं वा जीर्णोऽपि भूयः स पुनर्नवः स्यात् ॥

Aṣṭāṅga Hṛdaya, Uttara, 39.

Bhāvaprakāśa, Rasāyanādhikāra, 73-9.

शोथचिकित्सायां पुनर्नवादिसिद्धरसयूषादयः

Cakradatta, 39-23.

शोथरोगे पुनर्नवाद्यघृतम्

Cakradatta, 39-29.

शोथचिकित्सायां पुनर्नवाष्टकक्राथः

Cakradatta, Śoṭha cikitsā, 39-10.

अश्मर्याम्

हरीतक्यादिसिद्धं वा वर्षाभूसिद्धमेव वा ।

Suśruta Samhitā, Cikitsā, 7-26.

पाण्डुरोगे

पुनर्नवानिम्बपटोलशुण्ठीतिका मृतादार्थ्यभयाकषायः ।

सर्वाङ्गशोफोदरकासशूलश्वासान्वितं पाण्डुगदं निहन्ति ॥

Vṛndamādhava, 38-3.

रक्तष्ठीवने

चूर्णं पौनर्नवं रक्तशालितण्डुलशर्करम् ।
रक्तष्ठीवी पिबेत् सिद्धं द्राक्षारसपयोघृतैः ॥

Caraka Samhitā, Cikitsā, 21-26.

मूढगर्भे सुखप्रसवार्थम्

मूलं पुनर्नवायास्तु सतैलमीषत्कृतं गुह्ये ।
गर्भं प्रवेपमानं सहसा स्त्रीणां बहिः कुरुते ॥

Gadanigraha, 6-4-38.

गर्भिणीशोथे

वर्षाभूमूलनिष्काथं योजयेद् देवदारुणा ।
तत् पिबेन् मधुसंयुक्तं शूना स्त्री मूर्वया सह ॥

Kāśyapa Samhitā, p. 96.

श्लीपदे

वर्षाभूत्रिफलाचूर्णं पिप्पल्या सह योजितम् ।
सक्षौद्रं श्लीपदे लिह्याच्चिरोत्थं श्लीपदं जयेद् ॥

Bhāvaprakāśa, Cikitsā, 45-14.

नेत्ररोगे

श्वेताद्रिकर्ण्याः सपुनर्नवायाः मूलैः प्रविष्टैर्यवचूर्णयुक्तैः ॥
विलोचनं पूरितमम्बुयुक्तैर्विमुच्यते पुष्पकृतोपसर्गात् ॥

Rājamārtaṇḍa, 3-13.

ज्वरे

वृक्षीवबिल्ववर्षाभूः पयक्षोदकमेव च ।
पचेत् क्षीरावशिष्टं तु तद्धि सर्वज्वरापहम् ॥

Suśruta Samhitā, Uttara, 39-202.

अन्तर्विद्रधौ

पुनर्नवावरुणयोः क्वाथोऽन्तर्विद्रधीञ्जयेत् ।
तथा शिग्रुभवः क्वाथो हिङ्गुसैन्धवसंयुतः ॥

Śārngadhara Samhitā, 2-2-128.

निद्राजननार्थम्

‘.....पुनर्नवाक्वाथो निद्राकरो नृणाम् ।’

Hārīta Samhitā, 3-15-5.

B. VRŚCĪVA (वृश्चीव)

वृश्चीवः-वृश्चीरः विकाराणां प्रयोगाः

सर्पदंशभयरक्षणार्थं श्वेतपुनर्नवाजटाप्रयोगः

धवलपुनर्नवाजट्या तण्डुलजलपीतया च पुष्यर्थे ।

अपहरति विषधरविषोपद्रवं मासं वत्सरं पुंसाम् ॥

Cakradatta, Viṣa cikitsā, 4.

परिस्त्रावे

परिस्त्रावं शृतं क्षीरं सवृश्चीरपुनर्नवम् ।

आखुपर्णिकाया वापि तण्डुलीयकयुक्तया ॥

Caraka Saṃhitā, Siddhi. 10-32.

शोथे

सितपुनर्नवामूलं पीतञ्च गोसलिलेन निहन्ति ।

शोथं सर्वसमुत्थमुदराणि च दुरतराण्यचिरात् ॥

Baṅgasena, Śoṭha, 74.

प्लीहोदरे

मूलं समं तण्डुलपाचनेन प्रपेषितं श्वेतपुनर्नवायाः ।

पीतं भवेत् प्लीहविनाशहेतुः पाठाजटा छिन्नरुहाजटा वा ॥

Rājamārtanḍa, 7-5.

विषे

क. वृश्चिकादिविषप्रतिषेधे

यः पिबति पुण्यदिवसे जलपिष्टं सितपुनर्नवामूलम् ।

ततः सन्निधौ न वर्षं वृश्चिकभुजगाः प्रसर्पन्ति ॥

Rājamārtanḍa, 29-1.

अलर्कविषे

‘पिबेत् पुनर्नवां श्वेतां घुर्घूरकफलान्विताम् ।’

Aṣṭāṅga Saṅgraha, Uttara, 46-68.

विद्रधौ

श्वेतवर्षाभुवो मूलं मूलं वरुणक्लाथं च ।

जलेन कथितं पीतमपक्वं विद्रधिं जयेत् ॥

Vṛndamādhava, 43-12.

वातकण्टके

पुनर्नवायाः श्वेतायास्तैलं मूलेन साध्यते ।

वातकण्टकमाह्न्यात् पादाभ्यङ्गेन मर्दनात् ॥

Baṅgasena, Vāṭavyādhi, 140.

C. VIṢAKHARPARA (रोगचिकित्सायां विषखर्परः)

अपस्मारे

विषखर्परसंज्ञस्य स्वरसो नस्ययोजितः ।

अपस्मारं समुत्सार्य कल्याणाय प्रकल्पते ॥

Siddha Bhaiṣajya Maṇimālā, 4-457.

A. PUNNĀGA

Botanical name : *Calophyllum inophyllum* Linn.

Family : Guttiferae

Classical name : Punnāga

Sanskrit names

Punnāga, Tuṅga, Vibuddha, Pāṇsunāga, Pāṭalīpuṣpa, Raktakeśara, Keśara, Keśava, Pāṭalicchada, Kāncana, Suraparṇī, Devaballabha.

Regional names

Sultan Champa (Hindi); Sultan Champa, Kathchampa (Beng.); Undi (Mar.); Undal (Maharashtra); Punnai (Tam.); Pouna (Tel.), Buma (Kann.); Punna (Mal.), Alexandrian laurel (Eng.); Poon (Trade).

Description

A moderate-sized evergreen sub-maritime tree with fragrant flowers; 20-25 feet tall, beautiful tree. Woods reddish-white to reddish-brown, moderately heavy; interlaced-grained and medium textured; timber purpose.

Leaves oval or ovoid, like leaves of Vata (*Ficus benghalensis*), bright both sides; 4-8 × 3 × 4 inches.

Flowers odorous, white, 3/3 in. diam. on 4-6 in. long spikes; sepals and petals 4 each; stamens many, stigma and anthers 4. style longer than stamens.

Fruits round, smooth, fleshy, 1 inch diam.; fruits become yellow when ripen. Seeds yield oil which is usable as burning oil for illumination.

Flowering and fruiting time

Plant flowers during rains and fruiting begins subsequently.

Distribution

Plant occurs in coastal regions of Southern India, Andaman Islands, Burma and Ceylon, and grown for ornamental purposes. Trees from South India and Andamans yield only small logs C. 12 ft. in length and 4 ft. in girth, but in south Tenasserin, trees with a clean straight bole of 30 ft. are available.

The plant can be propagated from seeds without difficulty in sandy regions. Woods are of fairly strong timber utility.

Chemical composition

The analysis of fresh seeds gave following values : moisture 27.23, ash 1.07, protein 6.41, fat 60.72, carbohydrates 4.07 per cent. The kernels of fruit (43-52% of the fruit) yield 50-73 per cent of a dark green viscous oil known by various names such as Domba, Laurel nut, Dillo, Pinnay or Poon seed oil. Both the extracted and expressed oils possess a disagreeable odour and taste.

The unsaponin matter of seeds 0.25-1.4% in which sitosterol has been identified. The concentration of resinous substances in the oil varies from 10-20%. A sample of crude oil gave : iod. val. 92, acid val. 47.2, sap, val. 286.6.

Bark contains 11.9% tannin.

Pharmacodynamics

Rasa	: Madhura, kaṣāya
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Kaphapittaśāmakā Vātaśāmakā

Properties and action

Karma	: Raktastambhana Raktapittaśāmakā

	Snehana
	Sugandhi
	Mūtrala
	Lekhana-vedanāsthāpana (bija taila-seeds oil)
	Vraṇaropaṇa (niryāsa-resin)
	Vātaśāmaka (taila-oil).
Roga	: Raktapitta
	Raktasrāva
	Raktātisāra-pravāhikā
	Āmavāta-sandhivāta
	Carmaroga
	Mūtrakṛcchra-pūyameha
	Netraroga-śukra.

Therapeutic uses

The oil extracted from seeds kernel is medicinally used. The oil is orally given in condition of scanty urine and gonorrhoea. Externally seeds oil is applied to rheumatic organs and joints swelling; it is also locally applied in skin diseases.

The decoction of bark is internally given in cases of diarrhoea and dysentery. Bark is orally given in internal haemorrhage. Bark is astringent as bark contains tannin (yield 11.9%).

The resin of bark is aromatic and yellowish in colour. It is emetic and cathartic. Resin is externally wound healer.

The seeds oil is also used for illumination in temples particularly in Southern India. Oil is known as Domba oil in foreign countries. This oil is of green viscous oil contained in seeds kernel (50-70% yield). The oil is of excellent quality for soap making but it is unsuitable for edible purposes because of the presence of toxic non-fatty constituents. The oil is utilised as illuminant.

The oil is applied externally in rheumatic and affections of skin. The bark pounded and applied in orchitis; its juice is used as purgative. A decoction of bark is employed as a lotion for indolent ulcers.

An yellowish-green aromatic resin, possessing emetic and purgative properties, is obtained as an exudation from the bark of plant drug.

The leaves, containing saponin and hydrocyanic acid, are poisonous to fish.

Parts used : Bark, seeds, oil.

Dose

Bark decoction 50-100 ml., Seeds oil 2-5 drops (minims).

B. SURAPUNNĀGA

Botanical name : *Mammea longifolia* Planch & Trianna.

Family : Guttiferae

Classical name : Surapunnāga

Sanskrit names

Surapunnāga, Nameru, Suraparnikā.

Regional names

Lal Nagkesar, Nagkesar (Hindi); Nagesar, Nagkesara (Beng.); Surangi (tree), Lal nagkesar (Mar.); Ratan nagkesar (Guj.); Nagkesar (Tam.); Sarpunna (Tel.); Windi, Suragi, gardundi (Kan.), Seraya (Mal.); Churiana (Oriya).

Description

Large evergreen tree, with cylindric trunk; reddish brown dark, 0.05 cm., thick exudes red gum, close and even grained, red hard wood, with dark annual rings. Wood (wt. 55-60 lb./cu. ft.) red, hard, close and even-grained.

Leaves 12.5-23 cm., oblong, lanceolate, rigidly coriaceous, acute, secondary nerves not clear, veins in dry leaves, distinctly and minutely reticulate; leaves leathery.

Flowers in dense polygamous fascicles, bractate, in axils of withered leaves on old wood, 0.5 cm. diameter; white, streaked with red sepals reflexed during flowering; petals 4 acute, stamens many, free or nearly so, erect oblong anthers, ovary two celled. ovules two in each cell; stigma 3 lobed.

Fruit berry, ovoid 2.5 cm. long; seeds one, large. Fruits resemble with Bakula phala (fruits of *Mimusops elengi* Moulisiri).

Flowering and fruiting time

Plant flowers during spring season (beginning March to summer season) and fruiting begins after wards, and the fruits (berries) ripen by rains.

Distribution

Plant occurs in the evergreen forests of western India from Khandala southwards to Malabar and Coimbatore, ascending to an altitude to an altitude of 600 meters.

It is valued as an avenue or compound tree and cultivated for its handsome foliage and sweet scented flowers. Flowers appear in the hot weather and fruits ripen during the rainy season.

Chemical composition

Flower buds contain a colouring matter which dyes silk red.

Pharmacodynamics

Rasa	: Madhura, Kaṣāya
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Kaphapittaśāmaka

Properties and action

Karma	: Stambhana Raktapittaśāmaka
Roga	: Raktapitta Raktasrāva

Therapeutic uses

The drug Surapunnāga is aromatic, astringent, carminative and stimulant. It is used in anorexia, dyspepsia and haemorrhoids. A special recipe Kājal prepared by using seed oil is frequently used in all types of eye diseases and for cooling effect.

The flower-buds possess mild stimulant, carminative and astringent; they are used for dyspepsia and haemorrhoids. Fruits are edible; they contain a soft juicy pulp with the flavour of rose water.

In general, the fresh flowers of the tree are used like those of Nagakeśara (*Mesua ferrea* Linn.) for worship in temple and for personal adornment. Dried flowers keep their fragrance for a long time; a perfume, resembling that of violets, can be extracted from these flowers obtained from *Mammea longifolia* Planch & Trainna.

Parts used : Bark, seeds, oil.

Dose : Bark decoction 50-100 ml., Powder 3-5 gm.

Group (Gaṇa) : Elādi (*Suśruta Saṁhitā*).

A. PUNNĀGA (क. पुन्नाग)

B. SURA PUNNĀGA (ख. सुरपुन्नाग)

‘पुन्नागो मधुरः शीतः सुगन्धिः पित्तनाशकृत्।’

Rāja Nighaṇṭu.

सुरपुन्नागः

‘सुरपुन्नागः सुरपर्णिका सुगन्धिपुष्पयुक्ता
दक्षिणापथे ‘सुरपति’नाम्ना प्रतीता।’

Dalhana, Suśruta Saṁhitā.

पुन्नागः

पुन्नागः पुरुषस्तुङ्गो विबुद्धो देववल्लभः ।
पुन्नाभा पाटलीपुष्पकेशरो रक्तकेशरः ॥
पांशुर्नागो महानागः केशवः पाटलीच्छदः ।
काञ्चनः सुरपर्णी स्यात् सुगन्धः षट्पदालयः ॥
पुन्नागः तुवरः शीतः स्वादुः पित्तकफास्रजित् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1504-1506.

नेत्ररोगे शुके

क्षुण्णपुन्नागपत्रेण परिभावितवारिणा ।

श्यामाक्काथाम्बुना वाऽथ सेचनं कुसुमापहम् ॥

Vṛdamādhava, 61-63. Baṅgasena, Netraroga, 171.

PUṢKARAMŪLA

Botanical name : *Inula racemosa* Hook. f. J.

Family : Asteraceae (Compositae)

Classical name : Puṣkaramūla

Sanskrit names

Puṣkaramūla, Padmapatra, Kaṣmīra, Kuṣṭhabheda.

Regional name

Pohakarmool (Hindi)

Description

Stout herb, 50 cm. - 1.5 m. tall; stem grooved.

Leaves feathery, rough above, coriaceous densely hairy beneath, toothed; radical leaves .8-1.8 × .5-.8 in. (20-45 × 12.5-20 cm.), long-stalked, elliptic-lanceolate; cauline leaves ovate-oblong, semiamplexicaul, often deeply lobed at the base. Flowers fl.-heads many, 1.5-2.0 in. diam., yellow, in racemes; heads involucre; with recurved triangular tips; ligules slender, 1.5 cm. Achenes C. 1/6 in. long, slender, with reddish pappus.

Root Drug : The transection of the root shows 4-6 layered phalloderm, brownish and waxy in outline, cortex composed of variable number of layers depending upon the thickness, cells are thin walled pericentally elongated due to the pressure of underlying conjunctive tissues with resinous cavities and elements of secondary phloem opposite to secondary xylem consisting of groups of vessels and other tissues arranged radially, distinct resinous cavities filled with yellowish substance and 4-5 primary xylem bundles in the centre, xylem fibres are few and occur in small patches adnate to some vessel groups as well as in central parts of the xylem. Vessels mostly bear silt like horizontal parts and few with rounded bordered pits.

Distribution

Plant occurs in north-western Himalayas at altitudes of 5,000-14,000 ft.

Chemical composition

Roots contain inulin (10%) and an essential oil (1.3%) containing alantolactone (C₁₅H₂₀O₂). Alantolactone is the chief constituent of the oil obtained from the European species European *Inula helenium* Linn.

Pharmacodynamics

Rasa	: Tikta, Kaṭu
Guṇa	: Laghu, tikṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

Properties and action

Karma	: Śvāsahara Kaphaghna-hikkānigrahaṇa Hṛdya Mastiṣkaśāmaka Mūtrājanana Vājikaraṇa Garbhāśayottejaka Katupouṣṭika Medohora Śothahara Jantughna-pūtighna Śophahara-vedanāsthāpana
Roga	: Śvāsa-kāsa-hikkā-jirṇakāsa Pārśvaśūla-phuphphusā- varaṇaśotha-jīvāṇuhara Hṛdroga-hṛcchūla Mūtrakṛcchra Rajorodha-kaṣṭārtava Klaibya Carmaroga Jvara-vātaślaiṣmika jvara-pratiṣyāya Medoroga Dourbalya-pāṇḍu Āmavāta.

Therapeutic uses

The drug Puṣkaramūla is anti-inflammatory, anthelmintic, carminative, diuretic and febrifuge. It is used in anaemia, catarrh, coryza, cough, dysmenorrhoea, loss of appetite, weak heart and skin diseases. The studies with extract have revealed anti-inflammatory, antipyretic antihistaminic, and anti-spasmogenic activity of this drug.

The fresh roots of Puṣkaramūla (*Inula racemosa* Hook. f.) have a strong aromatic odour resembling orris comphor. Dried roots have a weak odour. They are also adulterated with Kuṣṭha or Kuth (*Saussurea lappa* C. B. Clarke).

The chief constituent Alantolactone of the oil possesses strong and anthelmintic properties and is more potent and less toxic than santonin. Alantolactone in 1:1000 dilution kills *Ascaris* in 16 hours while santonin in the same dilution requires more 2 days. It has been used as an anthelmintic for children (dose 0.0009-0.2 g.). Alantolactone is also antiseptic, expectorant and diuretic.

The seeds are bitter and aphrodisiac. The roots are mainly employed medicine which is used in treatment of various diseases specially in cough, asthma, bronchitis, pleurisy, chronic cough, chest pain and pulmonary tuberculosis.

Parts used : Roots

Dose : Powder 1-3 gm.

Formulation : Puṣkarmūlādi cūrṇa, Puṣkarādi cūrṇa.

Groups

Śvāsahara, Hikkānigrahaṇa (Caraka Saṁhitā).

PUṢKARAMŪLA (पुष्करमूल)

पौष्करं कटु तिक्तोष्णं कासश्लेष्मानिलापहम् ।

ज्वरशोफारुचिश्वासहिक्कापार्श्वरुजो जयेत् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1322.

पौष्करं कटुकं तिक्तमुक्तं वातकफज्वरान् ।

हन्ति शोथारुचिश्वासान्विशेषात्पार्श्वशूलनुत् ॥

Bhāvaṇṭakāśa Nighaṇṭu, Haritakyādi varga, 175.

पुष्करं कटुतिक्तोष्णं कफवातज्वरापहम् ।

श्वासारोचककासघ्नं शोफघ्नं पाण्डुनाशनम् ॥

Rāja Nighaṇṭu, Pippalyādi varga, 154.

‘पुष्करं पार्श्वरुक्श्वासकासहिक्काज्वरापहम् ।’

Śoḍhala.

‘पुष्करमूलं हिकाश्वासकासपार्श्वशूलहरणाम् ।’

Caraka Samhitā, Sūtra, 26.

तिक्तं पुष्करमूलं च कटूष्णं कफकासजित् ।
ज्वरदोषकफकासघ्नं शोफार्दितविनाशनम् ॥
श्वासोर्ध्ववातपाण्डुघ्नं हिकादोषनिवारणम् ।

Dhanvantari Nighaṇṭu.

चूर्णं पुष्करजं लिह्यान् माक्षिकेण समायुताम् ।
हृच्छूलश्वासकासघ्नं क्षयहिकानिवारणम् ॥

Bhaiṣajya Ratnāvalī.

पार्श्वशूले

पुष्करमूलं हिकाश्वासपार्श्वशूलहरणाम् ।

Caraka Samhitā, Sūtra, 25-40.

पार्श्वशूले पुष्करजा जटा ॥

Aṣṭāṅga Hṛdaya, Uttara, 40-56.

कासे पौष्करादिकाथः

पौष्करकटफलभार्गी-विश्वपिप्पलीसाधितम् ।
पिबेत् क्वाथं कफोद्रेके कासे श्वासे च हृद्ग्रहे ॥

Cakradatta, Kāsa cikitsā, 11-18.

हृद्रोगे हृच्छूले (सश्वासकासहिकादयः)

चूर्णं पुष्करजं लिह्यान्माक्षिकेण समायुतम् ।
हृच्छूलश्वासकासघ्नं क्षयहिकानिवारणम् ॥

Cakradatta, Hṛdroga cikitsā, 31-12.

Vṛndamādhava, 31-12.

कासश्वासयोः

दशमूलीकषायश्च पुष्करेणावचूर्णितः ।
कासश्वासप्रशमनः पार्श्वहृच्छूलनाशनः ॥

Vṛndamādhava, 12-18.

PŪTIHĀ

Botanical name

Mentha spicata Linn. emmend. Nathh.
Syns. *Mentha spicata* var. *viridis* Linn;
Mentha viridis Linn.

Family : Labiateae

Classical name : Pūtiḥā

Sanskrit names

Pūtiḥā, Rocanī, Podīnaka.

Regional names

Podina, Pudina (Hindi); Pudina (Beng.); Pudina (Mar.); Phudino (Guj.); Pudina (Tam., Tel.); Phujanaj (Arabic); Pudīn (Pers.); Spear-Mint, Garden mint, Lamb Mint. (Eng.).

Description

A glabrous perennial, 30-90 cm. high, with creeping rhizomes. Leaves smooth or nearly so, sessile, lanceolate to ovate, acute, coarsely dentate, smooth above, glandular below.

Flowers lilac, in loose, cylindrical, slender, interrupted spikes.

Flowering and fruiting time

Summer season and afterwards. Cultivation seasons.

Distribution

Spearmint is widely cultivated throughout the plains of India for use of culinary purpose. It thrives best in heavy loams well supplied with farmyard manure. It is usually propagated by planting divisions of old plants in rows 30 cm. apart, and with 15 cm. distance between the plants in row. Plants produce leaves for a number of years but their annual replacement for securing young and luxuriant growth.

Kinds and varieties

The plant species *Mentha spicata* Linn. is very variable and is often erroneously recorded under the name of *Mentha viridis*. It includes a number of forms whose identity and nomenclature are confusing. The species itself is considered to be a hybrid between *Mentha rotundifolia* and *M. longifolia*; cytological evidences indicate that the forms vary greatly in chromosome numbers and essential oil content.

Some other species of *Mentha* species are grown and used as Pudina or mint viz. *Mentha longifolia* (Linn.) Nathh. syn. *M. sylvestris* Linn. (Horsemint), *Mentha*

arvensis Linn. (Field Mint, Corn Mint) etc. As a main source of peppermint, another species of *Mentha piperita* Linn. emmend. Huds is referred.

Chemical composition

Fresh flowering herb (on distillation) yields 0.25-0.50% of a volatile oil known as spearmint oil. It is a colourless, yellow or greenish yellow liquid, with the characteristic odour and taste of spearmint; the aroma improves on an experimental scale at different places in India.

The characteristic constituent of the oil is l-carvone. An oil sample distilled contained : carvone 55.8, terpenes (chiefly l-limonene and dipentene) 17.5, and alcohol (as dihydrocarved) 6.7 and esters (as dihydrocarveol acetate) 11.6 per cent.

Leaves contain moisture 83, protein 4.8, fat, carbohydrate 8, fibre 2, mineral 1.6%, calcium 200 mg., phosphorous 80 mg., iron 15.6 mg., carotene (vitamin A) 2700 I.U., nicotinic acid 0.4 mg., riboflavin 80 mg., miamine 50 mg./100 g. and little quantity of copper.

The spearmint oil (samples of plants from different places) shows differences in the composition of oils are evidently due to varietal or even specific variations.

In the deficient digestion (agnimāndya), Pūtiḥā is recommended in Indian medicine. Ark extracted of the juice of pūtiḥā or podina (spearmint), ādraka (green ginger), nimbūka (lime) and Kumārī (aloes) are added with jīraka, trijāta etc; this mixture is taken for promoting desire for food (bhaktāruci) stimulating digestion (pācana) and it alleviates agnimāndya (Siddhabhaiṣajya maṇimāla, 4-263).

Pharmacodynamics

Rasa	: Kaṭu
Guṇa	: Laghu, rūkṣa, tikṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarman	: Kaphavātaśāma

Properties and action

Karma	: Vātānulomana

	Rocana-dīpana-chardinigrahaṇa
	Kṛmighna
	Durgandhanāśana-
	āsyadurgandhahara
	Vedanāsthāpana
	Jantughna
	Vraṇaropaṇa
	Hṛdayottejaka
	Kaphaṇiḥsāraka
	Ākṣepahara
	Mūtrala
	Garbhāśayasankocaka
	Tvagdoṣahara
	Svedana
	Jvaraghna
	Viṣaghna
Roga	: Aruci-agnimāndya
	Vamana-ādhmāna
	Atisāra
	Kṛmiroga
	Vraṇa-durgandhita vraṇa
	Hṛddourbalya
	Kāsa-hikkā-śvāsa
	Mūtrakṛcchra
	Rajorodha-kaṣṭhārtava
	Prasutijvara
	Carmavikāra
	Jvara-dourbalya
	Viṣa.

Therapeutic uses

The drug Pūtiḥā is valued as stimulant, carminative and anti-spasmodic herbal agent. A soothing tea is brewed from the leaves and an alcoholic beverage (mint jalep) is prepared from them and used as an antidote for poison. A sweetened infusion of the herb is given as a remedy for infantile troubles, vomiting in pregnancy and hysteria. The leaves are used in fevers and bronchitis.

The leaves are of slightly pungent taste and amomatic odour (but it quite differs from peppermint).

	Rocana-dīpana-chardinigrahaṇa
	Kṛmighna
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The leaves are of slightly pungent taste and amomatic odour (but it quite differs from peppermint).

The spearmint oil is useful for flavouring chewing gums, tooth paste, confectionery and pharmaceutical preparations.

Being an effective carminative medicine, the leaves and their juice are given in dyspepsia, flatulence, vomiting, diarrhoea, abdominal colic, loss of appetite or gastric power (fire) and worms. The leaves are ground and mixed with salt and limon etc. for preparing chutney which is a household dietetic article having medicinal properties.

Pūtiḥā is useful in heart trouble (hrddourbalya) cough, asthma and hiccough. It is used in dysuria, dysmenorrhoea, purperal fevers, skin diseases, poisons and bad taste of mouth.

The Indian Pharmacopocia (IIIrd. Ed., Vol. I, 1985, pp. 300-301) incorporates **Mentha** species as source of Mentha oil and Menthol as official drug in modern medicine :

Mentha oil : *Mentha*

Category : Carminative

Dose : 0.6 to 0.2 ml.

Description : Colourless or yellowish, clear liquid; odour characteristics, pleasant, taste; pungent, followed by a cooling sensation.

Solubility : 1 ml. dissolves in 3.5 to 4 ml. of alcohol (70 per cent) on further addition of 5 to 10 ml. of alcohol (70 per cent) the solution remains clear or its not more than slightly opalscent.

Standards : *Mentha* oil in the volatile oil distilled with steam from various species of *Mentha* (Family Labiateae) and rectified if necessary. It contains not less than 50.0 per cent w/w of total menthol, $C_{10}H_{20}O$.

Acidity or Alkalinity : The solution of 1 ml. in 3.5 ml. of alcohol (70 per cent) in neutral to litmus.

Wt. per ml. : Between 0.892 and 0.900 g.

Optical reaction : Between -15° and -35° .

Assay : Place 10 g. in an acetylation flask, add 10 ml. of acetic anhydride and 1 g. of anhydrous sodium acetate, attach a reflux condenser, and boil for two hours. cool, add 9 ml. of water, and warm on a water bath for 15 minutes

with occasional shaking. Transfer the contents of the flask to a separator, reject the water layer and wash the remaining oil with water until the last washing no longer shows acid reaction. Dry the resulting oil by shaking with 2 g. of anhydrous sodium sulphate, allow it to stand for thirty minutes and filter through a dry filter paper. Weigh accurately 1 to 2 g. of this dry acetylated oil, add 3 ml. of alcohol and 2 drops of phenolphthalein solution and drop by drop 0.5 N alcoholic potassium hydroxide until the solution acquires a faint pink colour. Add a further 20.0 ml. of the alkali, attach a reflux condenser, and boil for one hour on a water bath. Cool, add 1 ml. of phenolphthalein solution and titrate the excess alkali with 0.5 N hydrochloric acid. Repeat the experiment with the same quantities of the same reagents in the same manner omitting the oil and calculate the amount of total menthol from the following formula :

$$\text{Total menthol (in per cent)} = \frac{(a-b) \times 7.813}{S-(a-b) \times 0.021}$$

Where S is the amount in grams of the acetylated sample taken, a the amount in ml. of 0.5 N hydrochloric acid consumed in blank test, and b the amount in ml. of 0.5 N hydrochloric acid consumed in saponification of the acetylated oil tasted.

Storage : Store in well-closed, light-resistant containers.

Menthol : $C_{10}H_{20}O$, Mol. wt. 156.27

Category : Topical antipruritic.

Description : Colourless, hexagonal crystals, usually needlelike, or in fused masses or crystalline powder; odour, pleasant and peppermint like.

Solubility : Slightly soluble in water, very soluble in alcohol, in chloroform and in solvent ether, freely soluble in light liquid paraffin and in glacial acetic acid, and in essential oils.

Standards : Menthol is 2-isopropyl-5-methylcyclohexanol. It is natural laevo-menthol obtained from various species of *Mentha*, or synthetic laevomenthol or racemic menthol.

Identification

(a) Dissolve 10 mg. in 1 ml. of sulphuric acid and add 1 ml. of 1 per cent w/v solution of vanillin in sulphur

acid, an orange-yellow colour is produced on adding 1 ml. of water the colour changes to violet (distinction from thymol).

(b) Dissolve a few crystals in 1 ml. of glacial acetic acid, add three drops of sulphuric acid and one drop of nitric acid; no green colour is developed (distinction from thymol).

(c) When triturated with about an equal weight of camphor, or of chloral hydrate or of phenol, the mixture liquefies.

Parts used : Leaves, oil.

Dose

Leaves juice 5-10 ml., Infusion 20-40 ml., Oil 1-3 drops.

Formulation : Arka Pudina.

PŪTIHĀ (पूतिहा)

रोचनी वह्निजननी वक्त्रजाड्यनिषूदनी ।
कफवातहरी बल्या छर्द्यरोचकवारिणी ॥

Cakradatta.

पूतिहा कटुरुष्णश्च रोचनी दीपनी लघुः ।
हन्ति वातकफाध्मानशूलच्छर्दिर्कृमींस्तथा ॥

Dravyaguna Vijnāna, 327.

अग्निमान्द्ये

पोदीनार्द्रकनिम्बूककुमारीरससम्भवः ।
अर्को जीरत्रिजाताद्यै रोचनो वह्निबोधनः ॥

Siddhabhaiṣajya Maṇimālā, 4-263.

अरोचवैरस्ययकुद्वमिक्रिमिप्रभञ्जनश्लेष्मगदप्रभञ्जनः ।
रूक्षस्तथोष्णः सुरभी रजःप्रदनकः पोदीनकः कल्कविधौ प्रशस्यते ॥

Siddhabhaiṣajya Maṇimālā.

PUTRAJĪVAKA

Botanical name : Putranjiva roxburghii Wall.

Family : Euphorbiaceae

Classical name : Putrajivaka

Sanskrit names

Putrajivaka, Garbhakara, Garbhada, Yaṣṭisādhana, Arthaśādhaka, Kuṭa, Mantrārthasiddhikṛt, Pavitra, Apatyajivaka.

Regional names

Jiyapota, Pitoujiya (Hindi); Putajan (Mar.); Putrajiva (Guj.); Inkolli (Tam.); Putrajivik, Kuduru (Tel.); Putrajiva (Kann.); Ponglam (Mal.).

Description

Leafy medium-sized or large trees upto 15 in. - 18 m. high; branches drooping; mostly dioecious, evergreen tree with pendant branches; tree girth C. 2 m. Bark green, shining.

Leaves obliquely elliptic-oblong to ovate, coriaceous, dark-green above, glaucous beneath.

Male flowers in axillary, clusteres, subsessile; perianth lobes 3-5, oblong, obtuse, ciliolate; stamens 3, anthers globose. Female flowers pedicillate, perianth 5-6; ovary tomentose, styles 3, recurved; stigma crescent shaped; drupe ovoid, globose, tomentose; putamen pointed, very hard; deeply wrinkled, 1-seeded. Seeds normally 1 with copious albumen.

Flowering and fruiting time

Plant is flowering in April-August and it fruits onwards, in November-March.

Distribution

Plant occurs in India and Burma. It is commonly planted along avenues and in gardens. It grows almost throughout India upto 3,000 ft. elevation. It is found wild or cultivated almost in all parts of India ascending upto an altitude of C. 550 meters.

Kinds and varieties

Another variety is botanically named as *Putrajiva zeylanica* Muell-Arg. Which occurs in Sri Lanka.

Chemical composition

Seeds yield a fatty oil. On extraction with petroleum ether, the seeds kernel gave about 42 per cent of the oil

having a pale yellow colour, a strong mustard odour and the fatty acids in the oil are : oleic 47.4, linoleic 115.3, palmitic 7.1, stearic 12.1, and arachidic 2.1 per cent. The oil contains small amounts of a mustard oil.

The seeds kernels (on steam-distillation) yield 0.5 per cent of a sharp-smelling essential oil of the mustard oil type. The oil contains isopropyl and 2-butryl isothiocynates as the main constituents and 2-methyl-butyl isothio crynate as a minor component.

The fruit pulp contains a large proportion of manitol, and small quantities of a saponin glycoside and an unidentified alkaloid; the alkaloid is also present in a small quantity in the stones of the fruit.

Pharmacodynamics

Rasa	: Madhura, kaṭu
Guṇa	: Guru, picchila
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarman	: Kaphavardhana Vātapittaśāma

Properties and action

Karma	: Śukrastambhaka Prajāsthāpana Apatyakara Vṛṣya Dāhaśāma Cakṣuṣya Tṛṣṇāśāma Anulomana Mūtrala Śothahara
Roga	: Śukrakṣaya-vandhyātva Garbhasrāva-garbhapāta Ślipada Netravikāra Tṛṣṇā-vibandha Mūtrakṛcchra Dāha Visphoṭana

Granthiroga
Urograha
Viṣa.

Therapeutic uses

The drug Putrañjivaka is prajāsthāpana that stabilises or protects conception and foetus. Drug is useful as anti-inflammatory, diuretic, aphrodisiac, carminative and laxative. It allays burning sensation, excess thirst, filipreiasis, constipation, dysuria, eye diseases and seminal disorders.

The leaves and stones are given in decoction for cold and fever. They are also used in rheumatism. Crushed leaves are reported to be applied to swollen throats of cattle. Leaves are also lopped for fodder of cattles. Stones of the fruit are strung into rosaries and necklaces.

Specifically, the seeds of Putrañjivaka are given in sterility in order to promote conception, and it also checks miscarriage. The seed-rosaries (likewise rudrākṣa-*Elaeocarpus ganitrus* Roxb.) are also used in convention. The juice of leaves is given in elephantiasis. Seeds powder is orally given in over (excess) thirst (tṛṣṇā) as well as in constipation. Leaves and seeds are ground and applied over organ feeling burning sensation. Seeds are rubbed and paste is used as collyrium in eye ailments.

The roots of Putrañjiva (*Putrañjiva roxburghii* Wall.), Viṣṇukrāntā (*Evolvulus alsinoides* Linn.) and Śivalingī (*Bryonopsis laciniata* (Linn.) Naud.) are recommended to be taken for eight days during pregnancy (Bhāvaprakāśa, Cikitsā, 70-82).

The warm juice of Putrañjivaka and Śigru (*Moringa oleifera* Lam.) are mixed with hiṅgu (*asafoetida*) is used in urograha (chest pain) (Bhāvaprakāśa, urograha, 5). The Kernel of Putrañjivaka is taken with lemon juice counteracts the viṣa vega or force of poisoning (Āyurveda Prakāśa, 6-87).

The juice of Putrajivaka is used in the disease of filaria or ślipada (Suśruta Saṁhitā, Cikitsā, 19-61). The paste of seed-kernel of drug plant Putrañjivaka pounded with water may be applied; it removes eruptive boils with pain and

also cysts of various types known as visphoṭa (Bhāvaprakāśa, Cikitsā. 58-27).

Parts used : Seeds, leaves.

Dose : Seeds powder 3-6 gm., Leaves juice 10-20 ml.

PUTRAJĪVAKA (पुत्रजीवक)

क. पुत्रजीवो गर्भकरो यष्टीपुष्पोऽर्थसाधनः ।

ख. पुत्रजीवो गुरुर्वृष्यो गर्भदः श्लेष्मवातकृत् ।

सृष्टमूत्रानलो रूक्षो हिमः स्वादुः पटुः कटुः ॥

Bhāvaprakāśa Nighaṇṭu, Vaṭādi varga, 39-40.

पुत्रञ्जीवः

पुत्रञ्जीवो यष्टिपुष्पः कूटो मत्रार्थसिद्धिकृत् ।

पुत्रजीवो हिमो रूक्षो वृष्यः स्वादुः पटुर्गुरुः ॥

विष्टम्भी सृष्टविण्मूत्रो गर्भपातकफप्रदः ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 112-113.

पुत्रजीवः

पुत्रजीवः पवित्रश्च गर्भदः सुतजीवकः ।

कुटजीवोऽपत्यजीवः सिद्धिदोऽपत्यजीवकः ॥

पुत्रजीवगुणाः

पुत्रजीवो हिमो वृष्यः श्लेष्मदो गर्भजीवदः ।

चक्षुष्यः पित्तशमनो दाहतृष्णानिवारणः ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 138-139.

विस्फोटके

पुत्रजीवस्य मज्जानं जले पिष्ट्वा प्रलेपयेत् ।

कालस्फोटं च विस्फोटं सद्यो हन्ति सवेदनम् ॥

Bhāvaprakāśa, Viṣphoṭakādhikāra, 58-27.

ग्रन्थिरोगे

कक्षग्रन्थिं गलग्रन्थिं कर्णग्रन्थिञ्च नाशयेत् ।

हन्याच्च स्फोटकं ताम्रं पुत्रजीवो विनाशयेत् ॥

Bhāvaprakāśa, Madhyakhaṇḍa, 58-28.

पुत्रगर्भधारण-जन्मार्थम्

पुत्रकमञ्जरिमूलं विष्णुकान्तेशिवलिङ्गीनी सहिता ।

एतद्गर्भेऽष्टदिनं पीत्वा कन्यां न सर्वथा सूते ॥

Bhāvaprakāśa, Cikitsā, 70-32.

Yonirogādihikāra, 70-32.

श्लीपदरोगे पुत्रजीवकरसः

अननैव विधानेन पुत्रजीवकं रसम् ।

काञ्जिकेन पिबेच्छूर्णं मूत्रैर्वा वृद्धदारजम् ॥

Cakradatta, 42-11.

श्लीपदे

अननैव विधानेन पुत्रजीवकजं रसम् ।

प्रयुञ्जीत भिषक् प्रातःकालसात्म्यविभागजित् ॥

Suśruta Samhitā, Cikitsā, 19-61.

विषे

पुत्रजीवकमज्जा वा पीता निम्बुकवारिणा ।

विषवेगं निहन्त्येव वृष्टिर्दावानलं यथा ॥

Bhāvaprakāśa, 6-87.

उरोग्रहे

पुत्रजीवकशिग्रूत्थाः..... ।

रसा एकैकशः कोष्ठा द्विशो वा रामटान्विता ॥

Baṅgasena, Urograha, 5.

विस्फोटकादौ

पुत्रजीवस्य मज्जानं जलं पिष्ट्वा प्रलेपयेत् ।

कालस्फोटं च विस्फोटं सद्यो हन्ति सवेदनम् ॥

Bhāvaprakāśa, Cikitsā, 58-27.

RĀJĀDANA

Botanical name

Manilkara hexandra (Roxb.) Desv.

Syn. Mimusa hexandra Roxb.

Family : Sapotaceae

Classical name : Rājādana

Sanskrit names

Rājādana, Kṣīriṇī-kṣīrī, Phalādhyakṣa, Guccaphala, Kṣīravṛkṣa, Nṛpadruma, Madhuphala, Dr̥dhaskandha, Nimbabīja, Kapīṣṭha, Madhavodbhava, Śukīṣṭha.

एतद्गर्भेऽष्टदिनं पीत्वा कन्यां न सर्वथा सूते ॥

Bhāvaṇṇaprakāśa, Cikitsā, 70-32.

Yonirogādihikāra, 70-32.

श्लीपदरोगे पुत्रजीवकरसः

अननैव विधानेन पुत्रजीवकं रसम् ।

काञ्जिकेन पिबेच्चूर्णं मूत्रैर्वा वृद्धदारजम् ॥

Cakradatta, 42-11.

श्लीपदे

अननैव विधानेन पुत्रजीवकं रसम् ।

प्रयुञ्जीत भिषक् प्रातःकालसात्म्यविभाजित् ॥

Suśruta Samhitā, Cikitsā, 19-61.

विषे

पुत्रजीवकमज्जा वा पीता निम्बुकवारिणा ।

विषवेगं निहन्त्येव वृष्टिर्दावानलं यथा ॥

Bhāvaṇṇaprakāśa, 6-87.

उरोग्रहे

पुत्रजीवकशिगूत्थाः..... ।

रसा एकैकशः कोष्ठा द्विशो वा रामठान्विता ॥

Baṅgasena, Urograha, 5.

विस्फोटकादौ

पुत्रजीवस्य मज्जानं जलं पिष्ट्वा प्रलेपयेत् ।

कालस्फोटं च विस्फोटं सद्यो हन्ति सवेदनम् ॥

Bhāvaṇṇaprakāśa, Cikitsā, 58-27.

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Sanskrit names

Rājādana, Kṣīriṇī-kṣīrī, Phalādhyakṣa, Gucchaphala, Kṣīravṛkṣa, Nṛpadruma, Madhuphala, Dṛḍhaskandha, Nimbabīja, Kapīṣṭha, Madhavodbhava, Śukīṣṭha.

Regional names

Khiraṇi, Khirni, Khirini (Hindi); Khirkhirjur (Beng.); Ramjana Rayan, Ruini (Mar.) Rayan, Khirni (Guj.); Manjipala Pola (Tel.); Palla Pulai (Tam.); Kheri, Khirkuli (Oriya).

Description

Small or medium sized trees upto 15 meters tall. Leaves alternate, obovate oblong, coriaceous, upto 10 × 5 cm., glabrous, faintly-nerved. Wood strong, dense, timber; sapwood pale-reddish to brownish white.

Flowers white, 1-3-together in leaf axils. Calyx rusty-tomentose outside; segments 6, reflexed, inner 3 narrower, ciliate. Corolla, lobes 2-seriate. Stamens 6, alternating with staminodes; latter 2-fid or denticulate at apex, glabrous. Styles subulate.

Berry oblong, obtuse or retuse at apex, with solitary, large seeds.

Flowering and fruiting time

Plant is in flowering and fruiting stages during the priod from spring to summers; February-April.

Distribution

Plant occurs in India. It is planted in gardens, house premises, rural areas and other localities; plant is grown for edible fruits.

Chemical composition

Analysis of the fruit gave the following values : moisture 68.61, protein 0.48, fat (ether extr.) 2.42, Carbohydrates 24.74 and mineral matter 0.75%; Calcium 83 mg., phosphorous 17 mg., iron 0.92 mg., carotene (as vit. A) 675 I.U.; thiazine 70.33 ug., riboflavin 77.41 ug., nicotinic acid 0.66 mg and ascorbic acid 15.67 mg./100 g.

Tree yields a gum. Bark contains 10% tannin and may be used for tanning purpose. Seeds contain a bitter saponin.

Pharmacodynamics

Rasa	: Kaṣāya, madhura
Guṇa	: Snigdha, guru
Vīrya	: Śīta

Vipāka	: Madhura
Doṣakarma	: Tridoṣahara

Properties and action

Karma	: Br̥mhaṇa Tr̥ṣṇānigrahaṇa Balya Saṅgrāhī Snehana Raktastambhana Dantya Madahara Bhramahara Raktapittanāśaka Kṣayaghna Hṛdya Rocana Kṣatanāśaka Vṛṣya Susvādu
Roga	: Tr̥ṣṇā-bhrama-mada-mūrcchā Dourbalya Hṛdroga Vraṇa Prameha Mukharoga-dantodbheda Raktasrāva Raktapradara Visarpa Nyccha

Therapeutic uses

The drug Rājādana is br̥mhaṇīya, snehana, balya, tr̥ṣṇāśāmakā, susvādu and vṛṣya. Its fruits are tonic, demulcent, aphrodisiac and tasty; they are eaten fresh (or dried also). The fruits (Rājādana phala) are relished when they become yellow in ripen or matured stage; they are sweet but astringent. Rājādana (commonly known as Khirni or Rayan etc. in northern belt) belong to edible fruits available in market generally during summer season. Seeds are considered emollient and demulcents.

Rājādana is used as medicine and besides the fruits, the leaves, bark and flowers are also indicated in therapeutics. The paste of the leaves of Rājādana and Kapittha fried in ghee are effective in the disorder particularly caused by pitta and vāta doṣa. Bark is used as tonic and in fevers.

In raktapradara or meno-metrorrhagia, the paste of leaves of Rājādana and Kapittha in the disease caused by provoked pitta and kapha humors. Rājādana is used in treatment of erysipelas (visarpa), wound (vraṇa), and alcoholism (madātyaya).

In treatment of mukharoga (diseases of mouth), Rājādana is one of ingredients of snehika dhūma. Rājādana is indicated in treatment of prameha rogas; it is recommended to be used in the forms of ariṣṭa, leha and āsava.

The drugs Rājādana and Kapittha are ground and their paste is applied in nyaccha (freckles). The syrup prepared with Rājādana belongs six syrup preparations (incorporated in Suśruta Saṁhitā, uttara. 48-26) which have been prescribed to use in order to check thirst (tṛṣṇā).

Parts used : Bark, leaves, flowers, fruits.

Dose : Powder 3-5 gm., Decoction 50-100 ml.

RĀJĀDANA (राजादन)

क्षीरिणी स्यान्महास्कन्धा दृढकाष्ठा दृढच्छदा ।

तत्फलं मधुरं पीतं सक्षीरं मृदुलं भवेत् ॥

Śivadatta.

क्षीरिणीफलम्

क. राजादनः फलाध्यक्षो राजान्या क्षीरिकाऽपि च ।

ख. क्षीरिकाया फलं वृष्यं बल्यं स्निग्धं हिमं गुरु ।

तृष्णामूर्च्छामदभ्रान्तिक्षयदोषत्रयास्रजित् ॥

Bhāvaprakāśa Nighaṇṭu, Āmrādiphala varga, 86-87.

अ. राजादनो राजफलः क्षीरवृक्षो नृपद्रुमः ।

निम्बबीजो मधुफलः कपीष्टो माधवोद्भवः ॥

क्षीरी गुच्छफलः प्रोक्तः शुकेष्टो राजवल्लभः ।
श्रीफलोऽथ दृढस्कन्धः क्षीरशुक्लास्त्रिपञ्चधा ॥

राजादनः (रायणीगुणाः)

ब. राजादनी तु मधुरा पित्तहृद्गुरुतर्पणी ।
वृष्या स्थौल्यकरी हृद्या सुस्निग्धा मेहनाशकृत् ॥

Rāja Nighaṇṭu, Āmrādi varga, 70-70.

राजादनः

क. राजादनो दृढस्कन्धो मालाशी वानरप्रियः ॥
फलाध्यक्षो गुरुस्कन्धः क्षत्रियः प्रियदर्शनः ।
राजाह्वः क्षीरभृत् क्षीरी बलोक्षी विश्वरूपकः ॥

ख. राजादनं हिमं स्निग्धं कषायं मधुरं गुरु ।
स्वादुम्लपाकं सङ्ग्राहि वृष्यं विष्टम्भि बृंहणम् ॥
रोचनं मांसलं हन्ति दोषत्रयमदभ्रमान् ।
मूर्च्छामोहतृषादाहरक्तपित्तक्षतक्षयान् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 386-389.

राजादनभेदाः

मुचिलिन्दो मदनको राजन्यः क्षत्रपादपः ।
इक्ष्वाकुः श्रीक्षीरफक्षिबुकः प्रतिविष्णुकः ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 390.

मुखरोगे

स्नेहिकधूमे ।

Suśruta Samhitā, Cikitsā, 22-69.

न्यच्छे

‘कपित्थराजादनयोः कल्कं वा हितमुच्यते ।’

Suśruta Samhitā, Cikitsā, 20-36.

विसर्पे (पित्तजे)

‘घृतस्य गौरीमधुकारविन्दरोध्राम्बुराजादनगैरिकेषु ।’

Suśruta Samhitā, Cikitsā, 17-10.

तृष्णायाम्

‘राजादनक्षीरिकपीतनेषु षट्पानकान्यत्र हितानि च स्युः ।’

Suśruta Samhitā, Uttara, 48-26.

रक्तप्रदरे

‘पत्रकल्कौ घृते भृष्टौ राजादनकपित्थयोः ।
पित्तानिलहरो..... ॥’

Caraka Samhitā, Cikitsā, 30-97.

ब्रणे

सप्तपर्णकरञ्जार्कनिम्बराजादनत्वचः ।
हिता गोमूत्रपिष्टाश्च सेकः क्षारोदकेन वा ॥

Suśruta Samhitā, Cikitsā, 1-121.

प्रमेहे

‘.....अरिष्टानयस्कृतीस्नेहानासवांश्च
कुर्वति.....राजादनगोपघोण्टाविकङ्कतेषु वा— ।’

Suśruta Samhitā, Cikitsā, 11-10.

RĀJIKĀ

Botanical name

Brassica juncea Czern. & Coss.

Syn. *Synapsis juncea* L.

Family : Cruciferae

Classical name : Rājikā

Sanskrit names

Rājikā, Āsurī, Tikṣṇagandhā, Kṣujjanikā.

Regional names

Rai (Hindi); Rai sarisa (Beng.); Onhar (Punj.);
Mohari (Mar.); Rai (Guj.); Kangu (Tam.); Avalu (Tel.);
Khadaral (Arab.); Sipandou (Pers.); Indian Mustard
(Eng.).

Description

Erect, 30-40 cm. tall, branched, hispid, annual
herbs. Basal leaves lyrate-pinnatifid; middle ones obo-
vate-oblong, pinnatifid; upper ones lanceolate; entire-
dentate.

Racemes 20-40-flowered, up to 30 cm. long in fruit.
Flowers yellow, 7 mm. across; pedicels 5-8 mm. long, in-

creasing to 15 mm. in fruit. Sepals 4-6 × 1.5 mm., subequal. Petals 6-9 × 2.5-3 mm., obovate, clawed, apex rounded. Stamens 4-6; 5-8 mm. long; 2-3 mm. broad.

Pods 2.5-6 cm. long, linear; seeds rounded, reticulate, blackish-brown.

Flowering and fruiting time

Plant flowers and fruits during period from October to March. Farming seasons.

Distribution

It is commonly cultivated as oil-seed in various provinces of India, specially in Uttar Pradesh, West Bengal. Central India and states. Plant is found also as an escape.

Chemical composition

Seeds contain 30-38% fixed oil and nitrogenous matter 24.6%.

Pharmacodynamics

Rasa	: Kaṭu
Guṇa	: Tikṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

Properties and action

Karma	: Vidāhī Lekhana-sphoṭajanana Vedanāsthāpana Śothahara Dīpana-pācana-śūlahara Kṛmighna Plīhavṛddhahara Vāmaka (higher dose) Raktapittakopaka-uttejaka Svedajanana

Roga	: Vātavyādhi (śītapradhāna) Agnimāndya-aruci-ajīrṇa Udaraśūla-gulma-udaravikāra (vātakaphajanya)

Krimi-roga
 Plīhavṛddhi-yakṛtplīhodara
 Hṛddourbalya (lower dose)
 Pakṣāghāta-sandhivāta-kaṭiśūla
 Phuphphusāvaraṇaśoṭha-
 phuphphusaśoṭha
 Yakṛcchoṭha
 Carmaroga-kaṇḍū-kilāsa
 Galaśoṭha-dantaśūla

Therapeutic uses

The seeds of drug Rājikā mixed with equal quantity of salt and cow's urine are prescribed for use (in dose of about 8 gm.) in the enlargement of liver and spleen (yakṛtplīhodara). The dose ('triṣṇā' indicated in classical text) can be regulated suitably.

The drug Rājikā is vidāhī that causes burning sensation with hyperacidity, but it is stomachic (dīpana) and digestive (pācana) promoting digestive fire (power). Rājikā is anti-colic, anthelmintic, emaciating (lekhana), emetic in excess dose (atimātrā-vāmaka) and diaphoretic (svedajanana). It is stimulant (uttejaka) and aggravating bile and blood (raktapitta prakopaka). It is analgesic (vedanāsthāpana) and anti-inflammatory; it causes burning sensation, irritation and also blistering (sphoṭajanana) due to local application (contact with skin in excess). The seeds are used as a household spice of culinary purpose.

Rājikā is allaying ailments caused by Kapha and Vāta doṣa. The drug is useful in dyspepsia, loss of appetite and gastric power, loss of desire for food, abdominal colic, worms, liver and splenic enlargement, heart weakness and throat affections.

The seeds paste is applied externally in various diseases specially in vāta vyādhi (śītapradhāna), skin diseases, amenorrhoea and some other ailments. The gargle is suggested in throat affections (inflammation) and dentalache. The seeds oil is used in medicine. Its oil is edible oil of common utility.

t **Parts used :** Seeds, oil, leaves.

3. **Dose :** Seed-powder 1-3 gm.

D.

KṚṢṆA RĀJIKĀ-RĀJIKĀ BHEDA

(KṚṢṆA SARṢAPA)

Botanical name : *Brassica nigra* (Koch) Linn.

Family : Cruciferae

Classical name : Kṛṣṇa Rājikā-Rājikā bheda

Sanskrit names

Kṛṣṇa rājikā, Kṛṣṇa sarṣapa, Kṛṣṇikā, Āsurī (jāti)-
Rājika bheda (Rājikā jāti).

Regional names

Benarasi rai, Kali rai, Kali Lahi, Ashrai, Ghorarai,
Jagrai (Hindi); Kali rai (Guj.); Raisarisha (Guj.); Avalu
(Tel.); Kadugu (Tamil); Bilesasive, Karisasive, Sasive
(Kannāda); Black Mustard, True Mustard (Eng.).

Description

***Brassica nigra* (Linn.) Koch.**

Annual stem erect 0.5-1.3 m. high, mostly branching from the middle, more or less hispid, often purple-spotted or purplish in sunny places; branches thin, divaricate and ascending virgate.

Leaves lower distinctly stalked, lyrate-pinnatiscent, terminal lobe the largest ovate, often 5-lobed, on the margin unequally callose-denticulate, at the base more or less hastate, lateral lobes much smaller, obovate or oblong, denticulate the lowest extremely small, middle leaves shorter; petioled the upper leaves oblong-linear narrowed at the base into a short petiole, mostly entire often pendulous, all very membranous and bright green.

Flower raceme at flowering time corymbose but not surpassing the buds, very elongate, 40-60 flowered pedicels 2-3 mm. long, glabrous sepals 4-5 mm. long, oblong, erect-pendant, glabrous, petals yellow 7.5-9 mm. long, inner stamens 6 mm. long, the outer 5 mm., anthers oblong, obtuse 1.5 mm. long, ovary, 7-11 ovuled, style 1-2 mm. long, stigma broader than the style.

Fruits pedicel 1.2-5.4 long, erect; pods 1-2 cm. long,

1.5-2 mm. diam., linear, subtetragonous tortulose; seeds globose, 1 mm. diam obscurely brown, black near the hilum, delicately alveolate.

Seeds : Seeds dicotyledonous, exalbuminous, mostly round or rarely irregular in shape, dark, light or yellowish brown in colour, provided with a black spotted hilum and circular depressed regions on the surface, measuring 1-2 mm. in diam.

Black mustard seeds black brown or red sometimes nearly black and frequently partially covered with very thin, whitish dried mucilage, spherical about 1 mm. in diam. One hundred seeds weigh from 0.14 to 0.17 gm. Surface of the thin and brittle testa a diameter membrane (which is residue of the endosperm). Kernel greenish yellow and oily. It consists of an embryo having as two cotyledons face to face and folded along their midrib. Seeds with no odour, bitter in taste but on moistening with water evolving strongly pungent odour.

Germination-viability of the seeds tested with 2, 3, 5 triphenyle tetrazolium chloride. Seeds soaked in water in petridish under laboratory condition. About 62% seeds germinate within a week. On germination the seed coat bursts at hilum and the embryo pushes with the cuticle, and the plumule to form the root and shoot respectively. Part of cotyledons form the first part of leaf at the seedling.

Distribution

It is indigenous in Central Europe and Mediterranean region. Plant is cultivated in India and many other countries. Black mustard is cultivated in Uttar Pradesh, Punjab, Madras and North West Frontier Province.

Cultivation and collection

Black mustard is cultivated in Rabi season. The land should be ploughed 4-6 times to obtain a fine tilth. In case of mixed cropping, the seeds are sown from September-October and February-March either in parallel rows 10-15 cm. apart alternating with the main crop or broadcast on the entire field at the rate of 0.63-0.84 kg. per acre. For pure crop seed rate varies from 1.6-2.6 kg. per acre. Spac-

ing between lines, plants and rows varies according to varieties grown. For brown or **Kāli Sarson**, Toria and Rai, a spacing of 45.0 cm. between lines and 10-15 cm. between plants is followed. To obtain a better yield, application of nitrogenous fertilizer at the rate of 13.5 kg. is recommended. About a fortnight after sowing the crop is thinned, weeded and hoed twice.

Crop is harvested when they began to turn yellow. Plants are harvested to means of hand sickles. After harvesting they are threshed by beating the fruit bearing part of the plants with the help of a wooden stick or under the feet of cattle. Then seeds are winnowed and finally dried in the sun. The average yield of black mustard per acre varies from 155.5 kg. to 250 kg. approximately.

Kinds and varieties/Substitutes and adulterants

Rājikā is botanically identified as *Brassica juncea* Czern. & Coss. which is commonly known as Black Mustard or Rai. Another plant *Brassica nigra* (Linn.) Koch. is popularly known as Benarasi Rai which is quite different from Rājikā.

Diagnostic characters of seeds of Black mustard (Benarasi rai) obtained from *Brassica nigra* (Linn.) Koch. are helpful to distinguish them with other similar kinds of seeds. Round oval and irregular yellowish brown to dark brown seeds with black spotted hilum, outer integument of the seed coat consists of epidermis, hypodermis, palisade and innermost layers, inner integument of the seed coat single layered membranous and with aleurone grains, presence of fatty and proteinaceous reserve matters in the seed somatic and meiotic cells with $2n = 16$ chromosomes and $n = 8$ bivalents respectively.

Common adulterants are *Brassica campestris* Linn. var. sarson var. dichotoma and also var. toria, *B. juncea* (L.) Czern. (Indian mustard or Rai), *B. tournefortii* Gouan. (Punjab Rai) and *Argemone mexicana* Linn.

The true black mustard (*Brassica nigra* Koch.) can be obtained from the market in the name of 'Benaras Rai'. Both black mustard and Indian mustard are often adulter-

ated with *Argemone mexicana* seeds (Svarṇakṣīrī or Satyānāshi). Detection of Argemone oil in mustard oil is reported generally and simple methods for detection and removal of toxic alkaloid from adulterated mustard oil with *Argemone mexicana* have been devised. This aspect has largely been dealt with food technological studies particularly devoted to edible oils.

Chemical composition

Black mustard contains Myrosin, a glucoside and Simigrin (potassium myronate 0.5 % which acted upon by water form allyl sulphocyanamide which is the volatile oil of mustard. It also contains fixed oil 27% sinapine sulphacyamide, lecithin, mucilage, proteins and ash (4.2-5%). Fixed oil contains glycerides of oleic, stearic and erucic or brassic acids. It is yellowish-green, non-drying, slightly odorous and of a mild taste. It solidifies on cooling. Seeds of black mustard contain 30% proteins, mucilage and traces of sinapine hydrogen sulphate.

Preliminary phytochemical analysis finds some nonprotoplasmic cell contents like alkaloid, glycoside, tannin, sugar, protein, fat and oil, mucilage, cellulose and cutin present in the seed react positively with different concentrations of acids, alkalies, salts and dyes.

The seeds of *Brassica nigra* contain moisture 7.6, nitrogenous substances 29.1, nitrogen-free extract 19.2, ether extract 28.2, crude fibre 11, ash 5 per cent. The volatile oil contents is 0.7-1.2% specific gravity of volatile oil being 1.015-1.025. The oil is optically inactive and consists almost entirely of allyl isothiocyanate (93-98%). Specifications for the pharmaceutical oil as incorporated in B.P.C. are : specific gravity $n/20^{\circ}$ 1.525-1.530, allyl isothiocyanate content not less than 92 per cent determined in the seeds oil of plant.

Physical constant values have been recorded by various studies on seeds of *Brassica nigra* (Linn.) Koch. Seeds contain moisture 8.254, dry matter 91.746, total ash 9.349 and acid-insoluble ash 0.732 (as per cent of dry weight). Extractive values of seeds are : water soluble extractive 23.02, ethanol soluble extractive 35.92 and petroleum

ether soluble extractive 17.80 (as per cent of dry wt.). Seeds contain total fixed oil 17.02, volatile oil 0.78 and total nitrogen 3.53 (as per cent of dry weight). Observations find that one thousand seeds or grains weigh 0.7 gram. The swelling factor of seeds (in ml/gm/24 hours) 1.5, absorption factor 1.0 and pH of water extract 5.5 are observed. Physical constants of oil are : specific gravity 0.917, saponification value 179.8, iodine value 109.7 and erucic acid 41.5 (Black Mustard-Mysore) and comparatively English Black Mustard oil is with physical constants as follow : specific gravity 0.914, saponification value 173-176, iodine value 90-107 and erucic acid 50.0.

Pharmacodynamics

Rasa	: Kaṭu
Guṇa	: Tikṣṇa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātāsāmaka

Properties and action

Karma	: Vidāhī Lekhana-sphotajanana Vedanāsthāpana Śothahara Dipana-pācana-śūlahara Kṛmighna Plīhavṛddhīhara Vāmaka-recaka Raktaprapakopana-uttejaka
Roga	: Vātavyādhi (śītapradhāna) Agnimāndya-aruci-ajirṇa Udaraśūla-gulma-udaravikāra (Vātakaphaja) Kṛmiroga Plīhavṛddhi-yakṛtplīhodara Hṛddourbalya (lower dose) Pakṣāghāta-sandhivāta-kaṭiśūla Yakṛcchotha Carmavikāra Galaśotha.

Therapeutic uses

The leaves of plant drug are strongly pungent and they strengthen the body and increase the bile; it is good for throat complaints. The seeds are pungent and bitter; they alleviate kapha and they cure enlargement of spleen. Leaves dispel fever and cause burning. They increase the bile and remove kapha. Leaves are anthelmintic and increase appetite, and they cure skin diseases and itching. Leaves destroy external parasites.

The seeds are useful in medicine and poultice being useful and simple rubefacient and vesicant. Powder of seeds in water is highly recommended as a speedy and safe emetic. The seeds act as a digestive condiments if taken moderately. For this reason, the seeds are sometimes prescribed in dyspepsia and other complaints attended with torpid bowels. If swallowed in large quantity they act as a laxative.

The oil of black mustard seeds is medicinally useful. Pure fresh oil is a stimulant and mild counter-irritant when the oil is applied externally. It is very useful in mild attacks of sore-throat, internal congestion and chronic muscular rheumatism.

The volatile oil obtained by steam-distillation is extremely powerful irritant owing to its volatility and penetrating power and it is responsible for the painful nature of blisters caused by mustard diluted with 50 times, its volume of alcohol, or in the form of liniment, it is employed as a counter-irritant and rubefacient. It is used in cases of pleurisy and pneumonia.

Mustard poultices are useful in febrile cases and in inflammatory swellings such as parotitis. Experimental studies show that the feeding of *Brassica nigra* and *Tamarindus indica* to experimental rats produced marked increase in the bile flow rate. The bile acids output was noticeably higher in animals fed either mustard, tamarind, onion or curry powder and this was accompanied by similar increases in biliary phospholipid and cholesterol according to pharmacological studies conducted on black mustard.

The black mustard seeds (*Brassica nigra*) are used as a condiment in the preparation of pickles and for flavouring curries and vegetables. The oil extracted from the seeds is used for edible purposes. The erucic acid fraction of the oil is used for lubricating jet engines and in the manufacture of plastics. The oil obtained from mustard seeds is often used for anointing the body. The oil cake is mostly used as a livestock feed in India, especially in Uttar Pradesh and Punjab, but an equally large amount is used as a fertilizer in Japan, India and Europe owing to its high content of nitrogen. The leaves of young plants are used as a green or leafy vegetable. Mustard flour of commerce is a mixture of the flours of two types of mustard seeds, brown or black mustard (*Brassica nigra*) and white mustard (*Sinapis alba*). The condiment properties of the seeds are largely due to the essential principles of these two types of the seeds.

Besides the utility of seeds and leaves in condiments and foods in various forms and ways, the seeds are used as medicine in preventive and curative purposes. The seeds oil is very useful in medicinal purposes as well as the oil is used as an edible item.

Parts used : Leaves, seeds, seed-oil.

Dose : Seed powder 1-3 gm.

RĀJIKĀ (राजिका)

तद्वच्च राजिकाशाकं रक्तपित्तविदाहकृत् ।

तीक्ष्णं रूक्षमचक्षुष्यं भृशोष्णं कृमिहृत् गुरु ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 641.

राजिका कृष्णराजिका च

राजिका कफपित्तघ्नी तीक्ष्णोष्णा रक्तपित्तकृत् ।

किञ्चित् रूक्षाऽग्निदा कण्डूकुष्ठकोष्ठक्रिमीन्हरेत् ॥

अतितीक्ष्णा विशेषेण तद्वा कृष्णाऽपि राजिका ।

Bhāvaprakāśa Nighaṇṭu, Dhānyavarga, 73.

राजिकापत्रम्

कटूष्णं राजिकापत्रं क्रिमिवातकफापहम् ।

कण्ठामयहरं स्वादु वह्निदीपनकारकम् ॥

Rāja Nighaṇṭu, Mūlakādi varga, 146.

राजिकातैलम्

तीक्ष्णन्तु राजिका तैलं ज्ञेयं वातादिदोषनुत् ।

शिशिरं कटु पुंस्त्वघ्नं केश्यं त्वग्दोषनाशनम् ॥

Rāja Nighaṇṭu, Kṣīrādi varga, 122.

आसुरी

आसुरी राजिका राजी रक्तिका रक्तसर्षपः ।

तीक्ष्णगन्धा मधुरिका क्षवकः क्षुवकः क्षवः ॥

आसुरी कटुतिक्तोष्णा वातप्लीहार्तिसूलनुत् ।

दाहपित्तप्रदा हन्ति कफगुल्मकृमिब्रणान् ॥

Rāja Nighaṇṭu, Śālyādi varga, 119-120.

यकृत्प्लीहोदरे

लवणं राजिकामिश्रं समं गोमूत्रमिश्रितम् ।

त्रिशाणं हन्ति पीतं हि यकृत्प्लीहोदराण्यपि ॥

Gadanigraha, 2-32-123.

RAKTANIRYĀSA

Botanical name

Daemonorops draco Blume (*Daemenorops draco* Blume.) syn. *Calamus draco* Willd.

Family : Palmae**Classical name : Raktaniryāsa****Sanskrit names**

Raktaniryāsa, Aruṇarasā, Raktaphala, Raktasravā, Rudhiraphala, Phalāsra, Raktasrāvi, Phalalohitā.

Regional names

Khunakharaba, Hiradokhi (Hindi); Hiradakhana (Mar.); Hiradakhana (Guj.); Dammul akhvain (Arabic); Khun siyavashan (Pers.); Dragon's Blood (Eng.)

Description

Daemonorps kurzianus Hook. f. syn. *Daemocrps grandis* Kurz.; *Calamus grandis* Kurz. (non Griff.)

Lofty climber, found in south Andaman Islands in India. It yields cones C. 1 inch in diam, and the only Indian species of the genus reported to yield resinous exudate.

It is named as East Indian **Dracon's Blood** which is known in various regions as Aprang hiradukhi (Hindi), Hiradakhana (Marathi and Gujarati), Koudamararae rattam (Tamil), Ratanjarana (Malayalam).

Resin Drug : *Raktaniryāsa*, commonly known as *Khunakharaba*, is *Dracon's blood* which is the resinous secretion found on the fruits of *Daemonorps propinqua* Becc., *Daemonorps draco* Blume and a few other species of *Daemonorps*. The term applied also to a number of vegetable exudate which have nothing in common with the true product except the red colour.

The resinous matter from the source plant (s) is collected by rubbing or shaking the fruits in bags. A product of inferior quality is obtained by the crushed fruits with water or by tapping the stems. Supplies come mostly from Sumatra and Borneo, and the product is marketed in the form of rounded lumps or flattened cakes or thin reeds of dull red colour. It is colourless and almost tasteless, gritty when chewed. The pure resin is almost entirely soluble in alcohol which is primarily tested according to other characteristics of specification for genuine drug material.

Daemonorps Blume (belonging to family *Palmae*) is a genus of perennial, spinous, climbing palms distributed to the Indo-Malayan region. Many species yield canes or rattans and some, red resinous exudations known in commerce as *Dragon's Blood* which is employed as drug, *Raktaniryāsa* and available as *Lump Dragon Blood* in drug market.

Kinds and varieties

Indian substitute and another botanical source of the drug is identified as *Daemenorops Kurzianus* Hook. f. Which occurs in Andaman Islands in India. Botanical

source of drug *D. draco* Blume. is found in Malayasia. Another species *Daemonorps jenkiasianus* Mart. occurs in Sikkim, Khasi hills and Assam.

Dracuena cinnabari Bulf. f., belonging to family Liliaceae, is a source of Dragon's blood (*Khunkharaba*) and it is the native of Sacotra and also grown and collected from Janjibar, East Africa, Southern Arab etc. and exported to India.

Chemical composition

Alcohol soluble resin contains 50-60% of draeoresinotannol, mostly in the form of benzoic and benzoyl acetic esters, 13% of a yellow resene, and 2.5% of dracoalban. Abietic acid has been isolated from the resin acids. The principal pigment is dracocarmin—an anthocyanidin. Another pigment, dracorubin has also been reported.

Pharmacodynamics

Rasa	: Kaṣāya
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka

Properties and action

Karma	: Raktastambhana-raktaskandana Vraṇaropaṇa Stambhana Raktapittaśāmaka
Roga	: Raktasrāva Sadyovraṇa-jīrṇavraṇa Raktapitta-raktārśa Urahkṣata Raktapradara Atisāra-pravāhikā.

Therapeutic uses

The drug *Raktaniryāsa* is astringent and raktastambhana (haemostatic); and it has been reported to be used in diarrhoea, dysentery, eye troubles and in dentrifices. The drug is incorporated in British pharmacopoeial codex.

Raktaniryāsa is an effective haemostatic drug which is frequently recommended for entrinsic haemorrhage (raktapitta), bleeding piles or haemorrhoids (raktārśa), meno-metrorrhagia (asṛgdara-raktapradara), chest-wound (urahkṣata) and other similar ailments. Externally the drug is applied as haemostatic, astringent and wound healing medicine suggested to be used in the relevant diseases including acute and chronic ulcers and wounds.

Besides the medicinal utility of resinous substance obtained from the fruits of source plant, Raktaniryāsa or Dragon's blood is used for colouring and varnishes, and in zinc line engraving for protecting those portions of the metal not to be etched from the action of the acid. Its use in the varnish trade appears to have been largely replaced by synthetic dyestuffs.

The drug is a good medicine in indigenous systems of medicine especially Yunāni medicine.

Parts used : Exudate (fruit)

Dose : 1-3 gm.

RAKTANIRYĀSA (रक्तनिर्यास)

ज्ञेयस्तु रक्तनिर्यासः कषायः रूक्षः शीतलः ।

कफपित्तहरो रक्तस्तम्भनो व्रणरोपणः ॥

Dravyaguṇa Vigyāna, Part II, 794.

RĀSNĀ

Botanical name : *Pluchea lanceolata* C. B. Clarke.

Family : Asteraceae (Compositae)

Classical name : Rāsnā

Sanskrit names

Rāsnā, Yuktā, Surabhi, Sugandhā, Elāparṇī.

Regional names

Baisurai, Rasana, Rasna, Raisan, Sorahi (Hindi); Saramai, Reshami (Punj.); Choti-kaliga (Ma.); Rukharhi (Delhi); Korasan (Sindh.).

Description

Robust, hoary-pubescent, woody herbs upto 1.25 meters tall. Leaves thick; coriaceous, ascending, entire, upto 8 cm. long.

Heads pinkish, in compound and spreading corymbs. Involucral bracts many-seriate, the outer tinged with purple. Female florets many-seriate, filiform. 2-sexual florets few, mostly sterile; corolla tubular 5-fid.

Achenes minute, pappus hairs connate. Fls. white, yellow, lilac or purple, in many headed compound corymb.

Flowering and fruiting time

Plant flowers and fruits during period February to June.

Distribution

Plant occurs in North Africa, Afghanistan, Pakistan and India. It is commonly found in gardens, along way sides and in waste places in sandy and salty soils areas in particular. It occurs in upper gangetic plains, Punjab, Rajasthan, Gujrat and other provinces.

It is growing gregariously in vast areas in dry tracts forming thickets and is considered a troublesome weed. It does much damage to rubi crops, particularly in areas where irrigation facilities are not available.

Chemical composition

Analysis of plant shows a fairly high percentage of protein and a much greater feeding value (than bhusa or jowar stalks). Herb contains quercetin and isorhamnetin. Herb also contains pluchine.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Guru
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kāphavātaśāma

Properties and action

Karma	: Vedanāsthāpana-vātaghna Śothahara-śītahara-vedanāśāma Āmapācana-śūlapraśamana-recana Raktaśodhaka

	Kāśā-śvāsahara
	Jvaraghna
	Viśaghna
	Vṛṣya
	Rasāyana
Roga	: Vātavyādhi
	Vedanāyukta vātajanya vikāra
	Vātarakta
	Kāsa-śvāsa
	Rājayakṣmā
	Viśāktatā
	Śīraḥśūla
	Sarvāṅga vāta
	Āmavāta
	Gṛdhrasī
	Āmadoṣa-gulma-udaraśūla-
	vibandha
	Arśa
	Carvadala
	Raktavikāra
	Dourbalya.

Therapeutic uses

The drug Rāsnā is vedanāsthāpana or analgesic herbal agent; it is anodyne, carminative, expectorant and nervine tonic. It is used in cough, hernia, hydrocele, intestinal distention, pulmonary diseases, rheumatism and sciatica. The drug is much used in traditional medicine for nervous and neurological disorders, specially sciatica.

The extract of whole plant (*Pluchea lanceolata* O. & H.) drug has shown acetylcholine like activity, relaxant action on smooth muscles and spasmolytic action to (in different muscle preparations).

The leaves are succulent and are considered aperient; they are used as substitute or adulterant for senna. The plant is a highly valued medicine in rheumatic arthritis and other similar diseases. A decoction of herb has been reported to prevent the swelling of joints in experimental arthritis. Preliminary studies on the plant revealed the presence of glycoside and sterol. Pharmacological in-

vestigations indicated that the drug had two primary actions viz. acetylcholine-like action and smooth muscle relaxant-spasmolytic action on different muscle preparations. The only central nervous system activity detected in the drug was that of potentiation of barbiturate hypnosis. Further investigations indentify queratin and isorhamnetin in the air-dried; there is no glycosides.

Plant is succulent when young with sufficient foliage, and it has been tried as a possible cattle fodder in some drier parts. It can be fed only to working cattles, in mixture with other major feeding material; normally cattles avoid it because of its peculiar disagreeable bitter taste.

The leaves of plant (rāsnāpatra) as a Rāsnā is employed as a major component of several compound formulations widely prescribed in management of vātavyādhi.

Parts used : Leaves.

Dose : Decoction 50-100 ml.

Formulaitons

Rāsnādi kvātha, Rāsnādi taila, Rāsnāsaptaka kvātha, Rāsnādi ghr̥ta, Rāsna guggulu.

Groups

Anuvāsanopaga, Vayaḥsthāpana (Caraka Saṁhitā), Arkādi Śleṣmasaṁśamana (Suśruta Saṁhitā).

RĀSNĀ (रास्ना)

रास्नाऽऽमपाचिनी तिक्ता गुरुष्णा कफवातजित् ॥

शोथश्वाससमीरास्त्रवातशूलोदरापहा ।

कासज्वरविषाशीतिवातिकामयसिध्महत् ॥

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 164.

रास्ना

रास्ना युक्तरसा रम्या श्रेयसी रसना रसा ।

सुगन्धिमूला सुरसा रसाढयाऽतिरसा दश ॥

रास्ना तु त्रिविधा प्रोक्ता मूलं पत्रं तृणं तथा ।

ज्ञेये मूलदले श्रेष्ठे तृणरास्ना च मध्यमा ॥

रास्ना गुरुश्च तिक्तोष्णा विषवातास्रकासजित् ।
शोफकम्पोदरश्लेष्म-शमनी पाचनी च सा ॥

Rāja Nighaṇṭu, Pippalyādi varga, 80-82.

रास्ना वातनाशनार्थं श्रेष्ठत्वम्

‘रास्ना वातहराणाम् (श्रेष्ठम्) अग्र्यम् ।’

Caraka Samhitā, Sūtra 25-40.

राजयक्ष्मचिकित्सायां रास्नाघृतम्

रास्नाबलागोक्षुरस्थिरावर्षाभुसाधितम् ।

जीवन्तीपिप्पलीगर्भं सक्षीरं शोषनुद् घृतम् ॥

Caraka Samhitā, Cikitsā, 1-170-171.

कासे रास्नाऽऽद्यघृतम्

Cakradatta, Kāsa cikitsā, 11/55-58.

कासचिकित्सायां रास्नाघृतम्

Caraka Samhitā, Cikitsā, 18-43/46.

रास्नाघृतम्

विधिः

द्रोणेषां साधयेद्रास्नां दशमूलीं शतावरीम् ।

पलिकां मणिकांशांस्तु कुलत्थधान्यबदरान्धवान् ॥

तुलार्धं चाजमांसस्य पादशेषेण तेन च ।

सिद्धं तद्दशभिः कल्कैर्नस्यपानानुवासनैः ।

प्रयोगाः

समीक्ष्य वातरोगेषु यथावस्थं प्रयोजयेत् ॥

पञ्चकासान् शिरःकम्पं शूलं वङ्क्षणयोनिजम् ।

कासे रास्नाघृतम्

घृताढकं समक्षीरं जीवनीयैः पलोन्मितैः ॥

सर्वाङ्गैकाङ्गरोगांश्च सप्लीहोर्ध्वानिलाञ्जयेत् ॥

Caraka Samhitā, Cikitsā, 18-43/46.

वातव्याधिचिकित्सायां रास्नातैलम्

रास्नासहस्रनिर्यूहे तैलद्रोणं विपाचयेत् ।

गन्धैर्हैमवते पिष्टैरेलाद्यैश्चानिलार्तिनुत् ॥

Caraka Samhitā, Cikitsā, 28-165.

राजयक्ष्मरोगे रास्नाघृतम्

भक्तस्योपरि मध्ये वा यथा ह्यभ्यवचारितम् ।

रास्नाघृतं वा सक्षीरं सक्षीरं वा बलाघृतम् ॥

Caraka Samhitā, Cikitsā, 8-94.

शिरःशूले रास्नादितैलम्

रास्नास्थिरादिभिः सिद्धं सक्षीरं नस्यमर्त्तिनुत् ।

तैलं रास्नाद्विकाकोलीशर्कराभिरथापि वा ॥

Caraka Samhitā, Cikitsā, 26-160.

सर्वाङ्गतवाते रास्नादिक्वाथः

रास्नापुनर्नवाशुण्ठीगुडूच्येरण्डजं शृतम् ।

सप्तधातुगते वाते सामे सर्वाङ्गेऽपि चेत् ॥

Bhāvaprakāśa, Vātavyādhyaadhikāra, 24-342.

रास्ना

‘अथ रास्ना भृङ्गपत्रा पाषाणादौ प्रजायते ।

गिरौ च लघुरास्ना स्यात् ततो हीनगुणा स्मृता ॥

सुगन्धमूला,

एलापर्णी.... ।’

Śivadatta.

‘रास्ना

वातहरणाम् ।

रास्नाऽगुरुणी शीतापनयनप्रलेपानाम् ।’

Caraka Samhitā, Sūtra, 25.

वातरक्ते

रास्नागुडूचीचतुरङ्गुलानामेरण्डतैलेन पिबेत् कषायम् ।

सर्पिषा वटिकां कृत्वा खादेद् वा गृध्रसीहराम् ॥

Vṛndamādhava, 22-53.

Baṅgsena, Vātavyādhī, 598.

Bhāvaprakāśa, Cikitsā, 24-283

आमवाते

रास्ना गुडूचीमेरण्डं देवदारु महौषधम् ।

पिबेत् सर्वाङ्गे वाते सामे सन्ध्यस्थिमज्जगे ॥

Vṛndamādhava, 25-6.

रास्नामृतारग्वधदेवदारुत्रिकण्टकैरण्डपुनर्नवानाम् ।

क्राथं पिबेन्नागचूर्णमिश्रं जङ्घोरुजानुत्रिकपृष्ठशूली ॥

Vṛndamādhava, 25-7.

गृध्रस्यां रास्नागुग्गुलुः

‘रास्नायास्तु पलञ्चैकं कर्षान् पञ्च च गुग्गुलोः ।

सर्पिषा वटिकां कृत्वा खादेद्वा गृध्रसीहराम् ॥’

Vṛndamādhava, 22-53.

Baṅgasena, Vāta, 598.

Cakradatta, Vātavṛyādhi cikitsā.

वातव्याधौ

रास्नासहस्रनिर्यूहे तैलद्रोणं विपाचयेत् ।

गन्धर्वैरवते पिष्टैः एलान्तैश्चानिलार्त्तिनुत् ॥

Caraka Samhitā, Cikitsā, 28.

अर्शःसु

‘रास्नापिण्डैः सुखोष्णैर्वा....स्वेदयेत् ।’

Caraka Samhitā, Cikitsā, 14-43/44.

वातव्याधिचिकित्सायां सरास्नायोगाः

रास्नासप्तकक्राथः

रास्नाऽमृताऽऽरग्वधदेवदारुत्रिकण्टकैरण्डपुनर्नवानाम् ।

क्राथं पिबेन्नागरचूर्णमिश्रं जङ्घोरुपृष्ठत्रिकपार्श्वशूली ॥

Bhāvaprakāśa, Madhyakhaṇḍa, 24-144.

रास्नातैलम्

Caraka Samhitā, Cikitsā, 28-165/166; 172/175.

आमवाते

मध्यमरास्नादिऽऽक्राथः महारास्नाऽऽदिक्राथः रास्नाऽऽदिदशमूलक्राथः

Bhāvaprakāśa, Madhyakhaṇḍa, 26-131/144.

आमवाते चिकित्सायां रास्नाक्राथयोगाः

रास्नापञ्चकम् । रास्नासप्तकम् ।

Cakradatta, Āmavāta cikitsā, 25/7-8.

वातिकचर्मदले

‘रास्ना सुगन्धा नाकुलीति कल्कः स्तनालेपः ।’

Kāśyapa Samhitā, p. 333.

RASONA

Botanical name : *Allium sativa* Linn.

Family : Liliaceae

Classical name : Rasona

Sanskrit names

Rasona, Laśuna, Yavaneṣṭa, Ugragandhā.

Regional names

Lahsun (Hindi); Rashun (Beng.); Lasuna (Mar.); Lasan (Guj.); Lahasan (Ma.); Thum (Punj., Sindh.); Suma, Phum (Punj., Sindh.); Sir (Pers.); Garlic (Eng.).

Description

Glabrous, bulbous herb with pungent odour. Leaves radical, sometimes sheathing the scape. Scapes erect bearing a terminal umbel of small flowers surrounded by an involucre of 2 or 3 thin, membranous bracts sometimes united to form a spathe; perianth bell shaped or rotate, 6 parted; stamens 6 at the base of the segments; ovary 3-celled, 3-angled; style straight; stigma minute, terminal; ovules, few. Capsules 3-valved; seeds 1 to 2 in. each cell 5 black. Bulbils Bulb covered with white or light pinkish papery layer or covering, consisting 5-12 bulbils or cloves.

Distribution

Plant is cultivated widely throughout the country. It is found in Jammu and Kashmir, Uttar Pradesh and several other provinces for producing (compound bulbs with bulbils) bulbs as a common crop.

Chemical composition

Bulb (bulbils) contains an yellow volatile oil (on steam distillation) consisting sulphur organic compounds; it also contains starch, mucilaginous matter, albumin; and (in lesser quantity) calcium, iron, vitamin C and other constituents.

Pharmacodynamics

Rasa	: Kaṭu (pradhāna-chief or dominating taste); pañcarasa-amla rahita (five tastes excepting amla sour) viz. Root-Kaṭu, leaves-tikta, salk-kaṣāya, salk-top (nālāgra)-lavaṇa, seeds-madhura.
Guṇa	: Snigdha, tīkṣṇa, picchīla, guru, sara
Vīrya	: Uṣṇa

Vipāka : Kaṭu

Doṣakarma : Vātakaphaśāmaka

Properties and action

Karma : Vedanāsthāpana

Vātaghna

Uttejaka

Mastiṣkanāḍibalya

Raktotkleśaka

Śothahara

Viṣaghna

Kaphaghna-kaphaniḥsāraka

Raktapittajanana

Dīpana-pācana-anulomana

Śūlapraśamana

Kṛmighna

Yakṛduttejaka

Hṛdayottejaka

Mūtrajanana

Śukrājanana

Ārtavajanana

Rasāyana

Sandhānīya

Kuṣṭthaghna

Kothapraśamana

Svedajanana-jvaraghna

Cakṣuṣya.

Roga : Vātavyādhi

Sandhivāta-gr̥dhrasi-ardita-

manyāstambha

Śothavedanāyukta vikāra

Pārśvaśūla

Carmavikāra-dadru

Viṣākta kīṭa daṁśa

Karṇaśūla

Mastiṣka nāḍibalya

Dr̥ṣṭimāndya

Rājayakṣmā-kṣaya

Kāsa-śvāsa-yakṣmā-jīrṇakāsa-

svarabheda

Jivāṇuniṣūdana
 Agnimāndya-aruci-ajīrṇa-vibandha
 Gulma-udaravikāra-śūla
 Kṛmi
 Hṛdroga-hṛdvikṛtjanya śoṭha
 Śukradourbalya
 Kaṣṭārtava
 Asthibhagna
 Jvara-jīrṇajvara.

Therapeutic uses

The drug Rasona is anthelmintic, aphrodisiac, cardiac stimulant, carminative, diuretic, expectorant, emmenagogue and stimulant. It is used in anorexia, cough, consumption; leucoderma, piles, skin diseases and diseases of vocal cords.

The drug is much used for cardiac disorders, chronic fever, gout, mental retardation, ossification of fractured bones, poor eye sight and sciatica.

Rasona is vedanāsthāpana (analgesic); uttejaka (stimulant) and vātahara drug; it is allaying provoked vāta and kapha humors (doṣa). It is appreciated as rasāyana and medhya specially increasing or promoting functional power of indriya (sensory organs) and vision (dṛṣṭi) in particular.

Externally it is applied to in the diseases of sciatica, rheumatism, gout, arthritis, paralysis and other various ailments characterised by swelling and pain in effected organs or body parts.

It is topically used in ringworm and other skin diseases. In chest pain, it the paste or juice is applied, it is also pasted over poisonous insect bites. The juice or oil (cooked with drug) is used in earache.

Rasona is much used orally as a drug as well as vegetable and spicy condiment, frying item of pungent and intense odorous (unpleasant) spice of culinary purpose (utilised green and dried both).

Rasona is internally administered as a single drug and a major ingredient of several formulations and recipes recommended in a number of diseases. The drug is effec-

tive in several diseases of nervous, circulatory, respiratory, urinary, reproductive and digestive systems and whole body. Rasona is a major rasāyana drug used in geriatrics.

Parts used : Bulbils-Tubers, Oil

Dose : Paste 3-5 gm. Oil 1-2 drops.

Formulations

Laśunādi vaṭī, Laśunāṣṭaka vaṭī-yoga, Rasonāṣṭaka yoga, Rasona vaṭī, Rasonādi kaṣāya, Rasona piṇḍa, Laśunādyā ghr̥ta, Rasona piṇḍa, Laśuna taila, Rasona vaṭaka.

RASONA (रसोन)

लशुनः कटुकः पाके रसे स्निग्धो गुरुः सरः ॥

तीक्ष्णोष्णो मधुरो वृष्यो हृद्यो बृंहणपाचनः ।

पित्तास्रबलमेधाग्निवर्णकेशस्वराग्निकृत् ॥

भग्नसन्धानकृद् हन्यात् कफवातारुचिकृमीन् ।

हिक्काकासज्वरश्वासकुष्ठमेहामपीनसान् ॥

श्वित्राशोर्गुल्महृद्रोगशूलशोफान् रसायनम् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1219-1222.

लशुनोत्पत्तिः

यदाऽमृतं वैनतेयो जहार सुरसत्तमात् ।

तदा ततोऽपतद् बिन्दुः स रसनोऽभवद् भुवि ॥

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 218.

रसनस्य निरुक्तिः

पञ्चभिश्च रसैर्युक्तो रसेनाम्लेन वर्जितः ।

तस्माद्रसेन इत्युक्तो द्रव्याणां गुणवेदिभिः ॥

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 219.

लशुने रसस्थानानि

कटुकाश्चापि मूलेषु तिक्तः पत्रेषु संस्थितः ।

नाले कषाय उद्दिष्टो नालाग्रे लवणः स्सृतः ॥

बीजे तु मधुरः प्रोक्तो रसस्तद्गुणवेदिभिः ।

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 220.

लशुनगुणाः

रसोनो बृंहणो वृष्यः स्निग्धोष्णः पाचनः सरः ।

रसे पाके च कटुकस्तीक्ष्णो मधुरको मतः ॥

भग्नसन्धानकृत्कण्ठ्यो गुरुः पित्तास्रवृद्धिदः ।

बलवर्णकरो मेधाहितो नेत्र्यो रसायनः ॥

हृद्रोगजीर्णज्वरकुक्षिशूल-विबन्धगुल्मारुचिकासशोफान् ।

दुर्नामकुष्ठानलसादजन्तु-समीरणश्वासकफांश्च हन्ति ॥

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 221-223.

लशुनसेविनां हिताहितपदार्थाः

मद्यं मांसं तथाऽम्लञ्च हितं लशुनसेविनाम् ।

व्यायाममातपं रोषमतिमीरं पयो गुडम् ॥

रसोनमश्नन् पुरुषस्त्यजेदेतान् निरन्तरम् ।

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 224-225.

सर्ववातरोगे रसोनकल्कम्

युक्तः कल्को रसोनस्य तिलतैलेन सिन्धुना ।

वातरोगान्हरेत्सर्वान्ज्वरांश्च विषमानपि ॥

Bhāvaprakāśa, Madhyakhanda, 24-343.

वातव्याधिचिकित्सायां रसोनाष्टकयोगः

Bhāvaprakāśa, Madhyakhanda, 24-348/358.

क. रसोनः

रसोनोऽम्लरसोनः स्यात् गुरूष्णः कफवातनुत् ।

अरुचिक्रिमिहृद्रोगशोषघ्नश्च रसायनः ॥

Rāja Nighaṇṭu, Mūlakādi varga, 50.

ख. श्वेतरसोनः

रसोन उष्णः कटुपिच्छिलश्च स्निग्धो गुरुः स्वादुरसोऽतिबल्यः ।

वृष्यश्च मेधास्वरवर्णचक्षुर्भग्नस्थिसन्धानकरः सुतीक्ष्णः ॥

Rāja Nighaṇṭu, Mūlakādi varga, 51.

कृमिकुष्ठकिलासघ्नो वातघ्नो गुल्मनाशनः ।

स्निग्ध उष्णश्च वृष्यश्च लशुनः कटुको मतः ॥

Caraka Samhitā, Sūtra, 27.

स्निग्धोष्णतीक्ष्णः कटुपिच्छिलश्च गुरुः सरः स्वादुरसश्च बल्यः ।

वृष्यश्च मेधास्वरवर्णचक्षुर्भग्नस्थिसन्धानकरो रसोनः ॥

हृद्रोगजीर्णज्वरकुक्षिशूलविबन्धगुल्मारुचिकासशोथान् ।
दुर्नामकुष्ठानलसादजन्तुसमीरणश्वासकफांश्च हन्ति ॥

Suśruta Samhitā, Sūtra, 46.

लशुनक्षीरम्

साधयेच्छुद्धशुष्कस्य लशुनस्य चतुष्पलम् ।
क्षीरोदकेऽष्टगुणिते क्षीरशेषं च ना पिबेत् ॥
वातगुल्ममुदावर्तं गृध्रसीं विषमज्वरम् ।
हृद्रोगं विद्रधिं शोथं साधयत्याशु तत्पयः ॥

Caraka Samhitā, Cikitsā, 5-94/95.

अपस्मारे (अतत्त्वाभिनिवेशे) लशुनतैलम्

(अन्य एकोषधियोगसहितः)

प्रयुज्यातैललशुनं पयसा वा शतावरीम् ।
ब्राह्मीरसं कुष्ठरसं वचां वा मधुसंयुताम् ॥

Caraka Samhitā, Cikitsā, 10-64.

लशुनमुद्ग (स्वरस) योगः कफजप्रतिश्याये

लशुनं मुद्गचूर्णेन व्योषक्षारघृतैर्युतम् ।
देयं कफघ्नवमनमुत्क्लिष्टश्लेष्मणे हितम् ॥

Caraka Samhitā, Cikitsā, 26-149.

वातविकारे लशुनतैलम्

‘लशुन स्वरसे सिद्धं तैलमेभिश्च वातनुत् ।’

Caraka Samhitā, Cikitsā, 28-177.

विषमज्वरे लशुन-तिलतैलम् (आहारकल्पना)

रसोनस्य सतैलस्य प्राग्भक्तमुपसेवनम् ॥
मेघानामुष्णवीर्याणामामिषाणां च भक्षणम् ।

Caraka Samhitā, Cikitsā, 3-304/305.

तिलतैललवणयुक्तः कल्को लशुनस्य सेवितः प्रातः ।

विषमज्वरमपहरते वातव्याधीनशेषांश्च ॥

Bhāvaprakāśa, Jvarādhikāra, 1/752.

आमवाते रसोनादिकषायः

‘रसोनविश्वनिर्गुण्डीकाथमामार्दितः ।’

Bhāvaprakāśa, Madhyakhaṇḍa, 26-39.

आमवाते रसोनपिण्डम्

Bhāvaprakāśa, Āmavātādhikāra, 26-108/112.

वातव्याधौ

‘लशुनः प्रभञ्जनम्।’

Aṣṭāṅga Hṛdaya, Uttara, 40-52.

वातरोगाणां विनाशाय रसोनतैलम्

रसोनकल्कस्वरसेन पक्वं तैलं पिबेत् यस्त्वनिलामयार्तः।

तस्याशु नश्यन्ति च वातरोगा ग्रन्था विशाला इव दुर्गृहीताः॥

Vṛndamādhava, 22-152.

Cakradatta, Vātavyādhi cikitsā, 22-149.

आमवाते रसोनसुरा

Cakradatta, Āmavāta cikitsā, 25/71-73.

वातकफजनितशूले रसोनप्रयोगः

रसोनं मद्यसम्मिश्रं पिबेत् प्रातः प्रकाङ्क्षितः।

वातश्लेष्मभवं शूलं निहन्ति वह्निदीपनम्॥

Cakradatta, Śūla cikitsā, 26-64.

गुल्मचिकित्सायां रसोनसाधितक्षीरम्

Cakradatta, Gulmā cikitsā, 30/10-11.

लशुनक्षीरम्

Caraka Saṁhitā, Cikitsā, 5-94/95.

Āṣṭāṅga Hṛdaya, Cikitsā, 14-45/46.

प्लीहारोगे रसोनकल्कः

लशुनं पिप्पलीमूलमभयाञ्चैव भक्षयेत्।

पिबेद्गोमूत्रगण्डूषं प्लीहारोग(विमुक्तये)प्रशान्तये॥

Vṛndamādhava, 37-48.

Cakradatta, Plīhayakṛcchikitsā, 38-10.

व्रणक्रिमिनाशाय रसोनकल्कप्रलेपः

‘लशुनेनाथवा दद्याल्लेपनं क्रिमिनाशनम्।’

Cakradatta, Vraṇaśoṭha cikitsā, 44-67.

विषमज्वरे

‘शीतिकां कम्पबहुलां नाशयेत्लशुनं तथा।’

Vaidya Manoramā, 1-18.

रसोनस्य सतैलस्य प्राग्भक्तमुपसेवनम्।

प्रातः प्रातः ससर्पिष्कं रसोनमुपयोजयेत्॥

Suśruta Saṁhitā, Uttara, 39-213.

Bhāvaprakāśa, Cikitsā, 1-752.

Vṛndamādhava, 1-231.

वातव्याधौ

‘रसोनकल्कः वातरोगादौ ।’

Śārṅgadharma Samhitā, 2-5-7.

हिक्काश्वासयोः

लशुनस्य पलाण्डोर्वा मूलं गुञ्जनकस्य वा ।

नावयेच्चन्दनं वापि नारीक्षीरेण संयुतम् ॥

Caraka Samhitā, Cikitsā, 17-131.

Aṣṭāṅga Hṛdaya, Cikitsā, 4-46.

शूले

रसोनं मद्यसम्मिश्रं पिबेत् प्रातः प्रकाङ्क्षितः ।

वातश्लेष्मभवं शूलं निहन्तुं वह्निदीपनम् ॥

Vṛndamādhava, 26-50.

क्षये

रसोनयोगं विधिवत् क्षयार्तः क्षीरेण वा नागबलाप्रयोगम् ।

सेवेत वा मागधिकाविधानं तथोपयोगं जतुनोऽश्मजस्य ॥

Suśruta Samhitā, Uttara, 41-57.

शूले

रसोनं मद्यसम्मिश्रं पिबेत् प्रातः प्रकाङ्क्षितः ।

वातश्लेष्मभवं शूलं निहन्तुं वह्निदीपनम् ॥

Vṛndamādhava, 26-57.

वातव्याधौ

सर्वञ्चावरणपित्तरक्तसंसर्गवर्जितम् ।

रसायनविधानेन लशुनो हन्ति शीलितः ॥

Aṣṭāṅga Hṛdaya, Cikitsā, 22-70.

वातरोगे

पिष्टा सुसूक्ष्मं लशुनस्य कन्दं घृतेन लिह्याद् घृतभोजनाशी ।

तस्य प्रणश्यन्ति हि वातरोगाः संस्कारहीनात् पुरुषादिकाथः ॥

Bāṅgasena, Vāta, 48..

वातव्याधौ

‘रसोनं घृततैलाभ्यां पिबेद् वाऽप्यर्दितापहम् ।’

Bāṅgasena, Vātavṛyādhi, 48.

रसोनप्रयोगः

Bhāvavaprakāśa, Cikitsā, 24-343/347.

रसोनाष्टकम्

Bhāvaprakāśa, Cikitsā, 24-348/359.

आमवाते

रसोनसुरा

Cakradatta, 25-71/72.

हनुस्तम्भे

रसोनवटकः

Bhāvaprakāśa, Cikitsā, 24/29-30.

निष्कुल्य लशुनं सम्यक् सङ्क्षुद्य तिलतैलवत् ।

सैन्धवान्वितं खादेत धनुस्तम्भार्दितनरः ॥

Bhāvaprakāśa, Cikitsā, 24, 28.

कर्णरोगे

लशुनार्द्रकशिग्रूणां मुरङ्गया मूलकस्य च ।

कदल्याः स्वरसः श्रेष्ठः कदुष्णः कर्णपूरेणे ॥

Suśruta Saṁhitā, Uttara, 21-17.

Vṛndamādhava, 59-3.

क्रिमिजुष्टे व्रणे

‘लशुनेनाथवा दद्याल्लेपनं क्रिमिनाशनम् ।’

Vṛndamādhava, 44-46.

रसायने

लशुनानां पलं नित्यं पले द्वे वा घृतस्य तु ।

मधुनः किञ्चिदेव स्यात्तल्लीद्वाऽनु पिबेत् पयः ॥

संवत्सरमजीर्णान्ते भुञ्जीत पायसौदनम् ।

सोऽपि सर्वरुजाहीनः शतवर्षाणि जीवति ॥

Kāśyapa Saṁhitā, p. 179.

रसायने लशुनकल्पः

Gadanigraha, 8-2-211/243.

रसायनार्थं प्रयोगः रसोनरसायनम्

Aṣṭāṅga Saṅgraha, Uttara, 49-101/134.

Aṣṭāṅga Hṛdaya, Uttara, 39-111/130.

योनिव्यापदि

प्रातः प्रातर्निषेवेत रसोन दुद्धृतं रसम् ।

क्षीरमांसरसप्रायमाहारं विदधीत च ॥

Suśruta Saṁhitā, Uttara, 38-28.

विसूचिकायाम्

लशुनादिवटी

Vaidya jīvanam, 4-13.

उन्मादापस्मारयोः

लशुनाद्यं घृतम्

Caraka Samhitā, Cikitsā, 9-49/56.

आमवातरोगे

‘रसोनविश्वनिर्गुण्डीक्वाथमामार्दितः पिबेत् ।’

Bhāvaprakāśa, Cikitsā, 26-39.

स्तन्यवृद्धये

‘लशुनानां पलाण्डूनां सेवनं.....क्षीरवर्धनम् ।’

Kāśyapa Samhitā, p. 8.

ROHIṢA

Botanical name

Cymbopogon martinii (Roxb.) Wats.

syn. *Andropogon martinii* Roxb.

Family : Poaceae (Graminae)

Classical name : Rohisa

Sanskrit names

Rohiṣa, Kāṭṛṇa, Sougandhika, Bhūtika, Dhyāmaka, Dhūpagandhika, Kutṛṇa, Bhūstrṇa, Devajagdha, Devadagdha, Mudgala, Pouṭa.

Regional names

Rusaghas, Mirchagandh, Motiaghas (Hindi); Agiyaghas (Beng.); Rohisa navat (Mar.); Ronsado (Guj.); Rusa grass, Palmrosa (Eng.).

Description

Robust, tufted, perennial, sweet-scented grass upto 2 meters tall; lower nodes often swollen. Leaves 40.0 × 2.5 cm., lanceolate or linear-lanceolate, semi-amplexicaul or rounded-cordate at base; ligule up to 5 mm. long, oblong; membranous.

Inflorescence usually more than 23 cm. long, false decompound panicle, spathe up to 6 cm. long, spatheole 2

cm. long, containing 3-6 spikelets. Sessile spikelets upto 5 mm. long, ovate or ovate-oblong; lower glume ovate-oblong, obtuse, often emarginate-notched, 2-nerved towards apex; upper glume lanceolate, acute, keel winged, serrulate above middle, lower lemma empty nerveless, ciliate, awned, epaleate. Pedicelled spikelets staminate, pedicel upto 1 cm. long; lower glume lanceolate-oblong, obtuse; upper glume 3-nerved; lemma hyaline, epaleate.

Flowering and fruiting time

Plant flowers and fruits in February-May or springs to summers.

Distribution

Plant occurs in Indomallesian regions. It is occasional in open country and on ridges in drier regions of India specially Uttar Pradesh, Punjab, Rajasthan, Bihar, Maharastra and southern India.

Chemical composition

Plant yields Palmrosa oil, also known as Rusa oil (or East Indian Geranium oil); the oil is obtained from the stem, leaves and flowers (by distillation in crude directfired stills). It is an important aromatic oil.

The principal constituent of palmrosa oil is geraniol, both free and in ester combination with acetic and caproic acids. other constituents are dipentene, traces of methyl heptanone and farnesol. The best grade of palmrose oil with a total geraniol content of 90-95% which varies in case of different samples of Palmrosa grass.

The constants of the average Indian oil, steam-distilled Indian oil are : acid valency 0.3.0, 0.41 and ester val. 12-18 and the total geraniol is 78-94 per cent.

Pharmacodynamics

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma

Properties and action

Karma	: Stanyajanana Raktotkleśaka-vedanāsthāpana

	Rocana-dīpana-pācana-anulomana
	Kṛmighna
	Hṛdayottejaka-raktaśodhaka
	Kaphaniḥsāraka
	Mūtrajanana
	Svedajanana
	Jvaraghna.
Roga	: Stanyakṣaya
	Āmavāta-carmaroga-khālitya
	Aruci-agnimāndya-ajīrṇa
	Viśucikā-śūla
	Kṛmiroga
	Hṛddourbalya-vātarakta-raktavikāra
	Kāsa-śvāsa-pratiśyāya
	Mūtrāghāta
	Jvara.

Therapeutic uses

The drug Rohiṣa is galactagogue (stanyajanana) that promotes generation of latex (mother milk) in mammary glands (breasts) in females who take it in case of loss of breast milk or in need for improving the function of mammary ducts in lactus formation. It is also mixed with other galactogougue drugs.

Rohiṣa is aromatic, carminative, stomachic, digestive, anthelmintic, cardiac, blood purifier, diuretic, diaphoretic, and febrifuge, expectorant, anticolic and bhūtagrahavādhāhara.

The drug is given in fever, prameha (group of urinary ailments), pīnasa (nasal disease), śīroroga (head disease), vṛścika daṁśa (scorpion-sting), cough, asthma, dyspepsia, gastro-enteritis, abdominal colic, worms, heart trouble, gout, blood diseases (impurities), viśucikā, dysuria, skin affections and some other diseases.

The leaves, stem and flowers are employed in medicine; and an oil obtained from plant is also medicinally potent. Rohiṣa taila (palmorosa oil) is mainly important perfumery carrying commercial value (largely used for adulterating altar of Roses and as a base for several perfumes and in cosmetics and chiefly in perfumed soaps).

Alongwith the sandal wood oil, it is used in ointments for warding of mosquitoes. It is used in medicine; the Rohiṣa taila (rusa grass oil) is applied as local remedy for lumbago and stiff joints and in skin diseases. It is said to be cure of baldness. It is also taken internally (in small doses), it serves as a remedy for bilious complaints.

Parts used : Stem, flowers, leaves, oil.

Dose : Decoction 50-100 ml., Oil 1-3 drops.

Group : Stanyajanana (Caraka Saṁhitā).

ROHIṢA (रोहिष)

क. कतृणं रोहिषं देवजग्धं सौगन्धिकं तथा ।
भूतिकं ध्यामपौरञ्च श्यामकं धूपगन्धिकम् ॥

ख. रोहिषं तुवरं स्निग्धं कटुपाकं व्यपोहति ।
हृत्कण्टव्याधिपित्तास्त्रशूलकासकफज्वरान् ॥

Bhāvaṇṣa Nighaṇṭu, Guḍūcyādi varga, 167-168.

कतृणम्

अ. रोहिषं शवलं पूति भूतिकं कतृणं तृणम् ।
ध्यामकं मुद्गलं पौटं श्यामकं विषगन्धिकम् ॥
दवदग्धं देवदग्धं दग्धं बिन्दुचितं वरम् ।

कतृणगुणाः

ब. कतृणं तुवरं तिक्तमुष्णं कटु विपाकतः ॥
बलासपित्तरुधिरकण्डूहृद्रोगनाशनम् ।
कृमिकासज्वरश्वासशूलाजीर्णरुचिप्रणुत् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1245-1247.

कुतृणम्

कुतृणं कतृणं भूतिभूतिकं रोहिषं तृणम् ।
श्यामकं ध्यामकं पूतिर्मुद्गलं दवदग्धकम् ॥

कुतृणगुणाः

कुतृणं दशनामाढ्यं कटुतिक्तकफापहम् ।
शस्त्रशल्यादिदोषघ्नं बालग्रहविनाशनम् ॥

Rāja Nighaṇṭu, Śālmalyādi varga, 97-98.

दीर्घरोहिषक-कुतृणभेदः

अन्यद्रोहिषकं दीर्घं दृढकाण्डो दृढच्छदम् ।
द्राघिष्ठं दीर्घनालश्च तित्तसारश्च कुत्सितम् ॥

अन्यकुतृणगुणाः

दीर्घरोहिषकं तित्तं कटूष्णं कफवातजित् ।
भूतग्रहविषघ्नश्च व्रणक्षतविरोपणम् ॥

Rāja Nighaṇṭu, Śālmalyādi varga, 99-100.

भूस्तृणः

- अ. मालातृणो गुह्यबीजो बधिरत्त्वनिबोधनः ।
छत्रातिछत्रको भूतिः सुगन्धः पुंस्त्वनाशनः ॥
भूस्तृणो गोछलः शृङ्गो रोहणो गोमयप्रियः ।
ब. भूस्तृणः कटुकस्तिक्तः तीक्ष्णोष्णो रोचनो लघुः ॥
विदाही दीपनो रूक्षो चक्षुष्यो वक्त्रशोधनः ।
अवृष्यो बहुविटकः स्यात् रक्तपित्तप्रदूषणः ॥
कृमिकासवमिश्लेष्मश्वासदद्गुविनाशनः ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1248-1250.

वृश्चिकविषे

नागपुरीषच्छत्रं रोहिषमूलं च शेलुतोयेन ।
कुर्याद् गुटिकां लेपादियमलिविषनाशनी श्रेष्ठा ॥

Aṣṭāṅga Hṛdaya, Uttara, 37-42.

प्रमेहे

धान्वन्तरघृते

Aṣṭāṅga Hṛdaya, Cikitsā, 12-21.

ज्वरे

अगुर्वादितैले

Caraka Samhitā, Cikitsā, 3-267.

कासे

मनःशिलादिधूमे ।

Caraka Samhitā, Cikitsā, 18-73.

पीनसे

घ्रेयाश्च रोहिषाजाजीचातर्कारिचोरकाः ।
त्वक्पत्रमरिचैलानां चूर्णा वा सोपकुञ्चिका ॥

Caraka Samhitā, Cikitsā, 26-138.

शिरोरोगे

सरलाकुष्ठशार्ङ्गप्यादेवकाष्ठैः सरोहिषैः ।

क्षारपिष्टैः सलवणैः सुखोष्णैर्लेपयेच्छिरः ॥

Susruta Samhitā, Uttara, 26-22.

ROHĪTAKA

Botanical name : *Tecoma undulata* G. Don.

Family : Bignoniaceae

Classical name : Rohitaka

Sanskrit names

Rohitaka-Rohitaka, Dādimapuspa, Plīghna, Rohiṇo, Dādimacchada, Rohita-Rohīta, Rakta, Raktapuspa, Raktaghna, Rohī, Rohaṇa, Raktaprasādana.

Regional names

Roherha Rangtarora (Hindi); Rohirha (Mar.); Rohirho (Guj.).

Description

Tree with rounded crown, very variable in size (according to its habitat); it is attaining, in favourable localities, large size with tall, clean and cylindrical bole, carrying its girth well up stem, but with advanced age, the stem becomes more fluted and buttressed at the base. Branchlets characteristically quadrangular and channelled.

Deciduous, ornamental shrub or a small tree; it is usually a shrub, found in small patches, but when cultivated it may grow as high as 12 meters with a girth upto 2.4 meters.

Leaves oblong or linear-oblong. Flowers pale yellow or deep orange in few flowered, corymbose racemes on short, lateral branches. Capsules slightly curved, smooth; seeds winged.

Wood (wt. 705-1,125 kg./cu.m.) greyish or yellowish brown, close-grained and mottled with light streaks and tough, strong and durable; heartwood contains a good amount of lapachol (toxic and with fungus - and termite

resisting properties of wood). Tree trunk exudes a brownish white gum or brown gum.

Flowering and fruiting time

April and onwards.

Distribution

Trees are grown in gardens in North India for its handsome deep-orange flowers; also planted along the road-sides and in parks, and compounds of public buildings. It occurs in the drier parts of North-west and western India extending eastwards to the river Yamuna and ascending to 1,200 meters.

It is very hardy and resistant to drought and is used for afforestation and landscaping of dry tracts. Tree is propagated from seeds or cuttings and succeeds well in well-drained fibrous loam. It requires plenty of water in summer season.

Plant occurs wild or found in planted state. It is scatteredly growing in natural state in Rajasthan, Punjab areas (Haryana) adjacent to Rajasthan. Kathiawar and Kutch in Gujarat, Deccan and other provinces in country.

Chemical composition

Bark contains an active principle tecomin and bark exudes gum. It also contains tannin.

Kinds and varieties

There are some other plants which are referred as substitutes, adulterants and kinds of Rohitaka such as *Aphanamixis polystachya* (Wall.) Parker. syn. *Amoora rohituka* Wt. & Arn. (Meliaceae), *Rhamus wightii* W. & A. (Rhamnaceae) and *Chloroxylon swietenia* DC. Willd. (Rutaceae) and *Polygonum glabrum* (Polygonaceae).

Pharmacodynamics

Rasa	: Kaṭu, tikta, kaṣāya
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarman	: Kaphapittaśāma

Properties and action

Karma	: Plīhaghna-plīhasaṅkocaka-

pittasrāvakara
 Dīpana-anulomana
 Kṛmighna
 Hṛdya-raktaśodhaka-
 raktaprasādana
 Mūtrasaṅgrahaṇīya
 Yonisrāvarodhaka
 Lekhana-viṣaghna
 Vraṇaropaṇa
 Cakṣuṣya
 Medohara

Roga : Plihāvṛddhi-pliharoga
 Yakṛtvikāra-yakṛtplihodara
 Kāmalā-pāṇḍu
 Raktavikāra-upadaṁśa-phiraṅga-
 vātarakta
 Prameha (kaphapaittika prameha)
 Pradara-śvetapradara-asṛgdara
 Medoroga
 Viṣa
 Agnimāndya-gulma-udararoga
 Arśa
 Kṛmiroga
 Netraroga
 Vraṇa.

Therapeutic uses

The drug Rohitaka is astringent, and it is used in gastro-intestinal disorders and liver and spleen diseases. The drug is very useful in liver and splenic disorders as Rohitaka chiefly acts on spleen and liver functions and cures morbidity of pathological manifestation; it is also effective in allied diseases and other ailing conditions.

Rohitaka is recommended in the enlargement of liver and spleen, abdominal disorders, gulma (lump in abdominal region), loss of gastric power, dyspepsia, jaundice (Kāmalā), anaemia (pāṇḍu), piles (arśa) worms (kṛmi), blood diseases or impurities, syphilis, soft chancre, gout, prameha (kapha pitta urinary anomalies),

leucorrhoea (śveta pradara), obesity (medoroga), poisoning and toxic effects (viṣa) and kuṣṭha roga (skin diseases).

The bark is employed in some important pharmaceutical preparations which are much used in practice of Indian medicine, Rohitakāriṣṭa is a prominent compound formulation prescribed mainly in the management of liver, spleen, blood and abdominal disorders. It has been reported that the bark of young branches is employed for the treatment of syphilis and eczema. Preliminary investigations have shown that the bark possesses mild relaxant, cardiotoxic, and choleric activities.

Leaves of Rohitaka are also utilised as cattle fodder.

Parts used : Bark

Dose : Powder 1-3 gm., Decoction 50-100 ml.

Formulations

Rohitakāriṣṭa, Rohitakādyā cūrṇa, Rohitaka ghr̥ta, Rohitaka louha, Mahārohitaka ghr̥ta, Rohitaka kvātha.

ROHĪTAKA (रोहीतक)

क. रोहीतको रोहितको रोही दाडिमपुष्पकः ।

ख. रोहीतकः प्लीहघाती रुच्यो रक्तप्रसादनः ।

Bhāvaprakāśa Nighaṇṭu, Vatādi varga, 35.

रोहीतकः

रोहीतो रोहितो रक्तः रक्तपुष्पः कुशाल्मलिः ।

रोहिणो रोचनो रोही रक्तघ्नः कूटशाल्मलिः ।

प्लीहघ्नः दाडिमीपुष्पो रोहणः पारिजातकः ।

रोहीतकगुणाः

रोहितकः कटुस्तिक्तः सरोष्णः कफवातनुत् ॥

प्लीहोदरयकृतगुल्ममांसभेदो विषापहः ।

भूतानाहविबन्धास्त्रकफशूलरुजापहः ॥

(प्लीघ्नं नाशयेद्रोही स्तन्यो रक्तप्रसादनः ।

कर्णकासामयं हन्यात् सर्वव्रणनिषूदनः ॥)

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 914-916.

रोहीतकः (शाल्मलीविशेषः)

रोहीतको रोहितकश्च रोहितः कुशाल्मलिदाडिमपुष्पसंज्ञकः ।

सदाप्रसूनः स च कूटशाल्मलिर्विरोचनः शाल्मलिको नवाह्वयः ॥

सप्ताहः श्वेतरोहितः सितपुष्पः सिताह्वयः ।

शिताङ्गः शुक्लरोहतो लक्ष्मीवान् जनवल्लभः ॥

Rāja Nighaṇṭu, Śālmalyādi varga, 14-15.

रोहीतकगुणाः

रोहितको कटुस्निग्धो कषायौ च सुशीतलौ ।

क्रिमिदोषव्रणप्लीहरक्तनेत्रामयापहौ ॥

Rāja Nighaṇṭu, Śālmalyādi varga, 16.

श्वेतप्रदरे

‘रोहीतकान्मूलकल्कं पाण्डुरेऽसृगदरे पिबेत् ।’

Caraka Saṁhitā, Cikitsā, 30-116.

Vṛndamādhava, 63-3.

प्लीहरोगे रोहीतकक्राथयोगः

‘रोहीतकाभयाक्राथः कणाक्षारसमन्वितः ।’

Cakradatta, 38-4.

प्लीहोदरचिकित्सायां रोहीतकाभयाप्रयोगाः

रोहीतकाभयाक्षोदभावितं मूत्रमम्बु वा ।

पीतं सर्वोदरप्लीहमेहार्शः क्रिमिगुल्मनुत् ॥

Cakradatta, 38-13.

Vṛndamādhava, 37-51.

प्लीहयकृच्चिकित्सायां रोहतकघृतम्

क. रोहतकत्वचः श्रेष्ठाः पलानां पञ्चविंशतिः ।

कोलद्विप्रस्थसंयुक्तं कषायमुपकल्पयेत् ॥

पलिकैः पञ्चकोलैश्च तैः सर्वैश्चापि तुल्यया ।

रोहीतकत्वचा पिष्टैर्धृतप्रस्थं विपाचयेत् ॥

ख. प्लीहाभिवृद्धिं शमयेदतदाशु प्रयोजितम् ।

तथा गुल्मज्वरश्वासक्रिमिपाण्डुत्वकामलाः ॥

Cakradatta, Plāhayakṛccikitsā, 38/38-40.

यकृत्प्लीहरोगे महारोहीतकघृतम्

Cakradatta, Plāhayakṛccikitsā, 38/41-48.

पाण्डुप्रदररोगे रोहीतकमूलप्रयोगः

‘रोहीतकान्मूलकल्कं पाण्डुरेऽसृग्दरे पिबेत् ।’

Cakradatta, Asṛgdara cikitsā, 3.

प्रमेहे

कम्पिल्लसप्तच्छदशालजानि वैभीतकरौहीतककौटजानि ।

कपित्थपुष्पाणि च चूर्णितानि क्षौद्रेण लिह्यात् कफपित्तप्रमेही ॥

Caraka Samhitā, Cikitsā, 6-35.

कुष्ठे

खदिरावद्याककुभरोहीतकलोध्रकुटजधवनिम्बाः ।

सप्तच्छदकरवीराः शस्यन्ते स्नानपानेषु ॥

Caraka Samhitā, Cikitsā, 7-129.

यकृत्प्लीहोदरे

रोहीतकलतानां तु काण्डकानभयाजले ।

मूत्रे वा सुनुयात्तच्च सप्तरात्रस्थितं पिबेत् ॥

कामलागुल्ममेहार्शः प्लीहसर्वोदरक्रिमीन् ।

स हन्याज्जाङ्गलसौजीर्णे स्याच्चात्र भोजनम् ॥

Caraka Samhitā, Cikitsā, 13-81/82.

Aṣṭāṅga Hṛdaya, Cikitsā, 15-91/92.

‘रोहीतकश्चापि यकृद्विकारे स्याद् विद्रधीनां वरुणः प्रशस्तः ।’

Cikitsākrama Kālpavallī, 321.

रोहीतकघृतम्

Caraka Samhitā, Cikitsā, 13-85.

RUDANTI

Botanical name : Capparis moonii Wight.

Family : Capparidaceae

Classical name : Rudanti

Sanskrit name : Rudanti

Regional name : Rudanti (Hindi)

Description

Large woody, thorny and climbing shrub. Leaves 3-6 in long, 1.5-2.5 in. broad, leathery. Flowers white, 6-12 fls. together in spike. Fruit 2-4 in. diam, brown or red colour, often round-shape; seeds bean-like, many (in number).

Distribution

Plant occurs in seacoastal region in western India.

Kinds and varieties

Another species *Capparis roxburghii* Dc. is found and similar to the plant drug. Two plants are referred in context of Rudanti viz. *Capparis moonii* Wight and *Cressa certica* Linn. (which is also sometimes confused or named as Rudravanti) belonging to family Convolvulaceae. In Uttar Pradesh hilly region, Rudravanti is *Astragalus candolleanus* Royle ex Benth. (syn. *Astragalus anomallus* Bunge). Rudanti (Rāja Nighaṇṭu, 5-15) and Rudantikā (Rasendra cūḍāmaṇi, 6-17) are synonymous to the drug Rudantī. Though Rudantī and Rudravanti are named to two different plants, but the term 'Rudravanti' is also referred by Narahari (in Rāja Nighaṇṭu, op. cit.) in the context of Rudanti while explaining the drug in question.

Cressa cretica Linn (Convolvulaceae) a small herb occurring throughout India (tropics and subtropics). It is known as Rudravanti, Rudanti (Hindi and Bengla), Khardi, Chavel (Marathi), Una (Gujarat) and Uppu sonaga (Telugu) in different regions of country. Plant drug is alterative, stomachic, tonic and aphrodisiac properties including its sour unpleasant taste. Rudantika or Rudantī also belongs to category of divine herbs 'divyauśadhi' as mentioned in Rasasāstra of Indian medicine (Rasendra cūḍāmaṇi, op. cit.).

Pharmacodynamics

Rasa	: Kaṣāya, tiktā
Guṇa	: Laghu, tīkṣṇa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣahara

Properties and action

Karma	: Śothahara
	Kāśaghna
	Śvāsaghna
	Rasāyana
Roga	: Śoṭha

Kāsa
 Śvāsa
 Tridoṣaja vikāra
 Rājayakṣmā
 Kṣaya-śoṣa.

Therapeutic uses

The drug Rudantī is śothahara or anti-inflammatory and it is antiasthmatic (śvāsahara) and expectorant (kāсахara); and rasāyana (alterative and restorative). It allays provocation of vāta, pitta and kapha humors.

The fruits of plant are used as Rudantī drug. Fruits (rudanti phala) are mainly recommended in treatment of consumption, tuberculosis, cough, asthma and bronchitis; it is specifically useful in pulmonary tuberculosis. It is taken as a rasāyana drug.

Parts used : Fruits.

Dose : Powder 3-6 gm.

RUDANTI (रुदन्ती)

क. रुदन्तिका

क. दिव्यौषधिविशेषरुदन्ती, तल्लक्षणम्—‘चणच्छदाकारदला दला प्रगलज्जला सा सुरतीति दिष्टा । रसायनी सैव रुदन्तिकालख्या वध्नाति सुतं खलु जारिताग्रम् ।’ इति ।

Rasendracūḍāmaṇi, 6-17.

ख. रुदन्ती

रुद्रवन्ती तल्लक्षणं—‘चणपत्रसमं पत्रं क्षुपं चैव तथाम्लकम् ।

शिशिरे जलबिन्दूनां स्रवन्तीति रुदन्तिका ।’

Rāja Nighaṇṭu, 5-15.

रसायनं च तज्ज्ञेयं जराव्याधिविनाशनम् ।

यथाऽमृता रुदन्ती च गुग्गुलुश्च हरीतकी ॥

Śāraṅgadhara Samhitā.

ज्ञेया रुदन्ती शोषघ्नी तिक्तोष्णा तुवरा परम् ।

रसायनं त्रिदोषघ्नी राजयक्ष्मणि शस्यते ॥

Dravyaguṇa Vijñāna, part II, p. 830.

RUDRĀKṢA

Botanical name : *Elaeocarpus ganitrus* Roxb.

Family : Elaeocarpaceae

Classical name : Rudrākṣa

Sanskrit names

Rudrākṣa, Śivākṣa, Śarvākṣa, Bhūtanāśana, Pāvana, Śivapriya, Harākṣa, Śivapriya, Nīlakanthākṣa.

Regional names

Rudraksa (Hindi); Rudrai, Sohalangskai, ludrok, Udrok (Assamese); Rudrakhya (Beng.); Rudrakhyo (Oriya); Ultrasum Bead Tree (Eng.).

Description

Moderate sized-tree. Leaves oblong-lanceolate, subentire, nearly glabrous. Slightly dentate, 5-6 in. long and 2 in. broad; petiole 1/2-1/4 in. long. Spike shorter than leaves, 2-3 in. long, drooping or pendulous; spike flowers of 1/3 in. diam, white in colour, fls. in dense racemes, arising from old leaf axils.

Fruit drupe, deep or bluish-purple, globose or obvoid (0.5-1.0 in. diam.), enclosing a hard, longitudinally grooved, tubercled, normally 5-celled stone, seeds 5.

Flowering and fruiting time

Plant flowers during the period from August to February and after wards fruiting.

Distribution

Plant occurs in Nepal and India. It is found in Bengal, Assam, Bihar, Madhya Pradesh and Maharashtra. It is occasionally cultivated in as an ornamental plant and also planted sometimes with the premises of temples or religious places.

Kinds and varieties

There are some other species of the genus *Elaeocarpus* Linn. (about 25 species occurring in India) which are referred in context of Rudrākṣa as their drupes or stones are reportedly used as Rudrākṣa; a few of such species may be indicated : *Elaeocarpus ferrugineus* (Jack Steud), *E. lancaefolius* Roxb., *E. oblongus* Most *E. robustus* Roxb., *E. serratus* Linn. and *E. tuberculatus* Roxb.

Chemical composition

An analysis of the edible part of the drupe (collected from ceylon) of another plant species *Elaeocarpus serratus* Linn. gave the following values : moisture 77.2, crude protein 0.69, total carbohydrates 19.53, total sugar 9.8, ether extr. 0.46, fibre 1.49, and mineral matter 0.59%, vitamin C 47 mg./100 g. Citric acid is the main acid present in the pulp. Seeds contain a fixed oil.

Pharmacodynamics

Rasa	: Madhura
Guṇa	: Guru, snigdha
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittanāśana

Properties and action

Karma	: Raktabhāraśāmaka Mastiṣkaśāmaka-ākṣepahara Vedanāsthāpana Pittasrāvajanana Śvāsanalikasaṅkocaka Jvaraghna Śīraḥ śūlahara Bhūtagraha vināśana Vātaghna Kaphanāśana
Roga	: Raktabhāravṛddhi (uccaraktacāpa) Mānasavikāra-cittavikṣobha Ākṣepaka Apatantraka Apasmāra Unmāda Śīroroga Yakṛdvikāra-kāmalā Śvāsa roga Jvara Viṣphotaka-masūrikā Dāha.

Therapeutic uses

The drug Rudrākṣa is hypotensive agent (raktabhāra or uccaraktacāpa sāmaka). It is pacifying mental tension and disturbances, stress, excitement, burning sensation, imbalance of psychological equilibrium, and rise in blood pressure. It checks headache, and is useful in cough, asthma, jaundice, liver disorders, mental disorders, convulsions, tetanus, insomnia, epilepsy fever and pittaja vikāra. It alleviates kapa and pitta doṣas in provoked state.

Externally the stone (fruit or drupe) is subbed with water (likewise sandal) and then it is applied small-pox eruptions. Similarly it is applied on organs feeling burning sensation. In these conditions i.e. eruptions, measles, fevers etc., the same (stones rubbed like sandal) is also given orally.

Internally the drug is taken generally in the form of infusion (hima) and it may be used as decoction, powder and tablets etc. Rudrākṣa is a valued remedy for hypertension.

The use of dried stones of Rudrākṣa is quite popular in tradition (rudrākṣa dhāraṇa) for attaining mental peace and maintaining psychological equilibrium; it, carries much religious importance.

The stones are cleaned, polished, sometimes stained, and used as beads for rosaries, bracelets and other ornamental objects; they are frequently set in gold; freaky stones with fewer or more 5 cells fetch high price. The flesh or pulp of drupe in green and fresh state is sour in taste; and it is given in epilepsy.

Besides the medicinal importance as drug, Rudrākṣa is occupying sacred and high place in religious traditions supported with or scriptural textual base.

Parts used : Seeds (phalāsthi).

Dose : Powder 3-5 gms.

RUDRĀKṢA (रुद्राक्ष)

क. रुद्राक्षश्च शिवाक्षश्च शर्वाक्षो भूतनाशनः ।

पावनो नीलकण्ठाक्षो हराक्षश्च शिवप्रियः ॥

ख. रुद्राक्षमस्त्रमन्त्रमुष्णाश्च वातघ्नं कफनाशनम् ।
शिरोऽर्त्तिशमनं रुच्यं भूतग्रहविनाशनम् ॥

Rāja Nighaṇṭu, Āmrādiphala varga, 186-187.

रुद्राक्षमाहात्यम्

सर्वाश्रमाणां वर्णानां रुद्राक्षाणां च धारणम् ।
कर्त्तव्यं मन्त्रतः प्रोक्तं द्विजानां नान्यवर्णिनाम् ॥
'रुद्राक्षधारणाद् रुद्रो भवत्येव न संशयः ।'
'रुद्राक्षधारणात् श्रेष्ठं न किञ्चिदपि विद्यते ।'

रुद्राक्षधारणात् रुद्रत्वप्राप्तिः

पश्यन्नपि निषिद्धांश्च तथा शृण्वन्नपि स्मरन् ।
जिघ्रन्नपि तथा चाशनन्त्रलपन्नपि सन्ततम् ।
कुर्वन्नपि सदा गच्छन्विसृजन्नपि मानवः ।
रुद्राक्षधारणादेव सर्वपापैर्न लिप्यते ॥

रुद्राक्षधारणात् ब्रह्मत्वप्राप्तिः

रुद्राक्षधारणादेव रुद्रो रुद्रत्वमाप्नुयात् ।
मुनयः सत्यसङ्कल्पा ब्रह्मा ब्रह्मत्वमागतः ।

रुद्राक्षोत्पत्तिः

- क. 'त्रिपुरो नाम दैत्यस्तु पुराऽसीत्सर्वदुर्जयः ।'
ख. हतास्तेन सुराः सर्वे ब्रह्मविष्ण्वादिदेवताः ।
सर्वेस्तु कथिते तस्मिंस्तदाह त्रिपुरे प्रति ।
अचिन्त्यं च महाशस्त्रमघोराख्यं मनोहरम् ।
सर्वदेवमयं दिव्यं ज्वलन्तं घोररूपि यत् ॥
त्रिपुरस्य वधार्थाय देवानां तारणाय च ।
सर्वविघ्नोपशमनमघोरास्तमर्चितं यम् ।
ग. दिव्यवर्षसहस्रं तु चक्षुरुन्मीलितं मया ।
पश्चान्ममाकुलाक्षिभ्यः पतिता जलबिन्दवः ।
घ. तत्राश्रुबिन्दुतो जाता महारुद्राक्षवृक्षकाः,
ममाज्ञया महासेनः सर्वेषां हितकाम्यया ।

रुद्राक्षभेदाः

- क. बभूभुस्ते च रुद्राक्षा अष्टत्रिंशत्प्रभेदतः ।
सूर्यनेत्रसमुद्भूता कपिला द्वादश स्मृताः ॥

- ख. सोमनेत्रोत्थिताः श्वेतास्ते षोडशविधाः क्रमात् ।
 वह्निनेत्रोद्भवाः कृष्णा दश भेदा भवन्ति हि ।
 श्वेतवर्णश्च रुद्राक्षो जातितो ब्राह्म उच्यते ।
 क्षात्रो रक्तस्तथा मिश्रो वैश्यः कृष्णस्तु शूद्रकः ॥

रुद्राक्षमालाजपः (माहात्म्यम्)

- क. यस्य देवस्य यो मन्त्रस्तां तेनैवाभिपूजयेत् ।
 मूर्ध्नि कण्ठेऽथवा कर्णे न्यसेद्वा जपमालिकाम् ।
 रुद्राक्षमालाया चैवं जातव्यं नियतात्मना ।
 कण्ठे मूर्ध्नि हृदि प्रीते कर्णे बाहुयुगेऽथवा ।
 रुद्राक्षधारणं नित्यं भक्त्या परमया युतः ।
 ख. रुद्राक्षस्य च माहात्म्यं वक्तुं नैवात्र शक्यते ।
 अहं ते कथयिष्यामि शृणुष्व सुरसत्तम ॥

रुद्राक्षधारणविधिः

- क. यः पुमान्मन्त्रसंयुक्तं धारयेद्भुवि मानवः ।
 रुद्रलोके वसेत्सत्यं सत्यमेतन्न संशयः ॥
 ग. विना मन्त्रेण यो धत्ते रुद्राक्षं भुवि मानवः ।
 स याति नरके धीरे यावदिन्द्राक्षतुर्दशः ॥

मसूरिकायाम्

जम्बीरनीरपरिपीतगुडं नराणामारम्भकालसमयेषु मसूरकार्तिम् ।
 सद्यः शमं नयति गोपयसा प्रभाते रुद्राक्षमप्यलमतीव रहस्यमेतत् ॥

Vaidya Manoramā, 11-19.

दुर्लभे रसे

Bhaiṣajya Ratnāvalī, p. 1010.

SADĀPUṢPĪ

Botanical name

Lochnera rosea (Linn.) Reichhb.

Syns. *Vinea rosea* Linn., *Catharanthus roseus* G.

Don.

Family : Apocynaceae

Classical name : Sadāpuṣpī-sadampuṣpā

Sanskrit names

Sadāpuṣpī, Sadampuṣpā.

Regional names

Sadasuhagin, Sadabahar (Hi.); Nayantara (Beng.); Sadaphul (Mar.); Sudukudu mallikai (Tam.); Bilaganeru (Tel.); Uagamalali (Mal.); Ratanjot (Punj.); Madagascar periwinkla, Red Periwinkle (Eng.).

Description

An erect annual or perennial herb, 0.3-0.9 in high. Leaves opposite, oval obovate or oblong glossy. Flowers usually 2-3, in cymose, axillary clusters. Fruits a cylindrical follicles, many-seeded.

Flowering and fruiting time

Plant blooms almost throughout the year. Flowers and fruits are often seen on plants.

Kinds and varieties

Three cultivars of *Lochnera rosea* (Linn.) Reichb. are recognised : 'Alba' with white flowers, 'Ocellata' with corollas white with rose pink to carmine-red eye, and 'Roseus' with uniformly rose coloured flowers.

Catharanthus pusillus G. Don. Another species is *Lochnera pusilla* (Murr.) K. Schum. syns. *Vinca pusilla* Murr. which occurs as a weed in cultivated field and pastures.

Some important periwinkles are : *Vinca major* Linn. syn. *V. pubescens* Linn. (Greater Periwinkle) and *Vinca minor* Linn. (Running Myrtle, Lesser Periwinkle).

Distribution

Plant grows throughout the country as it is commonly grown in garden and planted in pots generally as an ornamental plant providing flowers easily and always different seasons.

It is native of Madagascar, now naturalised throughout the tropics of both hemispheres. It is propagated by seeds or cuttings and is suitable for summer bedding, borders and rockeries. Plant is also grown as in large masses in parks. It is found sometimes as an escape in waste place and sandy tracts. It flowers almost throughout the years and

plant requires its cutting back every four months as it becomes woody and straggling otherwise.

Chemical composition

All parts of the plant, particularly the root bark contain alkaloids these include three alkaloids of the Rauwolfia group viz. ajmalicine, serpentine and reserpine, the concentration of the first two alkaloids is greater in the root of *Lochnera rosea* Linn. (than in the roots of *Rauwolfia serpentina* Benth ex Kurz).

Major alkaloids isolated from the roots of *Lochnera rosea* (Linn.) Reichb. : ajmalicine, akuammine, catharanthine, leurosine, lochericine, lochnerine, perivine, reserpine, serpentine, tetrahydroalstonine, vineacalcukoblastine, vindoline, vindoline (2HCl) and virosine.

Root bark also contains a phenolic resin 2%, and d-camphor (0.03%). Leaves contain an oily resin, a volatile oil, two glycosides, tannin, carotenoids, steroids and ursolic acid. Pink flowers yield an anthocyanine.

Pharmacodynamics

Rasa	: Kaṣāya, tikta
Guṇa	: Laghu, rūkṣa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma

Properties and action

Karma	: Raktārbudanāśaka Pramehaghna Dīpana-grāhī Raktabhāraśāma Viśaghna-jantughna Jivāṇūniśūdana
Roga	: Raktārbuda (Cancer-leukemia) Anidrā-mānasikodvega Pravāhikā Madhumeha Vṛścikadamśa Vraṇa.

Therapeutic uses

The drug *Sadāpuṣpī* is anti-cancer, hypotensive and anti-diabetic herbal agent. The whole plant, root, root-bark and leaves are medicinally potent and used in medicine. Various alkaloids occupy their therapeutic importance in different diseases.

Externally the paste is applied in poisonous insect-bites (wasp sting); it is also applied on wounds (juice of plant or root or leaves) as an antiseptic. The drug plant is used internally. The drug is useful in sleeplessness and mental tension, high blood pressure or hypertension, diabetes, blood cancer (leukaemia) and glycosuria. Leaves juice or paste mixed in water is useful in dysentery and diarrhoea. It is stomachic and astringent. Plant is also considered to be toxic.

The active principles of *Sadāpuṣpī* are in group of a number of alkaloids which possess hypotensive, sedative and tranquillizing properties similar to, but more marked, than those of the total alkaloids of *Rauwolfia serpentina* (sarpaganghā). They also cause relaxation of plain muscles and depression of the central nervous system.

These alkaloids of *Sadāpuṣpī* inhibit the growth of *Vibrio cholera* and *Micrococcus pyogenes* var. *aureus*, but possess no anti-bacterial action against the enteric group of organism. Vindoline and other alkaloid fractions from the leaves are active against *Micrococcus pyogenes* var. *aureus* and var. *albus*, *Streptococcus haemolyticus*, *Corynebacterium diphtheriae* and a few other bacteria.

Leaf extracts of *Sadāpuṣpī* are reported to produce limited prolongation of life in mice against experimental leukemia; the anti-leukemic activity resides in leurosine and vincalencoblastine. Plant alkaloids also possess marked anti-diuretic action on rats.

The infusion of leaves of *Sadāpuṣpī* is given for checking menorrhagia.

Parts used : Whole plant, roots, leaves.

Dose : Juice 10-20 ml., Paste 5-10 gm.

SADĀPUṢPĪ-SADAMPUṢPĀ

(सदापुष्पी-सदम्पुष्पा)

सदम्पुष्पा कषाया स्यात् तिक्तोष्णकफवातहृत् ।

सौमनस्यायनी रक्तभाराधिक्यनिवारणी ॥

चित्तोद्वेगहरी हृद्या रक्तार्बुदविनाशिनी ।

Dravyaguna Vijñāna, Part II, p. 822.

SAHADEVĪ

Botanical name : *Vernonia cineria* Less.**Family :** Asteraceae (Compositae)**Classical name :** Sahadevī**Sanskrit names :** Sahadevī, Daṇḍotpalā.**Regional names**

Sahadei (Hindi); Kukasim (Beng.); Sadorhi (Mar.); Sirasangal, Mor (Tam.); Gariti Kamma (Tel.); Sahadevi (Kann.); Puvankodttela (Mal.); Purple fleabane, Ash-coloured Fleabane (Eng.).

Description

An erect, rarely decumbent, tender or soft herb, a weed; stems slender, 15-17 cm., high (6 in.-3 feet) grooved and ribbed; branches hairy.

Leaves 2.5-2.0 cm. or more × 2.3-8.0 cm., variable in shape, broadly elliptic or lanceolate, membranous or rather coriaceous; not petiole or very short-petioled.

Flowers pinkish and purple, in minute heads in rounded or flattopped corymbs.

Achenes 1.25 mm. long, oblong, terete, slightly narrowed at the base.

Flowering and fruiting time

Plant flowers during rainy season and fruiting in cold season.

Distribution

It is one of the commonest Indian weeds. Plant occurs throughout India ascending to an altitude of C. 1,800 meters.

Chemical composition

Herb contains B-amyrin, lupcol and their acetates, B-sitosterol, stigmasterol, O-spinasterol, phenolic resin and potassium chloride.

Seeds (from Poona) yielded 38 per cent of a fatty oil having the following fatty acid composition : myristic 8, palmitic 23, stearic 8, arachidic 3, bethenic 4, oleic 4, linoleic 22 and oxygenated oleic 28 per cent.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Laghu, rūkṣa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

Properties and action

Karma	: Jvaraghna
	Śothahara-vedanāsthāpana
	Anulomana
	Kṛmighna
	Raktaśodhaka
	Aśmaribhedana-mūtrala
	Kuṣṭhaghna
	Svedajanana

Roga	: Jvara-jīrṇajvara
	Śotha-vedanā
	Netrābhiṣyanda
	Snāyuka kṛmī
	Raktavikāra
	Ślīpada
	Aśmarī-mūtrakṛcchra
	Kuṣṭha-carmaroga.

Therapeutic uses

The drug Sahadevī is febrifuge or anti-pyretic (jvaraghna). An infusion of the plant makes a useful combination with quinine against malarial fevers and a decoction is given to promote perspiration in febrile conditions. The plant juice is given to children with incontinnence of

urine and to cattle with swollen throats and suffering from indigestion.

Preliminary investigation shows that an ethanolic (50%) extract of the herb has activity against Ranikhet-virus disease. It also showed anti-cancer activity against sarcoma 180 in mice; the maximum tolerated dose was found to be 500 mg./kg. body-weight of albino mice.

Sahadevī is diaphoretic, blood purifier, diuretic, carminative, anthelmintic, analgesic, antiphlogistic, alexipharmic, antidermatosis and anticolic.

The fresh juice of the leaves is given in amoebiasis-A poultice of the leaves is used against humid herpes, eczema and ringworm and for the extraction of guineaworm. The juice is boiled with oil and used for the treatment of elephantiasis. Prollius extract of the leaves showed positive test for alkaloids.

The root is bitter and used as an anthelmintic. A decoction of roots of plant drug is given in diarrhoea and stomachache, and the juice for cough and colic. The flowers are used in conjunctivitis and fever and also for rheumatism.

The seeds are commonly used as an anthelmintic and alexipharmic; they are considered to be quite effective against roundworms and thread worms. They are also given for cough, flatulence, intestinal colic and dysuria; and they are useful for leucoderma, psoriasis and other chronic skin-diseases. Seeds are made into a paste with lime juice and used for destroying pediculi. They also form a masala, a folk herbal recipe of veterinary use, orally given to horses.

Its peculiar application in fever carries textual support as well as folk tradition; the root are kept or tied on head ('śīrobaddha' or 'śikhabaddha') for alleviating fever. The juice is also applied (abhyāṅga) on body in febrile condition.

Parts used : Roots.

Dose : Juice 10-20 ml., Decoction 50-100 ml.

D.V.3-19

SAHADEVĪ (DANDOTPALĀ) सहदेवी (दण्डोत्पला)

क. 'महाबला पीतपुष्पा सहदेवी च सा स्मृता।'

Bhāvaprakāśa Nighaṇṭu Guḍūcyādi varga, 142.

ख. 'ज्वरं हन्ति शिरोबद्धा सहदेवी जटा यथा।'

Caraka Samhitā, Sūtra, 26.

'सहदेवी कृता पिण्डी सर्वविस्फोटनाशिनी।'

Śoḍhala.

दण्डोत्पला सहदेवी विषमज्वरनाशिनी।

सहदेवी द्विधा प्रोक्ता श्वेता नीला च पुष्पतः ॥

द्वयं चैकान्तरं हन्ति भक्षणात् धारणादपि।

निद्राकरा धृता शीर्षे नीला सिध्मविनाशिनी ॥

Śoḍhala.

शस्त्रक्षते

दण्डोत्पलायाः स्वरसेन पूर्णो रिक्तीकृतो यः परिपूरितश्च।

पश्चान्निबद्धो व्रणपट्टकेन क्षिप्रं स संरोहति शस्त्रघातः ॥

Gadanigraha, 4-4-45.

पिटकासु

दण्डोत्पलकमूलेन पिटका सम्प्रलेपिताः।

तण्डुलोदकघृष्टेन नाशमायान्त्यसंशयम् ॥

Gadanigraha, 4-1-117.

ज्वरे

सहदेवी शिफा बद्धा श्वेतसूत्रेण कन्यया।

निहन्ति दक्षिणे पाणौ ज्वरभूतग्रहादिकान् ॥

Vaidya Manoramā, 1-22.

'स्वरसैः सहदेव्या वा सिद्धं तैलं ज्वरं जयेत्।'

Vaidya Manoramā.

सर्वज्वर (भूतग्रहादौ) हरणार्थम्

'सहदेवीरसे तैलं साधयेन्मतिमान् भिषक्।

षडङ्गकल्कं सक्षीरं सर्वज्वरहरं परम् ॥'

Sahasrayogah, 5-123.

आगन्तुक (भूताभिषङ्गजन्य)ज्वरे

सहदेवाया मूलं विधिना कण्ठे निबद्धमपहरति ।

एकद्वित्रिचतुर्भिर्दिवसैर्भूतज्वरं पुंसाम् ॥

Bhāvaprakāśa Madhyakhanda, Jvarādhikāra, 1-717.

चिरकालीनश्लीपदे

असाध्यमपि यात्यस्तं श्लीपदं चिरकालजम् ।

मूलेन सहदेवायास्तालमिश्रेण लेपनात् । (लेपितम्) ॥

Bhāvaprakāśa, Madhyakhanda, 45-11.

Baṅgasena, Śtipada, 19.

प्रदरे

अजाक्षीरेण वा पीता सहदेवाह्वया शिफा ।

तक्राशनरता सम्यक् सम्पिबेन्नागकेशरम् ॥

त्र्यहं तक्त्रेण सम्पेप्य श्वेतप्रदरशान्तये ।

Gadanigraha, 6-1-44.

विस्फोटे

‘सहदेवीकृता पिण्डी सर्वविस्फोटनाशिनी ।’

Gadanigraha, 2-40-16.

ŚAILEYA

Botanical name : *Parmelia perlata* Ach.

Family : Parmeliaceae

Classical name : Śaileya

Sanskrit names

Śaileya, Śilāpuṣpa, Vṛddha-jirṇam, Śilāprasūna, Kālānusarya(ka)m, Śilajam, Palitam, Subhaga, Śilottham, Śilādadru, Giripuṣpakam, Śailaka.

Regional names

Chhadila, Charila (Hindi); Jholo, Jhula (Kumaonese, U.P. hills); Chhadchhadila (Ma.); Dadarhaphul (Ma.); Chhadilo (Guj.); Ushn (Arab., Pers.); Stone Flowers (Eng.).

Description

It is a lichen plant found on old trees, housewalls, stony, base and other similar habitats. It is spreaded like

layer or mat. Upper or outer coating or layer, with blackish in colour and internally it is white. Whole plant gives a peculiar odour. Fresh or new plant is procurable which is of bitter and astringent in taste and intense aromatic.

In general, Lichens are crustose, forming a thin, flat crust on the substratum, foliose, flat with leaf-like lobes, or fruticose, upright, branched forms. Very slow growing and vary greatly in size, (e.g. from millimetre to several metres across).

Lichen is a cosmopolitan group of plants, occurring on tree trunks, old walls, on the ground, exposed rock etc., and providing the dominant flora in large areas of mountain and arctic regions (where few other plants can live).

Lichens are dual organisms formed from symbiotic association of two plants, a fungus and an alga. The fungus partner is usually an Ascomycete, sometimes a Basidiomycete, the algal partner a green (chlorophyceae) or blue-green (cyanophyceae) alga.

The vegetative body of the lichens, called thallus, is composed of fungal mycelia which form a net work enclosing algal cells or gonidia. The fungal component is the dominant participant, and usually a member of Ascomycetes; less frequently and particularly in the tropical species, the fungal component is a Basidiomycetes.

Kinds and varieties

There are several species of the genus *Parmelia* found in the Himalayan region and adjacent parts in India. Among nearabout 20-25 species of *Parmelia* growing in country, several have been screened chemically and a few of them are medicinally useful in addition to their utility as a flavouring spice and food. Some species are worth mentioning in present contexts viz. *Parmelia perlata* (Hunds.) Ach., *P. perforata* Ach., *P. conspersa* (Ehrb.) Asch., *P. kamtschoides* Asch.

Distribution

Lichens are widely distribution from Arctic to tropics. *Parmelia* species are found in various regions in the Himalayas in India.

Chemical composition

It contains lecanoric acid and atranorin. It also lichenin, chrysophenic acid, yellow chystalline substance, sugar extractives and oleo resin. Several lichens yield dye.

Pharmacodynamics

Rasa	: Tikta, Kaṣāya
Guṇa	: Laghu, snigdha (rūkṣa)
Virya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka

Properties and action

Karma	: Dāhapraśamana Dīpana-grāhī-rucya Hṛdaya-balya-śothahara Raktadoṣahara Kaṇḍūghna-kuṣṭhaghna Viśaghna Jvaraghna Sandhānīya Śothahara Sugandhiprada Śītapraśamana Tr̥ṣṇāpraśamana Chardinigrahaṇa Kaphaniḥsāraka Vraṇaropaṇa-śothana Vedanāsthāpana Mūtrala-aśmarināśana Cakṣuṣya
Roga	: Aruci-agnimāndya Atisāra-pravāhika-gudaroga Vamana-tr̥ṣṇā Hṛddourbalya Śotha Raktadoṣa-raktavikāra Carmavikāra-kuṣṭha-kaṇḍū Mūtrakṣcchra-aśmarī Jvara-dāha

Vātavyādhi
 Bhagna
 Netravikāra
 Upadamśa
 Mukharoga
 Kāsa-śvāsa.

Therapeutic uses

The drug Śaileya is pacifying burning sensation (dāhapraśamana). It is stomachic bitter and astringent; it is cardiac, expectorant, diuretic, antipyretic, antidermatosis, anodyne, wound-healer, anti-emetic and blood purifier.

Śaileya is useful in dyspepsia, loss of appetite (gastric power), vomiting, thirst (excess), diarrhoea, dysentery, cardiac trouble (weakness), depression, oedema, blood diseases cough, asthma, dysuria, calculus (urinary stone), skin diseases (itching, scabies, pruritis, kuṣṭha), Jvara, burning sensation (dāha) and other ailments.

Externally the drug is applied in various ailments. It is used as paste (kalka lepa) in headache, swelling, scabies, cutaneous affections, dysuria (pasted lukewarm over urinary bladder, waist and kidney region); and its powder is dusted on ulcers.

The drug allays ailments caused by vātapitta doṣa. The crude material is commonly used as a spice and aromatic flavouring item, also an ingredient of garam-masālā as household combination of spices is with culinary utility. Certain lichers are of food importance. They are also as delicacies.

Śaileya is incorporated among medicines prescribed in treatment of various diseases as an ingredient and also occasionally as single drug is classical texts of Indian medicine.

It is one of the ingredient of Balātaila recommended in vātavyādhi (Caraka Saṁhitā, Cikitsā, 28-152; Suśruta Saṁhitā, Cikitsā, 15-22). Gandhataila (Aṣṭāṅga Hṛdaya, Uttara, 27-40) contains Śaileya as an ingredient. It is used in unctuous smoking suggested in diseases of

mouth (Suśruta Samhitā, Cikitsā, 22-69). Śaileya enters into various recipes or formulations prescribed for treatment of śīta (cold), oedema (śōtha), poisoning (viṣa), soft chancre (upadaṁśa) and eyes diseases (netraroga) in therapeutic texts.

Parts used : Whole plant.

Dose : Powder 1-3 gm.

Formulations

Gandha tailam, Śaileyādyā tailam, Balā tailam, Mṛtasañjivana agada, Vagrādyāñjanam.

ŚAILEYA (शैलेय)

क. शैलेयन्तु शिलापुष्पं वृद्धं कालानुसार्यकम् ।

ख. शैलेयं शीतलं रूक्षं कफपित्तहरं लघु ।

कण्डूकुष्ठाश्मरीदाहविषहृद् गुदरक्तहृत् ॥

Bhāvaprakāśa Nighaṇṭu, Karpūrādi varga, 20-21.

शैलेयम्

अ. शैलेयं शिलजं वृद्धं शिलापुष्पं शिलोद्भवम् ।

स्थविरं पलितं जीर्णं तथा कालानुसार्यकम् ॥

शिलोत्थञ्च शिलादद्भुः शैलजं गिरिपुष्पकम् ।

शिलाप्रसूनं सुभगं शैलकं षोडशाह्वयम् ॥

ब. शैलेयं शिशिरं तिक्तं सुगन्धि कफपित्तजित् ।

दाहतृष्णावमिश्वासव्रणदोषविनाशनम् ॥

Rāja Nighaṇṭu, Āmrādiphala varga, 133-135.

शैलेयम्

क. शैलेयं स्थविरं वृद्धं शैलजं पलितं गृहम् ।

शिलापुष्पं शिलादद्भुजीर्णं कालानुसार्यकम् ॥

शैलेयगुणाः

ख. शैलेयं शीतलं रुच्यं लघु श्लेष्मज्वरापहम् ।

निहन्ति विषदाहास्रकण्डूकुष्ठाश्महृद् गदान् ॥

Kaiyadeva Nighaṇṭu, Dhātu varga, 88-89.

शोधचिकित्सायां शैलेयाद्यतैलम्

Cakradatta, Śōtha cikitsā, 39/38-39.

वातव्याधौ

बलातैले

Caraka Samhitā, Cikitsā, 28-152.
Suśruta Samhitā, Cikitsā, 15-32.

मुखरोगे

स्नैहिकधूमे

Suśruta Samhitā, Cikitsā, 22-69.

विषे

मृतसञ्जीवने अगदे

Caraka Samhitā, Cikitsā, 23-54.

ताक्ष्यागदे

Suśruta Samhitā, Kalpa, 5-46.

महासुगन्ध अगदे

Suśruta Samhitā, Kalpa, 6-17.

शीतप्रशमनार्थम्

‘शैलेयसेलागुरुणां सकुष्ठं चण्डानतत्वक्
सुरदारु रास्ना । शीतं निहन्यादचिरं प्रदेहः ।’

Caraka Samhitā, Sūtra, 3-28.

शोथे

‘शैलेयकुष्ठागुरुयासकौन्तीत्वक्पद्मकैलाम्बुपलाशमुस्तैः ।... ।
वातान्वितेऽभ्यङ्गमुशन्ति तैलं सिद्धं सुपिष्टैरपि च प्रदेहम् ॥’

Caraka Samhitā, Cikitsā, 12-65/66.

उपदंशे

‘.....शैलेयञ्च रसायनम् ।’

Suśruta Samhitā, Cikitsā, 19-45.

नेत्ररोगे

‘.....शैलेयकं सर्जो वर्तिः श्लेष्माक्षिरोगनुत् ॥’

Caraka Samhitā, Cikitsā, 26-242.

अक्षिविकारे

वक्राद्यञ्जने

Suśruta Samhitā, Uttara, 18-98.

भग्ने

गन्धतैले

Aṣṭāṅga Hṛdaya, Uttara, 27-40.

SAIREYAKA

Botanical name : Barleria prionitis Linn.

Family : Acanthaceae

Classical name : Saireyaka

Sanskrit names

Saireyaka, Sahacara, Jhanti, Sahacara, Saireya, Mrdukanṭaka.

Regional names

Katasaraiya, Piyabansa (Hindi); Jhanti (Beng.); Koranta (Mar.); Kantasairiyo (Guj.); Shemmuli (Tam.); Mullugorant (Tel.).

Description

A spiny shrub, reaching to height of 2-5', much-branched straight thorny, branches coming up from (near) the roots, often bushy. Roots woody, perennial.

Leaves 3-75 cm.-10 cm. long.

Flowers orange-yellow or cream-coloured, sessile, axillary, often solitary; bracts linear. Fruits carpels,

Flowering and fruiting time

Plant flowers in the cold season and it bears fruits afterwards. Flowers fruits from october to February.

Distribution

It is commonly grown in as a low hedge-plant and is found throughout the hotter parts of India, Burma and Malaya, and extends westwards to tropical and South Africa. It is generally found around and near villages, garden hedges and temples premises in country, as wild or planted in warm regions.

Kinds and varieties

There are four kinds of Saireyaka on the basis of flowers as follow :

Pīta Saireyaka : Barleria prionitis Linn. - yellow

Śveta-Rakta Saireyaka : Barleria cristata Linn. -

White and Red

Nila Saireyaka : Barleria strigosa willd. - Blue

These kinds of Saireyaka have also been given specific synonymous terms (Sanskrit names). For the instance,

(Vāṇa), Dāsī and Ārttagala terms given to Nīla Saireyaka. Red Saireyaka and Pīta Saireyaka are name as Kurabaka and Kuraṇṭaka respectively.

Barleria prionitis Linn.

A bushy, pickly, undershrub or shrubs, branched, glabrous upto 1.0-5.0 meters tall, branching from the base. Stems grey-white. Spines 3-4 or more in the axil of leaves, white, stiff sharp.

Leaves sessile or subsessile, ovate-lanceolate, acute; lvs. about 10 × 5 cm., ovate or elliptic, tapering at the ends.

Flowers orange-yellow in terminal spikes. Calyx lobes spine-tipped. Fls. sessile, solitary, in lower leaf axils and spicate above. Bracts foliaceous, keeled and bristle-tipped; bracteoles similar but smaller. Corolla orange-yellow, pubescent outside. Filaments exerted, pubescent at base. Staminate 2, with very short filaments. Ovary glabrate, disc tubular.

Capsule covered with fibrous sheath, black-pointed and tuberculosis.

Flowering and fruiting time

October-March; March-June.

Barleria cristata Linn.

An erect or diffuse undershrub. Leaves elliptic-oblong, abruptly tapering towards the base, glaucous beneath. Flowers blue-purple, in axillary and terminal, crowded, short racemes. Bracteoles shorter than the outer; spinous, sepals. Capsules ellipsoid, 4-seeded.

Flowering and fruiting time

October-December.

Barleria cristata Linn var. *dichotoma* (Roxb.) Prain. syn. *Barleria dichotoma* Roxb.

It differs from the typical variety by its white flowers. Upper Gangetic plains, in naturalised state in moist, shady places of garden and waste places.

Barleria species may differ mainly on the basis of thorns and flower colours. *Barleria prionitis* is armed plant and the flowers are orange-yellow, while the plants of *Barleria tristata* are unarmed and the flowers have blue-purple or white in colour.

Four kinds of Saireyaka viz. yellow (pīta), white (śveta), red (rakta) and blue (nīla) which are botanically known as *Barleria prionitis* Linn., *B. cristata* Linn. and *B. strigosa* Willd. respectively (red and white flowered varieties of some plant *Barleria cristata* Linn.). Blue (nīla) variety is specifically carries Sanskrit names like Vāṇa, Dāsī and Ārttagala, while Sanskrit names Kurabaka and Kuraṇṭaka are particularly given to red (rakta) and yellow (pīta) varieties of Saireyaka respectively.

Chemical composition

Plant is reported to be rich in potassium.

Pharmacodynamics

Rasa	: Tiktā, madhura
Guṇa	: Laghu
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

Properties and action

Karma	: Kuṣṭhaghna
	Raktaśodhaka-śothahara
	Vedanāsthāpana
	Vraṇapācana-vraṇaśodhana
	Keśya
	Nāḍibalya
	Kaphaghna
	Śukraśodhana
	Mūtrala
	Svedajanana-kaṇḍūghna-
	kuṣṭhaghna
	Jvaraghna
	Viśaghna
Roga	: Kuṣṭha-kaṇḍū-carmavikāra
	Śōtha-vidradhi-apacī
	Gaṇḍamāla
	Dantaśūla-calitadanta
	Pāliṭya
	Nāḍidourbalya
	Vātavyādhi
	Raktavikāra-vātarakta-upadamśa

Sarvāṅga śoṭha
 Pratiśyāya-ślaiṣmika kāsa
 Bāla kāsa-kukkurkāsa
 Śukrameha
 Mūtrakṛcchra-aśmarī
 Vātaślaiṣmikajvara
 Viṣa-mūṣika viṣa
 Netraroga-arma.

Therapeutic uses

The drug Saireyaka (sahacara) is recommended in coryza, cough (caused by kapha) and especially in children cough and whooping cough (Kukkurakāsa). The leaves are cooked in oil which is applied on ulcers and wounds. Externally the leaves are applied on scabies, itching, dermatosis, kuṣṭha and other skin diseases. Leaves are chewed or juice is applied in dentalache. Leaves juice cooked in oil is used for checking greying of hairs.

The leaves juice of śveta saireyaka mixed with jīraka is used in spermatorrhoea (śukra-meha). Roots are taken in dysuria. In vātakaphaja jvara, the leaves juice is given. Saireyaka is useful in oedema, blood impurities, vātarakta, upadamśa, nervine debility, poisons (viṣa) and skin diseases.

The juice of the leaves is slightly bitter and acid. It is generally administered in a little honey or sugar in catarrhal affections of children which are accompanied by fever and much phlegm. A paste of the roots is applied to boils and glandular swellings.

The root of Saireyaka (sahacara) and Jīvantī pounded with goat's milk and mixed with ghee is prescribed to be applied as paste in Vātarakta. (Aṣṭāṅga Hr̥daya, Ci. 72-33). In rat-poisoning (ākhu-viṣa), the root of saireyaka mixed with honey is suggested for oral use (Aṣṭāṅga Hr̥daya, Uttara, 38-30). For treatment of cyst in blood vessels (sirāgranthi), the oil of Sahacara (saireyaka) is recommended in acute stage (Aṣṭāṅga Saṅgraha, Uttara. 35-13). Saireyaka is an ingredient of Kuśāḍya ghr̥ta prescribed in aśmarī (calculus). Saireyaka (Sahacara-kuraṇṭaka) is used in treatment of eye diseases (netra

roga), erisepalas (visarpa), vātavyādhi and some diseases, in combination with other suitable drugs as recommended in therapeutic texts. Similarly, Saireyaka is also used in the form of oil in palita (greying of hairs). The root of Saireyaka (sahacara) rubbed with water is suggested for use by pregnant mother in order to develop foetus perfectly (Gadanigraha, 6-5-24).

The juice of Bāṇa (dāsī-kuraṇṭaka) leaves and Lakuca mixed with oils is applied locally for eradicating Kuṣṭha (Vṛndamādhava, 11-38). The treatment of Sidhma is prescribed by using Bāṇa (Cakradatta, 50-31). The affected part may be pasted frequently with leaf-juice of Bāṇa and then the Mūlaka are applied seeds pounded with butter milk.

Parts used : Whole plant (specially leaves).

Dose : Juice 10-20 ml., Decoction 50-100 ml.

Formulation

Sahacara tailam, Sahacarādyā tailam, Kuśādyā ghṛta, Bāṇa taila.

SAIREYAKA (SAHACARA-KURANṬAKA)

सैरेयकः (सहचरः-कुरण्टकः)

चतुर्विधसैरेयकजातयः

क. सैरेयकः श्वेतपुष्पः सैरेयः कटसारिका ।

सहाचरः सहचरः स च भिन्द्यपि कथ्यते ॥

कुरण्टकोऽवपीते स्याद्रक्तकुरबकः स्मृतः ।

नीले वाणाद्वयोरुक्तो दासी चार्त्तगलश्च सः ॥

Bhāvaprakāśa Nighaṇṭu, Puṣpa varga, 51-52.

ख. सैरेयः कुष्ठवातास्रकफकण्डूविषापहः ।

तिक्तोष्णो मधुरोऽनम्लः सुस्निग्धः केशरञ्जनः ॥

Bhāvaprakāśa Nighaṇṭu, Puṣpa varga, 53.

सैरेयकः

अ. सैरेयकः सहचरः सैरेयो मृदुकण्टकः ॥

कोमलप्रसवो दासी वर्णाख्यः किङ्किरातकः ।

झिण्टी सहचरोऽम्लानः सैर्यकश्च महासहा ॥

सैर्यकभेदाः

- ब. रक्तपुष्पः कुरबकः पीतपुष्पः कुरण्टकः ।
नीलपुष्पस्त्वार्तगलो राजसैर्यकः स्मृतः ॥
स. वाणस्त्वोदनपाकी स्यात् शाणकः केशरञ्जनः ।

सैर्यकगुणाः

- द. सैर्यो मधुरः स्निग्धस्तित्कोष्णः केशरञ्जनः ॥
केश्यो बलासवातास्रकुष्ठकण्डूविषं जयेत् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1047-1051.

क. झिण्टिका

- कण्टकरण्टो झिण्टी सा वन्यसहचरी तु सा पीता ।
शोणी कुरवकनाम्नी कण्टकिनी शोणझिण्टिका चैव ॥
साऽन्या तु नीलझिण्टी नीलकुरण्टश्च नीलकुसुमा च ।
वाणी वाणा दासी कण्टार्तगला च सप्तसंज्ञा स्यात् ॥

झिण्टीगुणाः

- झिण्टिकाः कटुकास्तित्का दन्तामयशान्तिदाश्च शूलघ्नाः ।
वातकफशोफकासत्वग्दोषविनाशकारिण्यः ॥

Rāja Nighaṇṭu, Karavīrādi varga, 136-138.

ख. नीलपुष्पा

- नीलपुष्पा तु सा दासी नीलाम्लानन्तु छादनः ।
बाला चार्तगला चैव नीलपुष्पा च षड्विधा ॥

गुणाः

- आर्तगला कटुस्तित्का कफमारुतशूलनुत् ।
कण्डूकुष्ठव्रणान् हन्ति शोफत्वग्दोषनाशनी ॥

Rāja Nighaṇṭu, Karavīrādi varga, 134-135.

ग. किङ्किरातः

- पीतः स किङ्किरातः पीताम्लानः कुरण्टकः कनकः ।
पीतकुरकः सुपीतः स पीतकुसुमश्च सप्तसंज्ञकः स्यात् ॥

किङ्किरातगुणाः

- किङ्किरातः कषायोष्णस्तित्कश्च कफवातजित् ।
दीपनः शोफकण्डूतिरक्तत्वग्दोषनाशनः ॥

Rāja Nighaṇṭu, Karavīrādi varga, 132-133.

घ. रक्ताम्लानः

अथ रक्ताम्लानः स्याद्रक्तसहाख्यः स चापरिम्लानः ।
रक्ताम्लान्तकोऽपि च रक्तप्रसवश्च कुरवकश्चैव ॥
रामालिङ्गनकामो रागप्रसवो मधूत्सवः प्रसवः ।
सुभगो भ्रमरानन्दः स्यादित्वयं पक्षचन्द्रमितः ॥

रक्ताम्लानगुणाः

उष्णः कटुः कुरवको वातामयशोफनाशनी ज्वरनुत् ।
आध्मानशूलकासश्वासातिप्रशमनो वर्ण्यः ॥

Rāja Nighaṇṭu, Karavirādi varga, 129-131.

वातव्यधिचिकित्सायां सहाचरतैलम्

सहाचरतुलायाश्च रसे तैलाढकं पचेत् ॥
मूलकल्कादशपलं पयो दग्ध्वा चतुर्गुणम् ।
सिद्धेऽस्मिच्छर्कराचूर्णादष्टापलं भिषक् ॥
विनीय दारुणेष्वेतद्वातव्याधिषु योजयेत् ।

Caraka Samhitā, Cikitsā, 28-144/145.

वातव्याधौ

सहचरं सुरदारु सनागरं कथितमम्भसि तैलविमिश्रितम् ।
मदनपीडितदेहगतिः पिबेत् द्रुतविलम्बितगो भवतीच्छया ॥

Aṣṭāṅga Hṛdaya, Cikitsā, 21-55.

पालित्ये

क्षीरात् सहचराद् भृङ्गरजसः सौरसाद् रसात् ।
प्रस्थैस्तैलस्य कुडवः सिद्धो यष्टीपलान्वितः ॥
नस्यं शैलोद्भवे भाण्डे शृङ्गे मेषस्य वा स्थितः ।

Aṣṭāṅga Hṛdaya, Uttara, 24-37/38.

अश्मर्याम्

कुशाद्यघृते

Aṣṭāṅga Hṛdaya, Cikitsā, 11-23.

गर्भवृद्धयर्थम्

वदि सहचरमूलं वारिणा सम्प्रघृष्टं पिबति यदि च गोधामांसमश्नाति योषित् ।
प्रतिदिनमभिवृद्धिं याति गर्भस्तदानीं क्रमवशपरिपुष्टैः धातुभिः पूर्वमाणैः ॥

Gadanigraha, 6-5-24.

मूषिकविषे

‘अथवा सैर्यकान् मूलं सक्षौद्रं तण्डुलाम्बुना ।’

Aṣṭāṅga Hṛdaya, Uttara, 38-30.

वातरक्ते

घृतं सहचरान् मूलं जीवन्त्याश्छागलं पयः ।

लेपः पिष्ट्वा तिलास्तद्वद्भृष्टाः पयसि निर्वृताः ॥

Aṣṭāṅga Hṛdaya, Cikitsā, 22-33.

विसर्पे (कफजे)

‘कुरण्टकं देवदारु दद्यादालेपनं भिषक् ।’

Caraka Samhitā, Cikitsā, 21-88.

नेत्ररोगे (अर्मणि शस्त्रकर्मोत्तरम्)

सक्षौद्रे.....किंशुकैः ।

कुरण्टमुकुलोपेतैः (सेचयेत्) ॥

Aṣṭāṅga Hṛdaya, Uttara, 24-37/38.

विविधविकारोपचारार्थं वाणः

दन्तरोग (दन्तवेष्ठ) चिकित्सायां (वाणः) सहचराद्यतैलम्

Bhāvaprakāśa, Mukharogādhikāra, 66/46-48.

सिध्मकुष्ठे (वाणः) नीलकुरण्टकपत्रस्वरसप्रयोगः

नीलकुरण्टकपत्रं स्वरसेनालिप्य गात्रमति बहुशः ।

Cakradatta, Kuṣṭha cikitsā, 50-31.

दन्तचालने नीलसैर्यककषायगाण्डूषः

‘आर्तगलदलक्काथो दन्तचालननुत् ।’

Cakradatta, Mukharoga cikitsā, 56-3.

मुखरोगे वाणः

वाणतैलम्

Aṣṭāṅga Hṛdaya, Uttara, 22-88/89.

कुष्ठे

वाणदलस्य स्वरसं लिक्चस्वरसं च तैलं च ।

सम्मिश्रितं प्रलेपाद्धन्यात् कुष्ठानि दुष्टानि ॥

Vaidyamanoramā, 11-38.

सिराग्रन्थौ सैर्यकः

‘सिराग्रन्थौ त्वभिनवे तैलं सहचरं पिबेत् ।’

Bhāvaprakāśa, Cikitsā, 70-41.

ŚAIVĀLA

Botanical name

Ceratophyllum demersum Linn.

Syn. *Ceratophyllum verticillatum* Roxb.

Family : Ceratophyllaceae

Classical name : Śaivāla

Sanskrit names

Śaivāla, Śaivala, Jalanilī, Jalaja

Regional names

Sevar, Sivar, Kai (Hindi); Shaioala (Beng.); Saival (Mar., Guj.); Tuhaleb (Arabic); Param bajag (Pers.).

Description

Ceratophyllum Linn. is a genus (belonging to family ceratophyllaceae) of 8 species of small aquatic herbs.

Ceratophyllum demersum L.

Copiously branched submerged, slender, aquatic herbs. Leaves, in whorles of 6-11; 1-4-palmatipartite, segments minutely toothed, filiform.

Flowers solitary, axillary, sessile. Male flowers : perianth segments, 10-15, slightly comate or base, each tipped with a pinkish hair; stamens 10-20 filaments short, anthers oblong. Female flowers : ovary sessile.

Nutlets ovoid or ellipsoid, coriaceous, with persistent subulate style, subtended by a short basal spine on either side.

Algae are simple autophytic plants (the majority of which are aquatic). They are usually differentiated by their colours : green, blue-green, brown or red. Some species of marine algae are of economic value. They do not grow deep in water and are confined to a narrow belt not more than a few hundred yards from the shore.

Ceratophyllum demersum Linn. is an aquatic herb, about 8 inches to 3 feet long, densely leaved, green in colour. Leaves near about 1 inch long which are spreaded in water and forming a net-like, inter-jointly, over water surface, gradually a dense coverage on water surface (sometimes or ultimately water covered completely), re-

sulting change of water colour due to presence of dense coverage of the algal herb.

Algae, sub-division of Thallophyta. Unicellular plants or multicellular plants, with a filamentous flattened, ribbon-like, thallus, with a relatively complex internal organization in higher forms. Distinguished with other thallophytes (Fungi) by presence of chlorophyll. Aquatic plants or plants of damp situations e. g. seaweeds, those forming green scums on pods, green stains on damp, shaded walls, tree trunks etc.

Algae including the following classes : Cyanophyceae (Mycophyceae-blue-green algae), chlorophyceae (green algae), Rhodophyceae (red algae), Bacillariophyceae (diatoms), Phaeophyceae (brown algae); the Chrysophyces, Dinophyceae, Xanthophyceae, and others are mostly unicellular, planktonic.

Kinds and varieties

There are several species kinds of algae plants and their kinds including colour variations (covered under taxonomic consideration of Algae and sub-division of Thallophyta and its classes comprising algae of different colours etc.). From habitat point of view, several marine algae under seaweeds are major group of algal species.

Distribution

Plants occur throughout India in aquatic situation e.g. tanks, pods, river beds, sea-coasts, damp and moist situations, water-logged sites, and also other places. Common in the still water of ponds ditches or shallow canals stagnant waters. Cosmopolitan in temperate and tropics. Slender, submerged, rootless, much-branched aquatic. Leaves whorled, divided into filiform, brittle, serrate segments. Male and female flowers solitary. Nutlets ovoid or ellipsoid, coriaceous, small, the persistent, subulate style subtended by a short, basal spine on either side.

Flowering and fruiting time

Post-rainy season, July-December.

Chemical composition

Analysis of algae is reported.

Pharmacodynamics

Rasa	: Kaṣāya, tikta, madhura
Guṇa	: Laghu, snigdha
Virya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣaśāmaka pittaśāmaka

Properties and action

Karma	: Dāhapraśamana
	Raktastambhana
	Trṣṇāhara-stambhana
	Pittaśāmaka
	Kaṇḍūghna
	Vraṇaropaṇa
	Jvaraghna-dāhasāmaka
Roga	: Dāha-raktārśa
	Vraṇa-kṣata-raktasrāva
	Trṣṇā
	Raktātisāra
	Kaṇḍū-visarpa
	Jvara-dāha
	Raktapitta
	Hṛdroga (pittaja)
	Karṇaroga
	Netraroga
	Śukrameha
	Viṣa-vṛścika-lūtā

Therapeutic uses

Śaivāla is dāhapraśamana that pacifies burning sensation of body in general or in localised region. Plant alleviates aggravation of tri-humors (tridoṣa prakopa) specially biliary (paittika). Herb is applied locally on lesion of burning sensation (dāha) and haemorrhoids or piles (arśa). Śaivāla is stambhana-raktastambhana which is haemostatic in action. Herb is locally applied as a haemostatic medicine and used in bleeding piles. It is used in bloody diarrhoea (raktātisāra) and applied over injuries in order to check bleeding (raktastambhana).

(a) Śaivāla is mainly useful in raktapitta (intrinsic haemorrhage), jvara (fever), dāha (burning sensation),

tr̥ṣṇā (over-thirst), vṛāṇa (wounds) and some other diseases.

In classical texts of indigenous medical system, the drug Śaivāla has been prescribed in treatment of various diseases as a single drug as well as an ingredient of certain recipes and compound formulations recommended in therapeutics of different ailments.

For the instance, Śaivāla has been incorporated in the following recipes and formulations used against relevant diseases or groups of ailments.

Intrinsic haemorrhage (raktapitta) : Bhadrāsriyādi gaṇa : Caraka Saṁhitā, Cikitsā, 4-108.

Erysipelas (visarpa) : Recipe : Ibid, 21-84.

Eye diseases (netra roga) : Gundrādi yoga : Suśruta Saṁhitā, Uttara, 10-104/105.

Poisoning-scorpion-sting and spider (viṣa-jāṅgama i.e. vṛścika daṁśa and lūtā viṣa) : (a) Recipe (b) Hṛiberādi yoga : (a) Aṣṭāṅga Hṛdaya, Uttara, (a) 37-82, (b) 37-35.

Heart disease (hṛdroga) : Formulation : Caraka Saṁhitā Cikitsā, 26-94, Aṣṭāṅga Hṛdaya Cikitsā, 6-46.

Excess thirst (tr̥ṣṇā) : Recipe : Caraka Saṁhitā, Cikitsā, 22-37.

Ear diseases (Karnaroga) : Formulation : Suśruta Saṁhitā, Uttara, 21-45.

Spermatorrhoea (śukrameha) : Formulation : Suśruta Saṁhitā, Cikitsā, 11-9.

(b) Recent studies about medicinal aspect of plant, animal and mineral substances in sea have created new interest and the medicinal potentiality of algae reveals the efficacy and prospects of algae group of flora. For the instance, the plant species belonging marine algae have attracted the attention of scientists for conducting multi-disciplinary investigations for exploring the marine waters for useful algae as well as harnessing their utility as drug in the field of medicine.

From the clippings of press reports, a press report entitled 'Algae-based compound to prevent blood loss' (The Hindustan Times, New Delhi, 25th. May, 1999, pp.5, Cols. 1-2) is worth mentioning. which runs as cited below :

"A compound in a marine algae that stops blood from oozing out of severe injuries by inducing clot formation, may help wounded soldiers in a battlefield, besides being of use in hospitals.

The compound discovered by researchers of marine polymer technologies in Massachusetts, U.S. can help reduce deaths in battlefield, half of which occur due to uncontrolled blood loss.

Called poly-n-acetyl glucosamine, the compound does not contain any of the proteins normally associated with clot formation like fibrin or thrombin, according to a release from the U.S. office of naval research. Thin sheets of the compound, which are lightweight and easy to transport, are attached to a dressing to prevent bleeding. The sheets have a shelf-life of two years.

The risk of disease transmission due to wound infection is less too as the product is not derived from human or animal sources.

Bandage can be easily separated from the wound surface 10-90 minutes after application without causing bleeding. This would help wounded soldiers who are transported to a hospital from the battle-field, the release says.

The new bandage seals the wound and red blood cells (RBCs) from a plug as they come into contact with the compound, preventing bleeding within seconds.

RBC plug formation leads to a high local concentration of clotting factors resulting in a normal clot. This is an improvement over existing gauze-based bandages in which pressure is used to prevent loss of blood. The gauze itself can not stop bleeding the release says.

The compound may be used in future to stop bleeding during heart operations, while using catheters in angioplasty and angiography.

Other such bandages currently being developed contain clot-inducing protein derived from human blood, which poses a risk of disease transmission."

Remarkably the description of source plant(s), habit and habitat medicinal properties and therapeutic utility of *śaivāla* (algae) mentioned in early classical texts of

ancient medicine belonging to Indian school, are to occupy pioneer place as a source of knowledge in the area of aquatic and marine drugs also which is well-evidenced by the textual version incorporating algae drugs available in legendary verses dealing with plants and medicine in general which are immense sources of valuable information, hitherto unknown or imperfectly known for scientific development.

Parts used : Whole plant.

Dose : Juice 10-20 ml.

ŚAIVĀLA (शैवाल)

क. शैवालं जलनीली स्याच्छैवलं जलजञ्च तत् ।

ख. शैवालं तुवरं तिक्तं मधुरं शीतलं लघु ।

स्निग्धं दाहतृषापित्तरक्तज्वरहरं परम् ॥

Bhāvaprakāśa Nighaṇṭu, Puṣpa varga, 19-21.

शैवालम् (सैवाल)

शैवालं जलनीली स्यात् शैवलं जलजञ्च तत् ।

शैवालं शीतलं स्निग्धं सन्तापव्रणनाशनम् ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 156.

विसर्परोगे शमनार्थं शैवाललेपः

‘..... वा शङ्खशैवलम् ।

.....घृतान्वितम् ॥’

Cakradatta, Visarpa-visphoṭa cikitsā, 53-9.

शैवालं नलमूलानि गोजिह्वा वृषकर्णिका ।

Caraka Saṁhitā, Cikitsā, 21-84.

कशेर्वादिलेपे

Suśruta Saṁhitā, Cikitsā, 17-6.

हृद्रोगे (पित्तजे)

कशेरुकशैवलशृङ्गबेरप्रपौण्डरीकं मधुकं विसस्य ।

ग्रन्थिश्च सर्पिः पयसा पचतैः क्षौद्रान्वितं पित्तहृदामयघ्नम् ॥

Caraka Saṁhitā, Cikitsā, 26-14.

Aṣṭāṅga Hṛdaya, Cikitsā, 6-46.

शुक्रमेहे

‘शुक्रमेहिनं दूर्वाशैवलप्लवहठकरज्जकशेरुककषायम् ।’

Suśruta Samhitā, Cikitsā, 11-9.

नेत्ररोगे पित्ताभिष्यन्दे

गुन्द्रातियोगे

Suśruta Samhitā, Uttara, 10-4/5.

रक्तपित्ते

भद्राश्रियादिगणे

Caraka Samhitā, Cikitsā, 4-103.

विषे

क. लूताविषे

हीबेरादिलेपे (योगे)

Aṣṭāṅga Hṛdaya, Uttara, 37-82.

ख. वृश्चिकदंशे

‘सशैवालोल्लोष्ट्रदंष्ट्रा च हन्ति वृश्चिकजं विषम् ।’

Aṣṭāṅga Hṛdaya, Uttara, 37-35.

तृष्णायाम्

‘शैवालपङ्काम्बुरुहैः साम्लैः सघृतैश्च सक्तुभिल्लैः ।’

Caraka Samhitā, Cikitsā, 22-37.

कर्णरोगे

सशैवालं महावृक्षजम्ब्वाम्रप्रसवाम्बुतम् ।

कुलीरक्षौद्रमण्डूकीसिद्धं तैलं च पूरितम् ॥

Suśruta Samhitā, Uttara, 21-45.

ŚĀKA

Botanical name : *Tectona grandis* Linn. f.

Family : Verberanceae

Classical name : Śāka

Sanskrit names

Śāka, Bhūmisaha, Mahāpatra, Sthirasāra, Dvāradāru, Varadāru, Krakacapatra, Gṛhadruma, Kharacchada, Śīsira, Śreṣṭhakāṣṭha, Surabhisāraka.

Regional names

Sagoun, Sagavan (Hindi); Segun (Beng.); Sagavan (Mar., Guj.); Tekku (Tam.); Tiku (Tel.); Tega (Kann.); Tekka (Mal.); Teak (Eng.).

Description

Trees with rounded crown attaining large size, with tall and clean and cylindrical bole, carrying its girth well up to stem (in favourable conditions in suitable localities), but with advanced age, the stem becomes, more fluted and buttressed.

Branchlets characteristically quadrangular and channelled. Bark fibrous, light-brown or grey, 4-10 mm., thick, exfoliating in long, thin strips.

Leaves broadly elliptical or obovate; 50-60 cm. long and 20-30 cm.; gradually becoming smaller, finally becoming bract-like in inflorescence, often larger in coppice-shoots and young plants, coriaceous, rough above, stellately-grey tomentose beneath, possessing minute, red, glandular dots which turn black.

Flowers small, white, sweet-scented, numerous in 45-90 mm. long, terminal panicles which are conspicuous from a distance.

Fruits hard, bony, irregularly globose, somewhat pointed at the apex, 10-15 mm. in diam., 4-celled, enveloped by light brown, bladder-like calyx. Seeds 1-3, rarely 4 in a fruit, marble-white, ovate, 4-8 mm. long. Śāka tree is wide economic value as teak timber and other parts with commercial uses.

Flowering and fruiting time

Leaves fall from November to January in dry situations and seasons, while in moist localities the tree may remain in leaf until March or even later. Normally the trees are leafless throughout the greater part of the season (as a rule). New leaves appear from April to June, but in the wet seasons, they sprout early.

Flowers come up from June to August or September, but like the leaves, they may begin to appear in April under abnormally wet conditions. Fruits ripen from November to January, and fall gradually.

Ripen and matured fruits may be collected from under the trees. For easy storage, the calyx is removed by half filling the bag with fruits and vigorously rubbing and shaking it; the remains of the calyces can be separated from the nuts by winnowing. Nuts vary much in weight (for the instance, the number of fruits varied from 2,000 to 3,000 per kg. samples of nuts collected from Madhya Pradesh teak forests).

Distribution

Natural teak forests of India are mainly confined to the peninsular region. Plant abundantly occurs in Terai region of Himalayas, from Kangra (Northern India) and upto Assam (North-east India) and from West Bengal to Orissa, Andhra Pradesh and extending upto U.P. and M.P.

Chemical composition

Heartwood contains many carbonic organic compounds. Heartwood yields (on steam-distillation) an oily product 0.15 per cent, alongwith an orange-coloured, solid substance (m.p. 178°-79°), identified as tectoquinone. This liquid is sometimes called Teak oil which is used medically (cattle wounds) as well as colouring liquid (as a substitute for linseed in points).

The cracks, and cavities are sometimes are found line with crystalline deposits. A sample of such deposit on analysis shows : moisture 3.0, organic matter 14.30, calcium carbonate 70.05, tricalcium orthophosphate 2.89 and quartz sand 9.76%. Seeds yield a fixed oil. Bark contains betulinic acid. Leaves yield a dye, yellow or red; they tannin 6 per cent. Crushed leaves, when rubbed with saliva, produce a red colour as per old traditional practice.

Pharmacodynamics

Rasa	: Kaṣāya
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka Vātaśāmaka (bīja-seeds).

Properties and action

Karma	: Śonitasthāpana (patra-leaves)

	Śothahara (patra-leaves)
	Pittaśāmaka-stambhana
	Kṛmighna
	Keśya-Kaṇḍūghna
	(bija taila-seeds oil)
	Garbhassthāpana
	Mūtrājanana (bija-seeds)
	Mūtrastambhana (tvak-bark)
	Mūtravikāra-mūtrāvilatā
	(puṣpa-flowers)
	Kuṣṭhaghna
	Medohara
	Vedanāsthāpana-śothahara-
	viṣaghna (kāṣṭha sāra-heartwood)
	Raktastambhana
	(patra svarasa-leaves juice)
Roga	: Raktapitta-raktavikāra-śoṭha
	Pradara-garbhasrāva-garbhapāta
	Prameha-mūtrakṛcchra
	Dāha-śoṭha
	Kuṣṭha-kaṇḍū
	Medoroga
	Amlapitta-pravāhikā
	Kṛmiroga
	Viṣa-Bhallātakaviṣa
	Śoṭha-dāha-viṣa-śīraḥśūla
	(sāra-heartwood).

Therapeutic uses

The drug Sāka is haemostatic (raktastambhana) and it is analgesic, anti-inflammatory, diuretic, anthelmintic and antidermatosis. It allays burning sensation and biliousness and countering poison.

The leaves have medicinal properties and utility. Extracts of the leaves showed complete inhibition *Mycobacterium rubericaulosis* (607).

The flowers are considered useful in biliousness, bronchitis and urinary discharges. It has been reported that the seed-extract is used as a lotion for eye troubles.

Both flowers and seeds are considered diuretic. Externally the seeds oil is applied in baldness and skin affections.

The bark is regarded as an astringent, and considered useful in bronchitis. The drug is useful in obesity (medoroga).

The plant drug alleviates kaphapittaja diseases in general. Seeds are used against vātavyādhī. Drug plant and its various parts possess medicinal activity and they are used in different diseases.

The decoction of bark is given in hyperacidity (amlapitta), dysentery (pravāhikā) and worms (kṛmi). The juice of leaves is taken in intrinsic haemorrhage (raktapitta), blood diseases (raktavikāra) and oedema (śoṭha). Decoction of heartwood is useful in leucorrhoea (pradara) and abortion (garbhapāta). Seeds (śākabīja) alongwith other drugs are suggested to use during pregnancy period (garbhinī māsānumāsika auśadhi krama).

The vegetable of flowers (puṣpa śāka) and bark (tvak kvātha) are used in prameha diseases. Seeds are given in mūtrakṛcchra. Seeds are useful as diuretic while the bark is anti-diuretic (mūtrastambhana).

The decoction of heartwood is prescribed in kuṣṭha and allied skin diseases.

Parts used : Heartwood, leaves, flowers, seeds, seed-oil.

Dose : Decoction 50-100 ml., Powder 3-6 gm.

ŚĀKA (शाक)

भूमीसहो द्वारदारुर्वरदारुः खरच्छदः ।

भूमिसहस्तु शिशिरो रक्तपित्तप्रसादनः ॥

Bhāvaprakāśa Nighaṇṭu, Vaṭādi varga, 77.

क. भूमिसहो द्वारदारुर्वरदारुः खरच्छदः ।

स्थिरकच्छो महापत्रः शाकः सुरभिसारकः ॥

ख. शाकः कषायः शिशिरो रक्तपित्तप्रसादनः ।

कुष्ठश्लेष्मानिलपित्तहरो गर्भसन्धानस्थैर्यकृत् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 805-806.

शाकपुष्पम्

शाकपुष्पं प्रमेहघ्नं रूक्षं तुवरतित्तकम् ।

कफपित्तहरं वातकोपनं विशदं लघु ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 807.

अ. शाकः क्रकचपत्रः स्यात् खरपत्रोऽतिपत्रकः ।

महीसहः श्रेष्ठकाष्ठः स्थिरसारो गृहद्रुमः ॥

ब. शाकस्तु सारकः प्रोक्तः पित्तदाहश्रमापहः ।

कफघ्नं मधुरं रुच्यं कषायं शाकवल्कलम् ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 124-125.

विषे

क्षारागदे

Suśruta Samhitā, Kalpa, 6-3.

गर्भिण्या मासानुमासिके

मधुकं शाकबीजं च पयस्या सुरदारु च ।

यथासङ्ख्यं प्रयोक्तव्यं गर्भस्त्रावे पयोयुताः ॥

Suśruta Samhitā, Śārīra, 10-59.

मूढगर्भे

शाकत्वग्धिङ्श्वतिविषापाठाकटुकरोहिणीः ।

तथा तेजोवती चापि पाययेत् पूर्ववद् भिषक् ॥

Suśruta Samhitā, Cikitsā, 15-22.

अश्मरीशर्करयोः

पिचुकाङ्गोलकतकशाकेन्दीवरजैः फलैः ।

चूर्णितैः सगुडं तोयं शर्कराशमनं पिबेत् ॥

Suśruta Samhitā, Cikitsā, 7-17.

वृक्षादनी भल्लुकश्च वरुणः शाकजफलम् ।

.....एषां क्वाथैर्घृतं कृतम् ।

भिनत्ति वातसम्भूतामश्मरीं क्षिप्रमेव तु ॥

Suśruta Samhitā, Cikitsā, 7-6.

ŚĀKHOTAKA

Botanical name : *Streblus asper* Lour.

Family : Moraceae

Classical name : Śākhoṭaka

Sanskrit names

Śākhoṭaka, Śākhoṭa, Kauśika, Pītapthalaka, Bhūtavāsa, Yūkāvāsa, Kharacchada, Bhūtavṛkṣa, Gavakṣa, Gaṇākṣī, Rūkṣapatrā, Śankhinīvāsa.

Regional names

Sihora (Hindi); Shevarha (Beng.); Kavati (Mar.); Milan (Tam.); Varanika (Tel.); Akhor moranu (Kann.); Sahuda (Oriya); Jindi, Sihora, Dahya (Punj.).

Description

A small rigid gnarled evergreen tree. Bark light-grey or greenish with faint ridges, rough when old, juice milky, twigs hairy, scabrid, brown, warty and uneven on the outer surface, light brown and fibrous on the inner surface.

Leaves alternate, 2.5-10 cm. long, rhomboid elliptic, obovate or elliptic-oblong, acute, shortly or abruptly acuminate, more or less sinuate or crenate, scabrid on both surfaces but especially beneath lateral nerves 4-6 pairs, raised beneath, joined by intra-marginal hoops; petiole 1.3-5.8 mm. long, stipules rather longer than the petiole, obliquely lanceolate, acuminate.

Flowers dioecious axillary. Male flowers in globose pedunculate, heads 7.5 mm. diam. peduncles 1-4 together, 7.5-13 mm. long. Perianth campanulate, sepals 4 pubescent outside, imbricate in bud. Stamens 4, inflexed in bud; anthers reniform. Female flowers solitary inconspicuous, long peduncled, peduncles 1-4 together, 5-13 mm. long, bracts 2-3 below the perianth. Perianth closely embracing the ovary, sepals 4, enlarged in fruit. Ovary 1-celled ovule, pendulous, styles 2, very long, filiform connate at the base.

Fruits 1-seeded berry, loosely enclosed by the enlarged sepals, yellow when ripe, 5 mm. diameters.

Bark drug characteristics : Bark consisting of phloem, phellogen, phelloderm and secondary phloem, moderately thickened and pitted sclerenchyma cells at the periphery of the phelloderm, heavily thickened cell wall of phloem fibres differentiated into outer and inner coat enclosing a very narrow lumen, long narrow thickwalled bordered pitted cells associated with the phloem fibres and

starch grains, solitary and clustered crystals of calcium oxalate present throughout the bark.

Flowering and fruiting time

It flowers in April and bears fruits during summers or May-June.

Distribution

Plant occurs naturally in the Himalayas from Himachal Pradesh to West Bengal and in the hills and plains of Assam and Tripura, ascending to an altitude of 450 meters. It also grows in the peninsular India upto 600 meters, especially in drier parts and in the Andamans. Generally it is found in drier regions of India.

Kinds and varieties

As regards substitutes and adulterants, the leaves of *Ficus asperrima* Roxb. (Kharapatra) may be often mistaken for *streblus asper* Lour. for its rough leaves.

The trees of *Streblus asper* Lour. coppice well and they are good for hedges and other similar purposes. Several root suckers are produced which can be transplanted during the rains.

Chemical composition

Some nonprotoplasmic cell contents like alkaloid, tannin, sugar, starch, fat, protein, mucilage, lignin, cutin, suberin, gum resin and calcium oxalate present in the bark react positively with different concentrations of acids, alkalis, salts and dyes.

Analysis of the root-bark of *streblus asper* gave water extractive 9.53% alcoholic extractive 6.6%, ether extractive 2.8%, total ash 14.0% and acid-soluble ash 5.1%. Free sugars, tannins, potassium chloride are present. The root-bark as such as cardenolides. The total glycosides content in an Indian sample of the air dried root-bark was 0.14%. Ten cardenolide glycosides have been isolated from the ether and chloroform extracts of the root-bark of which six have been obtained in a crystalline form viz. Kantaloside asperoside, pyranoside, strebloside, hatroside, lucknoside. The four ether glycosides were obtained as amorphous powders. The air dried stem bark contains 0.028%, glyco-

sides and also a-amyrin and lupol acetates, B-sitosterol and a-diol.

The leaves of Śākhota (Streblus asper Lour.) contain B-sitosterol. They also gave a positive hemolysis test. The milky juice of the plant contains a milk-clotting enzyme and is commonly used like rennet to coagulate milk; however, a bitter flavour is reported in the curd.

The chemical analysis plant drug isolated and characterised three new triterpenoids, friedelin, epifriedinol and taxasateryl acetate in addition to known alkaloids. Further investigations isolated a new cardiac glycoside vijalosite in addition to well known cardenolide asperoside from the roots of Śākhota.

Chromatographic studies were conducted on leaves of Śākhota (Streblus asper Lour.). Dried and milled leaves of plant were extracted with ethanol for 48 hours. The dark green extract was freed from solvent and poured into aqueous acetic acid (1%) with stirring and left overnight when a green gummy mass separated. The aqueous solution was filtered and the filtrate gave negative test for alkaloids. The residue was dried, dissolved in benzene and chromatographed over alumina using petroleum ether and benzene successively as eluents. The petroleum ether eluates yielded only a yellow oil while benzene the final purification was achieved by this process. The substances responded the Lichermann Burchard test for sterile.

Pharmacodynamics

Rasa	: Tikta, kaṣāya
Guṇa	: Laghu, rūkṣa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Vātakaphaśāma

Properties and action

Karma	: Ślīpadahara
	Śvitraghna (seeds)
	Raktastambhana (latex)
	Śothahara (bark)
	Vraṇaśodhana (bark)
	Ārśoghna

	Ākṣepahara
	Vātānulomana
	Jvaraghna
	Viṣaghna
	Medohara
	Grāhī
Roga	: Ślīpada
	Śoṭha
	Kṣata-raktasrāva
	Vraṇa
	Viṣa
	Atisāra-pravāhikā
	Arśa
	Raktasrāva
	Apasmāra
	Jvara
	Sarpaviṣa
	Gaṇḍamālā-apacī
	Kuṣṭha-śvitra
	Prameha.

Therapeutic uses

The leaves of plant drug Śākhoṭaka are useful as galactagogue. A paste of leaves is applied to buboes and it is given to check excessive perspiration. An infusion of the leaves as taken as a substitute for tea. The twigs are chewed to make brushes for cleaning teeth and to cure pyrrhoea.

The poultice of the roots is applied to ulcers, sinuses, swellings and boils. The powdered root is recommended in dysentery. The decoction of the roots is considered to be given in syphilis. Decoction of the bark is used in fever, dysentery and diarrhoea. Bark is also applied to boils as disinfectant agent.

The latex possesses astringent and antiseptic properties and it is applied to sore heals, chopped hands and glandular swellings. It is considered useful to apply on the head as a sedative in the treatment of neuralgia.

The seeds are useful in epitaxis, piles and diarrhoea. Externally the paste of seeds is applied in leucoderma. The sweet berries of Śākhoṭaka are edible. Tender leaves are

lopped for cattle and elephants as a fodder. The leaves are utilised as a substitute for sand paper for polishing wood, ivory articles, horns and cleaning utensils. The wood chips mixed with tobacco are used for making Burmese che-roots. It is a host plant for the lac-insect.

The plant drug is reported to be useful in cases of cancer, cholera, colic, diarrhoea and dysentery. The leaves extract is used in eye complaint and menorrhagia. The latex is also suggested to use in the pneumonia and the bark is used as stomachic. The bark is used as a remedy in urinary complaints. The fruits are eaten in different parts in country by rural peoples. Fresh stem bark for medicinal purpose may be collected during the spring.

The drug Śākhoṭaka is an effective anti-inflammatory medicine and recommended particularly in treatment of filaria and elephantiasis (Ślīpada) as mentioned in classical texts of Indian medicine. Accordingly the drug is useful in inflammatory conditions and blood diseases. Bark is locally applied to swellings and ulcers. Seeds paste is prescribed to apply on lesions of leucoderma. Roots are orally given to snake-bite. Roots are useful in obesity. The decoction of bark is used in diarrhoea, dysentery and piles. Roots are prescribed to be internally used in epilepsy. Sometimes the oral use of decoction of bark or root-bark obtained from Śākhoṭaka can cause nausea and vomiting, so necessary consideration of human nature or constitution of body (prakṛti) and posology (mātrā).

The drug is generally useful in the diseases caused due to provoked vāta and kapha. The drug is astringent and carminative. The latex of drug (Śākhoṭaka payah) is prescribed to eradicate leprosy (kuṣṭha). Paste of bark of drug tree pounded with sour gruel is used to alleviate oedema caused by vāta (vātajanya śoṭha). In treatment of Prameha, the drops of latex of plant drug mixed in fresh cow-milk are prescribed for oral use. Decoction of bark of the plant drug mixed with cow's urine has been recommended for use in cases of filaria (ślīpada) and obesity (medoroga). In treatment of Gaṇḍamāla-apacī, the oil is

cooked Śākhōṭaka bark and same is used as snuff (nāvana). The juice of bark is useful in intrinsic haemorrhage (raktapitta).

Parts used : Root, seeds, bark, latex, leaves.

Dose : Juice 10-20 ml., Decoction 50-100 ml.

ŚĀKHOTAKA (शाखोटक)

शाखोटः पीतफलको भूतावासः खरच्छदः ।

शाखोटो रक्तपित्तार्शोवातश्लेष्मातिसारजित् ॥

Bhāvaprakāśa Nighaṇṭu, Vaṭādi varga, 64.

शाखोटः स्याद्भूतवृक्षो गवाक्षी यूकावासो भूर्जपत्रश्च पीतः ।

कौशिक्योऽजक्षीरनाशश्च सूक्तस्तिकोष्णोऽयं पित्तकृद्वातहारी ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 123.

श्लीपदे शाखोटकक्राथः

शाखोटवल्कलक्राथं गोमूत्रेण युतं पिबेत् ।

श्लीपदानां विनाशाय मेदोदोषनिवृत्तये ॥

Śārṅgadhara Saṁhitā, 2-2-127.

Bhāvaprakāśa, Madhyakhaṇḍa, Ślīpadādhikāra, 45-13.

गण्डमालाचिकित्सायां शाखोटकबिम्बाद्ये तैले

‘गण्डमालाऽपहं तैलं सिद्धं शाखोटकत्वचा ।’

Cakradatta, Galagaṇḍādi cikitsā, 41-26.

श्लीपदे

शाखोटकवल्कमिश्रं तोयं गोमूत्रसंयुतं पीत्वा ।

हन्याच्छ्लीपदमुग्रं श्लेष्मभवं श्लीपदं पुंसाम् ॥

Baṅgasena, Ślīpada, 21.

शाखोटकवृक्षत्वक् चतुर्गुणाम्भःशृता चरणशेषा ।

गोमूत्रतुल्यपीता श्लीपदाशून्थितं हन्ति ॥

Gadanigraha, 2-2-41.

वातजव्रणशोथे शाखोटकलेपः

कल्कः काञ्जिकसम्पिष्टः स्निग्धः शाखोटकत्वचः ।

सुपर्ण इव नागानां वातशोथविनाशनः ॥

Cakradatta, Vraṇaśoṭha cikitsā, 44-4.

गण्डमालापच्योः

गण्डमालापहं तैलं सिद्धं शाखोटकत्वचः ।

बिम्ब्यश्चमारनिर्गुण्डीसाधितं वापि नावनम् ॥

Vṛndamādhava, 41-51.

कुष्ठे

‘तथैव शाखोटकसम्भवं पयः पुराकृतं पापमिवेश्वरस्मृतिः ।’

Vaidyamanoramā, 16-116.

रक्तपित्ते

भद्रशाखोटकत्वग्रसबिन्दुद्वययुतो घृतद्विगुणः ।

भूनिम्बकल्क उर्ध्वगपितासकासश्चासघ्नः ॥

Cakradatta, 9-24.

प्रमेहे

सद्योभुवा गोपयसा प्रपीता विलोड्य शाखोटकदग्धबिन्दवः ।

हरन्ति मेहानपि दीर्घकालजान् गुरुपदेशाः दृढसंशयमिव ॥

Siddhabhaiṣajya Maṇimālā, 4-572.

वातशोथे

कल्कः काञ्जिकसम्पिष्टः स्निग्धः शाखोटकत्वचः ।

सुपर्ण इव नागानां वातशोथविनाशनः ॥

Vṛndamādhava, 44-4.

ŚĀLA

Botanical name : Shorea robusta Gaertn.

Family : Dipterocarpeae

Classical name : Śāla

Sanskrit names

Śāla, Śālasāra, Dhūpavṛkṣa.

Regional names

Sal, Sakhu, Sakhua (Hindi); Shal (Beng.); Shal vriksh (Mar.); Jalarichettu (Tel.); Talur, Kungiliyam (Tam.); Karimaruthu (Mal.); Bailbobu (Kann.); Sal tree (Eng.).

Description

Large, gregarious deciduous tree (but not com-

pletely leafless). Bark dark brown, rough, 2-5 cm. thick, with deep verticle furrows; bark of old or matured trees thicker and quite rough with having deeper furrows. Wood coarse, cross grained, hard, brown.

Leaves 10-25.5 cm., secondary nerves 8 to 12 pairs, over, 1.5 cm. apart; lvs. 10-30 cm. long and 5-17.5 cm. broad, stout, leathery, shining, alternate, entire, rounded towards base or cardate; petiole terete, 1 - 2.5 cm. - 2cm.

Flowers in unilateral racemes or panicles; petals grey; tomentose outside, orange inside; fls. whitish yellow, often sessile or subsessile, white stellate or hairy, spikes in large lax terminal or axillary racemose panicle.

Fruits larger, about 1.25 cm. or 1/2 in. long, ovale or ovoid, pointed apex, white pubescent in beginning (raw stage when young) and brown and slightly fleshy; winged with three to five wings spathulate, 5-7.5 cm. long (2-3 in.).

Trunk exudes (by incision) resin (oleo-gum resin) of commercial utility.

Flowering and fruiting time

Plant bears young foliage and flowers in March-April and fruiting begins during summer season. Generally flowers in March and fruits in June.

Distribution

Plant occurs in Terai and outer region of the Himalayas ascending to 1,523 meters (5,000 ft.) in compact or composite forests known as sal forest (type). It is found in Punjab, Assam, Uttar Pradesh, Bihar, Madhya Pradesh, Orissa and other regions in country.

Chemical composition

Bark contains tannin 7-12 per cent which is obtained after boiling in water (likewise catechu or khadirasāra). Tree trunk exudes oleo-gum resin (by incision) commonly known as 'ral' (śāla niryāsa).

Kinds and varieties

'Sarja yugma' incorporated by Narahari (Rāja Nighaṇṭu) in classical work on materia medica, consists of Śāla and Sarja. The commentators mention 'Śālabheda' which appears to be *Terminalia alata* Heyne ex Roxb.

Pharmacodynamics

Rasa	: Kaṣāya (bark); kaṣāya-madhura (resin)
Guṇa	: Rūkṣa
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Pittakaphanāśaka

Properties and action

Karma	: Mūtrasaṅgrahaṇīya Mūtrasthajīvāṇuniṣūdana (gum-resin) Vedanāsthāpana Kaphaniḥsāraka (gum-resin) Kaphadurgandhīhara Raktastatmbhana Kaphaghna (bark) Stambhana Garbhāśayaśothahara Kuṣthaghna-svedāpanayana Vraṇaśodhana-vraṇaropaṇa (gum-resin) Sandhāniya Medaśoṣaṇa Kṛmighna-jantughna Viśaghna Varṇya.
Roga	: Pūyameha-prameha Pradara-yonivyāpad Kuṣtha-atisveda Raktasrāva-pāṇḍu Abhighātaja vraṇa Vidradhi-agnidagdha Dadru-vipādikā-carmavikāra Karṇapūya Atisāra-raktapravāhikā Asthibhagna-vraṇa Medoroga.

Therapeutic uses

The drug Śāla is antiseptic, aphrodisiac, astringent,

carminative and antipoisonous. It is used in anorexia, diarrhoea, dysentery, ear ailments, bones fracture, itching, morbid conditions of vagina, skin diseases and wounds.

Its resin or powder (solid extract) extensively used to fumigate for disinfecting and healing all types of wounds. The powder of bark (śāla tvak) and resin (rāla or śāla niryāsa). The ointment prepared with resin (rāla malahara) is topically applied as an antiseptic, wound healer and to check foul smell of ulcers. This ointment (sal resin) is frequently applied on burns, ringworm, abscess, boil and other cutaneous affections. For the purpose of fumigation (dhūpana karma), the resin (rāla-śāla niryās) is commonly used in various conditions. In otorrhoea, the decoction of bark is used as washing lotion.

Śāla is taken in cough, asthma, obesity, prameha and allied urinary disorders, gonorrhoea, fracture, diarrhoea, haemorrhoids (bleeding piles), haemorrhage, anaemia (caused by excess haemorrhage), blood dysentery, leucorrhoea, menorrhagia, goitre, eye diseases and some other diseases.

Parts used : Bark, gum-resin.

Dose : Bark decoction 50-100 ml., Gum-resin (rāla) 1-3 gm.

Group (gana)

Vedanāsthāpana, Kaṣāyaskandha, Āsavayonivṛkṣa (Caraka Saṁhitā), Śālasārādi, Rodhrādi (Suśruta Saṁhitā).

ŚĀLA (शाल)

शालः कषायो ग्राह्यस्त्रिद्विधरुक्कफजिद्धिमः ॥

कर्णरोगहरो रूक्षो विषहा व्रणशोधनः ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 809-810.

अश्वकर्णः कषायः स्याद् व्रणस्वेदकफक्रिमीन् ।

ब्रध्नविद्रधिबाधिर्ययोनिकर्णगदान् हरेत् ॥

Bhāvaprakāśa Nighaṇṭu, Vatādi varga, 19.

शालभेद (सर्जक) गुणाः

सर्जकोऽन्योऽजकर्णः स्याच्छालो मरिचपत्रकः ॥

अजकर्णः कटुस्तिक्तः कषायोष्णो व्यपोहति ।

कफपाण्डुश्रुतिगदान् मेहकुष्ठविषव्रणान् ॥

Bhāvaprakāśa Nighaṇṭu, Vaṭādi varga, 20-21.

सर्जः

सर्जस्तु कटुतिकोष्णो हिमः स्निग्धोऽतिसारजित् ।

पित्तास्रदोषकुष्ठघ्नः कण्डूविस्फोटवातजित् ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 80.

अश्वकर्णः

अश्वकर्णः कटुस्तिक्तः स्निग्धः पित्तास्रनाशनः ।

ज्वरविस्फोटकण्डूघ्नः शिरोदोषार्तिकृन्तनः ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 82.

रालगुणाः

रालः स्वादुः कषायोष्णः स्तम्भनो व्रणरोपणः ।

विषादिभूतहन्ता च भग्नसन्धानकृन्मता ॥

Dhanvantari Nighaṇṭu.

रालस्तु शिशिरः स्निग्धः कषायः तिक्तसङ्ग्रहः ।

वातपित्तहरः स्फोटकण्डूतिव्रणनाशनः ॥

Rāja Nighaṇṭu.

रालो हिमो गुरुस्तिक्तः कषायो ग्राहको हरेत् ।

दोषास्रस्वेदवीसर्पज्वरव्रणविपादिका ॥

ग्रहभग्नाग्निदग्धास्रशूलातीसारनाशनः ।

Bhāvaprakāśa Nighaṇṭu.

तैलं सर्जरसोद्धूतं विस्फोटव्रणनाशनम् ।

कुष्ठपामाकृमिहरं वातश्लेष्मामयापहम् ॥

Ātreya Samhitā.

रुन्धदोषगतिं जयन्स्वरगदं पामां क्षिपन्दूरतो

वह्निप्लुष्टरुजं हरच्छिशिरतां तन्वनुरुत्वं दधत् ।

भिन्दञ्छूलमयव्रणान् भिषग्वरः छिन्दन्विसर्पादिकम्

रालं भाति समाचरन्नतिसृतो शार्दूलविक्रीडितम् ॥

Siddha Bhaiṣajya Maṇimālā.

सर्जपर्पटीयोगः

राले चतुष्पद्ममि ते द्रवतेऽग्नियोगात्
 सम्मिल्य शुक्लविषमर्धपलप्रमाणम् ।
 खल्वे क्षिपेत्सपदि पर्पटिकारसोऽयं
 हन्यात्कफानिलमतिभ्रमवान्तिवेगान् ।

Siddha Bhaisajya Maṇimālā, Jvaraprahaṇa.

सर्ज(सर्जरस)गुणाः

सर्जकषायः व्रणजित् कफस्वेदमलक्रिमीन् ।
 ब्रध्नविद्रधिबाधिर्ययोनिकर्णमदाञ्जयेत् ॥

Bhāvaprakāśa Nighaṇṭu.

ज्वरेषु दाहशान्त्यर्थं सर्जतैलप्रदेहः

सर्जकाञ्जिकसंसिद्धं तैलं शीताम्बुमर्दितम् ।
 ज्वरदाहापहं लेपात् सद्योवातासदाहनुत् ॥

Cakradatta, Jvaracikitsā, 1-281.

पादस्फुटने सर्जरसादिलेपः

Cakradatta, Kuṣṭha cikitsā, 50-41.

पाददारीशमनाय सर्जादिपादमार्जनम्

सर्जाख्यसिन्धूद्भवयोश्चूर्णं मधुताप्लुतम् ।
 निर्मथ्य कटुतैलाक्तं हितं पादप्रमार्जनम् ॥

Cakradatta, Kṣudraroga cikitsā, 55-12.

ŚĀLI

Botanical name : *Oryza sativa* Linn.

Family : Poaceae (Graminae)

Classical name : Śāli

Sanskrit names

Śāli, Taṇḍula, Lājā, Dhānya.

Regional names

Chaval, Dhan (Hindi); Khil-laja (Hindi); Chal (Beng.); Tandula, Dhan, Bhat (Mar.); Dangar, Choka (Guj.); Vadlu, Varidhanyamu (Tel.); Nella, Arisi (Tam.); Nelli, Bhatta, Akki (Kan.); Nelli, Ari (Mal.); Paddy, Rice (Eng.).

Description

An annual or perennial grass without a rhizome. Leaves long and narrow, 30-50 cm. $\times$ 12.25 cm., slightly pubescent with spiny hairs on the margin.

Inflorescence a terminal panicle varying from close and compact in some to loose and spreading in others; spikelets generally single, but in some in clusters of 2-7; number of spikelets varying from 50-60 to 200-300; large numbers being usually associated with smaller size and a densely packed arrangement; lemma and palea surrounding the kernel, variously coloured, golden yellow, red, purple, brown or smoky black, becoming straw or light yellow when the grain ripens.

Grains varying in size from 5 to 14.5 mm. long and 1.9 to 3.7 mm. broad, the length/breadth ratio defining size and shape of the grain; kernel most commonly white, occasionally red, purple or brown.

The immature grain or paddy is botanically called caryopsis and consists of a loose outer husk enclosing the kernel. The husk varies in thickness as well as the ease with which it separates from the kernel in different types of rice. It constitutes upto 25% of the paddy.

The kernel itself is made up of three parts viz. the outer layers which include the pericarp (or seed coat) with the underlying aleurone layer, the starchy endosperm, and the germ (or embryo), which on the average amount respectively to 60.0, 91.75 and 2.25 per cent of the grain.

Flowering and fruiting time

Farming season.

Distribution

Plant is widely cultivated throughout India. Paddy is a most common and one of the principal food crops of various growing regions in country.

Kinds and varieties

Varietal diversity of *Oryza sativa* Linn. is great and several thousands types differing from one another in morphological and physiological characters exist under cultivation in different parts of the world including India. Various classifications on the basis of a number of factors relating

rice, season, area, crop, hybrid, quality, environment, types, food values, breeding and several other aspects have been made and followed in agro-practices and vast area of paddy farming under agricultural, nutritional sciences including food technology.

There are five major groups of Dhānya varga have earlier made in Indian medical science (including materia medica) viz. Śālidhānya, Brīhidhānya, Śimbī dhānya, Trṇadhānya and Śūkadhānya. Various aspects of Śāli dhānya have systematically been discussed in medical texts at length covering kinds, varieties, types, numbers, qualities utilisation, medicinal and food values etc. and especially utility in medicine from therapeutic and pharmaceutical point of view, considering the role of śāli (paddy etc. rice) in health and diseases.

Chemical composition

The chemical composition of rice is influenced to some extents by generic and environmental factors. Analysis of 14 types of husked rice from different parts of India gave the following ranges of values : moisture 10.9-13.78, ether extr. 0.59-2.59, protein 5.50-9.32, carbohydrates 73.35-80.81, fibre 0.18-0.95 and mineral matter 0.79-2.00 per cent.

Pharmacodynamics

Rasa	: Madhura, Anurasa : Kaṣāya
Guṇa	: Guru, snigdha
Virya	: Śīta
Vipāka	: Madhura
Doṣakarman	: Pittaghna
	Vātakaphavardhana

Properties and action

Karma	: Rucya
	Br̥mhāṇa
	Hṛdya
	Stanyajanana
	Vṛṣya
	Balya
	Svarya
	Jvaraghna

	Baddhālpavarcasa
	Mūtrala
Roga	: Dourbalya
	Hṛdroga
	Mūtrakṛcchra
	Pradara
	Stanyakṣaya.

Therapeutic uses

Besides the common utility of Śāli (taṇḍula) as food article, the drug Śāli is possessing medicinal properties and useful for preventive and curative purposes medicine as well as wholesome (pathya) and unwholesome (apathya) diet by keeping its medicinal values and processing of medicated dietetics (saṅskārīta khādyā) in account. Various forms, items and products of śāli (rice, paddy, parched, husked and dehusked etc.) are mentioned in medicine and its branches for different kinds of uses including beverages.

In general, Śāli is madhura (sweet) in rasa (taste) and kaṣāya in anurasa (unmanifest taste) and madhura in vipāka, it is laghu (light) and snigdha in guṇa (physical properties). It is hṛdya, rucya, bṛmhāṇa, vṛṣya, balya, svārya and jvaraghna. It allays pitta doṣa and increases vāta and kapha humors (subject to processing variation of rice). It has good galactagogue properties.

Śāli is suggested to be used in different forms in stanyakṣaya, bhagna, mūtrakṛcchra, vraṇa, pradara, atidagdha, pādapiṭikā, pārśvabastiśīroruja and also as rasāyana. It is restricted in various diseases as unwholesome (ahitakara or apathya).

Broadly the rice (taṇḍula) forms about one-half of the total amount of cereals consumed in the country where the pattern of consumption in different parts of country is also depending on rice producing regions. Rice is the staple diet of millions as a major and relishing food of daily household need of society.

Parts used : Fruits, seeds (grains), root.

Dose : Powder 5-10 gm.

Decoction 50-100 ml.

ŚĀLI (शालि)

धान्यभेदाः

शालयो रक्तशाल्याद्याः षष्टिकाद्याश्च ब्रीहयः ।
मुद्राद्यं शिम्बिजं शैचं वैदलं शिम्बिधान्यकम् ॥
कङ्खादि तृणधान्यं स्यात् कुधान्यं क्षुद्रधान्यकम् ।
यवादिकं शूकधान्यमिति धान्यं तु पञ्चधा ॥

Kaiyadeva Nighaṇṭu, Dhānya varga, 1-2.

धान्यवर्ग-पञ्चभेदाः

शालिधान्यम्,
ब्रीहिधान्यम्,
शिम्बीधान्यम्,
तृणधान्यम्,
शूकधान्यम्,

धान्यपञ्चकम् धान्यानां भेदाः

शालिधान्यं ब्रीहिधान्यं शूकधान्यं तृतीयकम् ।
शिम्बीधान्यं क्षुद्रधान्यमित्युक्तं धान्यपञ्चकम् ॥

Bhāvaprakāśa Nighaṇṭu, (Navama)-Dhānya varga, 1.

शाल्यादीनां भेदाः

शालयोः रक्तशाल्याद्या ब्रीहयः षष्टिकादयः ।
यवादिकं शूकधान्यं मुद्राद्यं शिम्बिधान्यकम् ॥

Bhāvaprakāśa Nighaṇṭu, Dhānya varga, 2.

शालिधान्यलक्षणम्

‘कण्डनेन बिना शुक्ला हैमन्ताः शालयः स्मृताः ।’

Bhāvaprakāśa Nighaṇṭu, Dhānya varga, 3.

शालिभेदाः

रक्तशालिः लोहितकः पाण्डुकः शकुनाहतः ।
सुगन्धिको महाशालिः कलमस्तु फलामतः ॥

शालिजातयः

रक्तशालिर्महाशालिः कलमः शकुनाहतः ।
रोध्रशूको दीर्घशूको गौरो महिषमस्तकः ॥

पुष्पाण्डको दीर्घनालो लाङ्गलः शङ्खमौक्तिकः ।
 शीतभीरुलोहबालो महादूषलदूषकौ ॥
 सारामुखः सारिवाख्यो धृतमण्डः सुगन्धकः ।
 पुण्ड्रः पाण्डुः पुण्डरीकः पूर्णचन्द्रः प्रमोदकः ॥
 काञ्चनो हायनो वेणुः पतङ्गस्तपनीयकः ।

Kaiyadeva Nighaṇṭu, Dhānya varga, 4.

कुष्ठचिकित्सायां विपादिकाविकारे नारिकेलजलपूतिक-
 तण्डुल-प्रलेपः

नारिकेलोदके न्यस्तस्तण्डुलः पूतिकां गतः ।
 लेपाद्विपादिकां हन्ति चिरकालानुबन्धिनीम् ॥

Cakradatta, 50-40.

रक्तपित्ते लाजतर्पणम्

तर्पणं सघृतक्षौद्रं लाजचूर्णैः प्रदापयेत् ।
 उर्ध्वगं रक्तपित्तं तत् पीतं काले व्यपोहति ॥

Caraka Samhitā, Cikitsā, 4-34.

शालयः जातिभेदेन

रक्तशालिः सकलमः पाण्डुकः शकुनाहतः ।
 सुगन्धकः कर्दमको महाशालिश्च दूषकः ॥
 पुष्पाण्डकः पुण्डरीकस्तथा महिषमस्तकः ।
 दीर्घशूकः काञ्चनको हायनो लोध्रपुष्पकः ॥

Bhāvaprakāśa Nighaṇṭu, Dhānya varga, 4-5.

बहुदेशजजातयः

इत्याद्याः शालयः सन्ति बहवो बहुदेशजाः ।
 ग्रन्थविस्तारभीतेस्ते समस्ता नात्र भाषिताः ॥

Bhāvaprakāśa Nighaṇṭu, Dhānya varga, 6.

शालीनां गुणाः

शालयो मधुराः स्निग्धा बल्या बद्धाल्पवर्चसः ।
 कषाया लघवो रुच्यः स्वर्या वृश्याश्च बृंहणाः ॥
 अल्पानिलकफाः शीताः पित्तघ्नाः मूत्रलास्तथा ॥

Bhāvaprakāśa Nighaṇṭu, Dhānya varga, 7.

शालिसामान्यगुणाः

शालयो लघवः स्निग्धाः मधुरा रसपाकतः ।

कषायानुरसा हृद्या रुच्या बद्धाल्पवर्चसः ॥

शीतला बृंहणाः वृष्या लघुपाकातिमूत्रलाः ।

पित्तघ्नाल्पानिलकफा बल्याः स्वर्या ज्वरापहाः ॥

Kaiyadeva Nighaṇṭu, Dhānya varga, 7-9.

धान्यत्रितयम्

धान्यं भोग्यञ्च भोगार्हमन्नाद्यं जीवसाधनम् ।

तच्च तावत् त्रिधा ज्ञेयं शूकशिम्बी तृणाह्वयम् ॥

अ. ब्रीह्यादिकं यदिह शूकसमन्वितं स्यात्

तच्छूकधान्यमथ मुद्गमकुष्टकादि ।

शिम्बी निगूढमिति तत्प्रवदन्ति शिम्बी-

धान्यं तृणोद्भवतया तृणधान्यमन्यत् ॥

ब. वातादिदोषशमनं लघु शूकधान्यं

तेजोबलातिशयवीर्यविवृद्धिदायि ।

शिम्बीभवं गुरु हिमं च विबन्धदायि

वातूलकं तु शिशिरं तृणधान्यमाहुः ॥

Rāja Nighaṇṭu, Śālyādi varga, 1-3.

अतिसारे शक्तुपिण्डिकाप्रयोगः

गुर्वी पिण्डी खराऽत्यर्थं लघ्वी सैव विपर्ययात् ।

शक्नुनामाशु जीर्येत मृदुत्वादवलेहिका ॥

Cakradatta, 3-9.

उदररोगे यवागू

भावितानां गवां मूत्रे षष्टिकानां तु तण्डुलैः ॥

यवागूं पयसा सिद्धां प्रकामं भोजयेन्नरम् ।

पिबेदिक्षुरसं चानु जठराणां निवृत्तये ॥

स्वं स्वं स्थानं व्रजन्त्येवं तथा पित्तकफानिलाः ।

Caraka Samhitā, Cikitsā, 13-165-166.

बहुसङ्ख्यकजातयः

देशे देशे शूकधान्येषु सङ्ख्या ज्ञातुं शक्या नैव तथैव तैर्वा ।

तस्मादेषां येषु भोगोपयोगास्तान्यस्माभिर्व्याक्रियन्ते कियन्ति ॥

Rāja Nighaṇṭu, Śālyādi varga, 4.

शालिभेदाः

शालयः कलमा रुच्या ब्रीहिश्रेष्ठा नृपप्रियाः ।

धान्योत्तमाश्च विज्ञेयाः कैदाराः सुकुमारकाः ॥

राजान्नषष्टिकसितेतररक्तमुण्ड
 स्थूलाणुगन्धनिरपादिकशालिसंज्ञः ।
 ब्रीहिस्तथेति दशधा भुवि शालयस्तु
 तेषां क्रमेण गुणनामगणं ब्रवीमि ॥

Rāja Nighatnu, Śālyādi varga, 5-6.

दग्धमृञ्जातशालिः

शालयो दग्धमृञ्जाताः कषाया लघुपाकिनः ।
 सृष्टमूत्रपुरीषाश्च रूक्षाः श्लेष्मापकर्षणाः ॥

कैदारशालिः

कैदाराः वातपित्ताघ्ना गुरुवः कफशुक्रलाः ।
 कषायाश्चाल्पवर्चस्का मेध्याश्चैव बलावहाः ॥

स्थलजशालिः

स्थलजाः स्वादवः पित्तकफघ्ना वातवह्निदाः ।
 किञ्चित्तिक्ताः कषायाश्च विपाके कटुका अपि ॥

वापितशालिः

वापिता मधुरा वृष्या बल्याः पित्तप्रणाशनाः ।
 श्लेष्मलाश्चाल्पवर्चस्काः कषाया गुरुवो हिमाः ॥

अवापितशालिः

‘अवापितेभ्यो गुणैः किञ्चिद्धीनाः प्रोक्ता अवापिताः ।’

Bhāvaprakāśa Nighaṇṭu, Dhānya varga, 8-12.

नव-पुराण-रोपित-शालिगुणाः

रोपितास्तु नवा वृष्याः पुराणाः लघवः स्मृताः ।
 तेभ्यस्तु रोपिता भूयः शीघ्रपाकाः गुणाधिकाः ॥

छिन्नारूढशालिगुणाः

छिन्नरूढा हिमा रूक्षा बल्याः पित्तकफापहाः ।
 बद्धविटाः कषायाश्च लघवश्चाल्पतिक्ताः ॥

Bhāvaprakāśa Nighaṇṭu, Dhānya varga, 13-14.

स्तनस्थापनकरयोगः

‘प्रथमर्त्तो तण्डुलाभ्यो नस्यं कुर्यात् स्थिरौ स्तनौ ।’

Cakradatta, 63-57.

तृष्णाविकारे लाजोदकम्

लाजोदकं मधुयुतं शीतं गुडविमर्दितम् ।

काश्मर्यशर्करायुक्तं पिबेत् तृष्णाऽर्दितो नरः ॥

Cakradatta, 16-14.

विसर्पे शालिप्रयोगः

रक्ताः श्वेता महाद्वाश्च शालयः षष्टिकैः सह ।

भोजनार्थे प्रशस्यन्ते पुराणाः सुपरिखुताः ॥

Caraka Samhitā, Cikitsā, 21-113.

वातजमसूरिकायां लाजातर्पणम्

‘तर्पणं वातजायां प्राग् लाजचूर्णेः सर्शकरैः ।’

Cakradatta, 54-13.

मसूरिकायां तण्डुलाम्बुसेकः

पाददाहं प्रकुरुते पिडका पादसम्भवा ।

तत्र सेकं प्रशंसन्ति बहुशस्तण्डुलाम्बुना ॥

Cakradatta, 54-29.

विशिष्टशालिजातयः

रक्तशालिः

रक्तशालिर्वरस्तेषु बल्यो वर्ण्यस्त्रिदोषजित् ।

चक्षुष्यो मूत्रलः स्वर्यः शुक्रलस्तृड्ज्वरापहः ॥

विषव्रणश्वासकासदाहनुद् बह्निपुष्टिदः ।

तस्मादल्पान्तरगुणाः शालयो महदादयः ॥

Bhāvaprakāśa Nighaṇṭu, Dhānya varga, 15-16.

रोधशूकः

दीर्घशूकः

दीर्घनालः

कुक्कुटाण्डः

सारामुखः

पारावतः

पुण्डरीकः

पतङ्गः

लाङ्गलः

गौरः

शकुनाहतः

सूचीमुखः

तपनीयः

महाशालिः

कलमः

Kaiyadeva Nighaṇṭu, Dhānya varga, 11-25.

षष्टिकस्त्रीहिधान्यम्

अ. ब्रीहिश्रेष्ठो गर्भपाकी षष्टिकः षष्टिहायनः ।

गौरो गौरासितः कृष्णास्त्रिधैवं षष्टिको मतः ॥

- ब. तत्र गौरो वरः स्निग्धः स्वादुः शीतो मृदुर्लघुः ॥
 त्रिदोषघ्नो स्थिरो ग्राही रक्तशालिगुणान्वितः ॥
 स. अन्यो ब्रीहिर्गुरुः स्वादुः पाकेऽम्लः पित्तवर्धनः ।

Kaiyadeva Nighaṇṭu, Dhānya varga, 26-28.

गन्धशालिः	पाटलब्रीहिः
छिन्नशालिः	वाप्यशालिः
स्थलजशालिः	दग्धभूमिजातधान्यम्
रोपितधान्यम्	पञ्चधान्यतण्डुलः
सूक्ष्मशालिः	पक्षिकशालिः
उम्यासशालिः	कौसुम्भी शालिः
कुम्भशालिः	कलाटकशालिः
तिलवासिनीशालिः	कुङ्कुमशालिः
सुगन्धशालिः	रक्तशालिः
कलमशालिः	पृथक् शालिः

Bhāvaprakāśa Nighaṇṭu, Dhānya varga, 17-26.

Kaiyadeva Nighaṇṭu, Dhānya varga, 28-35.

Rāja Nighaṇṭu, Śālyādi varga, 26-58.

स्तन्यवर्धनार्थं शालितण्डुलचूर्णम्

दुग्धेन शालितण्डुलचूर्णपानं विवर्जयेत् ।

स्तन्यं सप्ताहतः क्षीरसेविन्यास्तु न संशयः ॥

Cakradatta, Sūtrōga cikitsā, 63-45.

ख. लाजा

अतिसारे

कोशकारं घृते भृष्टं लाजाचूर्णं सिता मधु ।

सशूलं रक्तपित्तोत्थं लीढं हन्त्युदरामयम् ॥

Suśruta Samhitā, Uttara, 40-126.

ज्वरे

दाहवम्यर्दितं क्षामं निरन्नं तृणयान्वितम् ।

शर्करामधुसंयुक्तं पाययेद्भ्राजातर्पणम् ॥

Bhāvaprakāśa, Cikitsā, 4-34.

रक्तपित्ते

‘लिह्याच्च लाजाञ्जनचूर्णमेकमेवं सिताक्षौद्रयुतां तुगाख्याम् ।’

Suśruta Samhitā, Uttara, 45-32.

तर्पणं सघृतक्षौद्रं लाजाचूर्णं प्रदापयेत् ।
उर्ध्वगं रक्तपित्तं तत् पीतं काले व्यपोहति ॥

Caraka Samhitā, Cikitsā, 4-34.

छद्याम्

एलादिचूर्णे

Cakradatta, 15-23.

लाजाच्छर्दिषु

Aṣṭāṅga Hṛdaya, Uttara, 40-48.

‘सक्षौद्रां शालिलाजानां यवागूं वा पिबेन्नरः ।’

Suśruta Samhitā, Uttara, 49-34.

‘सर्पिः क्षौद्रयुतान् वापि लाजासकून् पिबेत्तथा ।’

Suśruta Samhitā, Uttara, 49-32.

लाजाकपित्थमधुमागधिकोषणानां

क्षौद्राभयात्रिकटुधान्यकजीरकाभ्याम् ।

पथ्यामृतामरिचमक्षिकपिप्पलीनां

लेहास्त्रयः सकलवम्यरुचिप्रशान्त्यै ॥

Cakradatta, 15-27.

विविधविकाराणां लाजा-षष्टिकाप्रयोगाः

क. षष्टिकः रसायने

‘पयसा वा षष्टिकः ससर्पिष्कः ।’

Caraka Samhitā, Cikitsā, 1-1-75.

‘जीर्णे जीर्णे च भुञ्जीत षष्टिकं क्षीरसर्पिषा ।’

Caraka Samhitā, Cikitsā, 1-4-23.

वाजीकरणे

षष्टिकादिगुटिका

Caraka Samhitā, Cikitsā, 2-2-3/9.

उदरे

भावितानां गवां मूत्रे षष्टिकानां तु तण्डुलैः ।

यवागूं पयसा सिद्धां प्रकामं भोजयेन्नरम् ॥

पिबेदिक्षुरसं चानु जठराणां निवृत्तये ।

Caraka Samhitā, Cikitsā, 13-165/166.

Aṣṭāṅga Hṛdaya, Cikitsā, 15-122/123.

प्रमेहे

‘सषष्टिकं स्यात् तृणधान्यमन्नं यवप्रधानस्तु भवेत् प्रमेही ।’

Caraka Samhitā, Cikitsā, 6-21.

शालिः

स्तन्यजननार्थम्

दुग्धान्वितं कलमतण्डुलसूक्ष्मचूर्णं पीतं प्रसूतयुवतेः पयसोऽभिवृद्धये ।

स्याद् दुग्धभोजनरतेरथवा विदारीकन्दोऽपि दुग्धसहितो दिनसमकेन ॥

Rājamārtanḍa, 31-38.

रसायने

ब्राह्मरसायने

Caraka Samhitā, Cikitsā, 1-1-44.

मूत्रकृच्छ्रे

शतावरीकाशकुशश्वदंष्ट्राविदारिशालीक्षुकशेरुकाणाम् ।

क्वाथं सुशीतं मधुरशर्कराभ्यां युक्तं पिबेत् पैत्तिकमूत्रकृच्छ्री ॥

Caraka Samhitā, Cikitsā, 26-50.

पार्श्ववस्तिशिरोरुजि

‘पेया वा रक्तशालीनां पार्श्ववस्तिशिरोरुजि ।’

Caraka Samhitā, Cikitsā, 3-181.

भग्ने

‘शतधौतघृतान्मिश्रं शालिपिष्टञ्च लेपनम् ।’

Vṛndamādhava, 46-3.

पादपिटकायाम्

पाददाहं च कुरुते पिटका पादसम्भवा ।

तत्र सेकं प्रशंसन्ति बहुशस्तण्डुलाम्बुना ॥

Vṛndamādhava, 56-24.

व्रणे

जीर्णशाल्योदनं स्निग्धमल्पमुष्णं द्रवोत्तम् ।

भुज्जानां जाङ्गलैर्मसैः शीघ्रं व्रणमपोहति ॥

Suśruta Samhitā, Sūtra, 19-32.

रक्तप्रदरे

क्षीरे स्थितं लोहितशालिपिष्टं शुशीतलं माक्षिकसंयुतञ्च ।

पीतं निहन्ति प्रदरामयोत्थातिप्रवृत्तामसृजः प्रवृत्तिम् ॥

Rājamārtanḍa, 31-6.

अतिदग्धे

अतिदग्धे विशीर्णानि मांसान्युद्धृत्य शीतलम् ।

क्रियां कुर्याद् भिषक् पश्चाच्छालितण्डुलकण्डनैः ॥

तिन्दुकीत्वक्कायैर्वा घृतमिश्रैः प्रलेपयेत् ।

व्रणं गुडूचीपत्रैर्वा छदयेदथवोदकैः ॥

Suśruta Samhitā, Sūtra, 12-25/26.

ŚĀLAPARNĪ

Botanical name : *Desmodium gangeticum* Dc.

Family : Fabaceae (Papilionaceae)

Classical names : Śālaparnī, Śālīparnī

Sanskrit names

Śālaparnī, Vidārigandhā, Amśumatī, Triparnī, Guhā, Sthirā, Dīrghapatrā, Dīrghāṅghri.

Regional names

Sarivan (Hindi); Shalapani (Beng.); Salavan (Mar.); Shalavan (Guj.); Gitanaram (Tel.); Pulladi (Tam.); Pullati (Mal.).

Description

Root drug morphology : The dried matured tap roots are utilised as drug. The roots are simple, branched, long, irregularly, curved, light yellow, in colour and are of varying length, usually 10.0-30.0 cm. long. The roots are cylindrical and have cord like appearance. The diameter of roots range from 0.5-2.5 cm. The whole root system is usually cut into smaller and convenient sizes or occasionally formed as compact handle consisting of whole root system. The surface of the roots are smooth bearing irregularly distributed small brown lenticles. It breaks with short and fibrous fracture. It has no characteristic odour, but the taste is slightly sweetish and mucilaginous.

Nearly erect under shrub or small shrub; stem pubescent, 2-5 feet (or 91-122 cm.) high (upto 1.5 m.); woody or herbaceous. Plants very variable and met with in its various forms (in forests and waste lands).

Leaves 1-foliolate; leaflets 7.6-15.2 cm. variable in width, ovate, oblong, acute, base rounded or sub-cordate, pointed; leaves somewhat resembling with leaves of *Shorea robusta* Gaertn. f. (śāla patra) in shape; lvs. back side (surface lower) dull coloured and slightly hairy. Petiole 1-3.3 cm., stipule persistent, 0.64-0.85 cm.

Flowers white or lilae, tinged in close set fascicles of 15-30.5 cm. long racemes, fls. on branch-ends or axillary spikes.

Pods follicles 1.3-1.9 × 0.25 cm., falcate, 6-8 jointed, joints minutely hairy (hairs curved) sticky to clothes.

Flowering and fruiting time

Almost throughout the year; flowering begins in rainy season or summers and flowering-fruiting in cold season; sometimes fruits in winters.

Sine the plant grows wild commonly throughout India, it is not largely cultivated. For experimental and small scale cultivation for drug requirement, the plant can be propagated through seeds. The plants are uprooted and roots are washed, free from sand etc. and cut into small pieces. Commercial supplies of drug generally consist of whole plant comprising aerial part as well as subterranean parts. From the cultivated area, the plant drug is collected during winter season. The plants may be collected from field in nature after rains or autumn season.

Kinds and varieties

Various other plants are considered and sometimes employed as botanical sources (substitutes and adulterants) of drug Śāliparnī particularly certain species of *Desmodium* genus viz. *Desmodium polycarpum* Dc., *Uraria* genus viz. *Uraria lagopoides* Dc. and *U. hamosa* Wall. and also *Flemingia* genus viz. *Flemingia paniculata* Wall. and *F. stricta* Roxb. *Pseudarthia viscida* W. & A. is also taken for the purpose.

The identity of the drug Śāliparnī is sometimes and particularly in certain regions of country subject of plurality and difference of opinion (for acceptance or use of plant in conventions). However, *Desmodium gangeticum* DC. is presently acceptable and obtained commonly as Śāliparnī.

Distribution

Plant occurs throughout India ascending upto 1,650 meters (or 5,000 feet), in various provinces in country i.e. Andhra Pradesh, Assam, Bihar, Gujarat, Himachal Pradesh, Jammu & Kashmir, Kerala, Tamilnadu, Uttar Pradesh and Madhya Pradesh.

Plants are found wild in the forests, specially sal forests abundantly; in the outer Himalayas, foothills and Siwaliks (ascending to 5,000 ft. altitude); commonly along roadsides; forest-patches, waste lands, roadsides gardens and other shady places.

Chemical composition

Roots contain yellow resinous matter, oil, alkaline substance and ash 6 per cent.

Pharmacodynamics

Rasa	: Madhura, tikta
Guṇa	: Guru, snigdha
Virya	: Uṣṇa
Vipāka	: Madhura
Doṣakarma	: Tridoṣaśāma

Properties and action

Karma	: Aṅgamardapraśamana
	Nāḍībalya
	Dipana-snehana-anulomana
	Stambhana
	Kṛmighna
	Hṛdya-śothahara
	Śonitāsthāpana
	Kaphaniḥsāra
	Vṛṣya
	Mūtrala
	Jvaraghna
	Balya
	Bṛmhana
	Rasāyana
Roga	: Nāḍidourbalya
	Vātavyādhi-vātarakta
	Dourbalya-aṅgamarda
	Agnimāndya-koṣṭhavāta

Atisâra
 Vamana
 Kṛmi
 Arśa
 Hṛdroga
 Raktavikâra
 Śoṭha
 Hṛcchûla
 Urahkṣata
 Kâsa
 Yakṣmâ
 Śukradourbalya
 Mûtrakṛcchra
 Prameha
 Viṣamajvara
 Kṣaya
 Śoṣa
 Netravikâra
 Śiraḥśûla
 Mûḍhagarbha
 Bâlaroga.

Therapeutic uses

The drug Śālīparṇī is used as alterative, anthelmintic, anti-catarrhal, carminative, diuretic, expectorant, febrifuge, nervine tonic, anti-diarrhoeal, stomachic and tonic. Drug is useful in asthma, brain affections, fevers-catarrhal, inflammation, vomiting and scorpion-sting.

The drug possesses astringent, aphrodisiac, anthelmintic, diuretic, febrifuge and tonic properties. It is used in general anasarca, consumption, cough, diarrhoea, fever including enteric fever, piles, respiratory disorders, vomiting and worms.

The drug is used as an ingredient of a number of official preparations of classical remedies such as Agastya Haritakī Rasāyana, Brāhma Rasāyana, Daśamûla kvātha cūrṇa, Vidāryādi cūrṇa kvātha, Elādi ghṛta, Daśamûla ghṛta, Daśamûla śatapalaka ghṛta, Dadhika ghṛta, Sudarśana cūrṇa, Dhānvantara ghṛta, Nārāyaṇa taila, Madhuyasṭyādi taila, Sahacarādi taila, Mansamitra taila and

Śālaparnyādi kvātha, Laghupañcamūla kvātha, Dasamūlāriṣṭa and some other compound formulations.

The studies have shown bronchodilator, vasopressor, analgesic, antipyretic, cardiostonic and stimulant action.

Parts used : Roots, whole plant.

Dose : Decoction 50-100 ml.

Formulations (yoga) : Śālaparnyādi kvātha.

Groups (gaṇa)

Āṅgamardapraśamana, Balya, Snehopaga, Śvayathuhara, Madhuraskandha (Caraka Saṁhitā), Vidārigandhādi, Laghupañcamūla (Suśruta Saṁhitā), Daśamūla.

ŚĀLIPARNĪ-ŚĀLAPARNĪ

(शालिपर्णी-शालपर्णी)

शालपर्णी स्वादुतिक्ता वृष्योष्णा बृंहणी गुरुः ॥

रसायनी ज्वरश्वासविषदोषत्रयापहा ।

मेहशोषकृमिच्छर्दिक्षतकासातिसारजित् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 45-46.

शालपर्णीगुणाः

शालपर्णी स्थिरा सौम्या त्रिपर्णी पीवरी गुहा ।

विदारिगन्धा दीघाङ्घ्रिपत्रांशुमत्यपि ॥

शालपर्णी गुरुश्छर्दिज्वरश्वासातिसारजित् ॥

शोषदोषत्रयहरी बृंहण्युक्ता रसायनी ।

तिक्ता विषहरी स्वादुः क्षतकासकृमिप्रणुत् ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 32-33.

शालपर्णी रसे तिक्ता गुरुष्णा वातदोषजित् ।

विषमज्वरमेहार्शःशोथसन्तापनाशिनी ॥

Rāja Nighaṇṭu, Śatāhvādi varga, 20.

‘विदारिगन्धा वृष्यसर्वदोषहराणाम् ।’

Caraka Saṁhitā, Sūtra, 25.

अर्धावभेदके

‘शालपर्ण्यम्भसा क्षिप्रं नस्यमर्धावभेदजित् ।’

*Śodhala, Gadanigraha, 3-1-63.
Śīrorogādhikāra.*

‘स्थिरारसो वा लेपे तु प्रपुन्नाटोऽम्लकल्कितः ।’

Aṣṭāṅga Hṛdaya, Uttara, 24-10.

मूढगर्भे

परूषकशिफालेपः स्थिरामूलकृतोऽथवा ।

नाभिबस्तिभगाद्येषु मूढगर्भविकर्षणः ॥

Vṛnda mād̐hava, Strīrogaādhikāra, 65-13.

अतिसारे

‘शालपर्णी.... ।

प्रयोजयेदन्नपाने विधिना सूपकल्पितम् ॥’

Caraka Saṁhitā, Cikitsā, 10-29.

अतिसारशूलशमनार्थम्

‘शूलार्दितो व्योषविदारिगन्धासिद्धेन दुग्धेन हिताय भोज्यः ।’

Suśruta Saṁhitā, Uttara, 40-145.

नेत्रविकारे पिल्ले

ताम्रपात्रे गुहामूलं सिन्धूत्थमरिचान्वितम् ।

आरनालेन सम्पृष्टमञ्जनं पिल्लनाशनम् ॥

Vṛndamād̐hava, 61-246.

उदररोगे

‘सुरङ्गी शालिपर्णी श्यामा पुनर्नवाकल्कं वा ।’

Suśruta Saṁhitā, Cikitsā, 14-10.

महावातव्याधौ

‘शालिपर्णी पृश्निपर्णी बृहत्यौ वा क्षीरपिष्टाः तर्पणमिश्राः ।’

Suśruta Saṁhitā, Cikitsā, 5-10.

आतिसारे आहारयोजना

‘एष आहारसंयोगे हितः सर्वातिसारिणाम् ।’

Suśruta Saṁhitā.

वाताभिष्यन्दे

‘नस्यादिषु स्थिराक्षीरमधुरैः तैलमिष्यते ।’

Suśruta Saṁhitā, Uttara, 9-11.

वातशोणिते

अंशुमत्या शृतः प्रस्थः पयसो द्विसितोपलः ।

पाने प्रशस्यते तद्वत् पिप्पलीनागरैः शृतः ॥

Caraka Samhitā, Cikitsā, 29-30.

हृद्गतवाते शालिपर्णीक्षीरम्

‘हृदि प्रकुपिते वाते चांशुमत्या पयो हितम् ।’

Caraka Samhitā, Cikitsā, 28-96.

Baṅgasena, Vāta-vyādhi, 62.

Cakradatta, Vāta-vyādhi Cikitsā, 22-29.

वातरक्ते

‘शालिपर्णी पृश्निपर्णी बृहत्यौ वा क्षीरपिष्टास्तर्पणमिश्राः ।’

Suśruta Samhitā, Cikitsā, 5-10.

सुखप्रसवे

मूलञ्च शालिपर्ण्यास्तु पिष्ट्वा वा तण्डुलाम्बुना ।

नाभिबस्तिभगालेपात् सुखं नारी प्रसूयते ॥

Baṅgasena, Strīroga, 235.

बालरोगे अतिसारे

शालिपर्णीपृश्निपर्णीघोण्टात्वक्कथितं जलम् ।

क्षौद्रयुक्ते त्रिदोषघ्नं सर्वातीसारनाशनम् ॥

Baṅgasena, Bālaroga, 39.

गलगण्ड-मेदोजे

‘मूत्रेण वालोड्य हिताय सारं प्रातः पिबेत् शालमहीरुहाणाम् ।’

Suśruta Samhitā, Cikitsā, 18-53.

कुष्ठे

‘प्रियालशालारग्वधनिम्बसप्तपर्णीचित्रकमरिच-

वचाकुष्ठसिद्धं श्लेष्मकुष्ठिनाम् ।’

Suśruta Samhitā, Cikitsā, 9-7.

हिक्काश्वासयोः

‘युज्याद् धूमं शालनिर्यासजातम् ।’

Suśruta Samhitā, Uttara, 50-18.

कर्णरोगे

रसमाग्नकपित्थानां मधूकधवशालजम् ।

पुराणार्थं प्रशंसन्ति तैलं वा तैर्विपाचितम् ॥

Suśruta Samhitā, Uttara, 44-24.

पाण्डुरोगे

'शालादिकं चाप्यथ सारचूर्णं धात्रीफलं वा मधुनाऽवलिह्यात् ।'

Suśruta Samhitā, Uttara, 44-24.

मुखरोगे

स्नेहिकधूमे

Suśruta Samhitā, Cikitsā, 21-39.

शोथे

शाललेपनम्

Aṣṭāṅga Hṛdaya, Cikitsā, 17-26.

नेत्ररोगे

पुष्पाञ्जने

Suśruta Samhitā, Uttara, 17-8/9.

शोथे

एलादियोगे

Suśruta Samhitā, Uttara, 49-50.

प्रमेहे

शालसप्ताहकम्पिलकवृक्षकाक्षकपित्थजम् ।

रोहीतकञ्च कुसुमं मधुनाऽद्यात् सुचूर्णितम् ॥

कफपित्तप्रमेहेषु पिबेद् धात्रीरसेन वा ।

Aṣṭāṅga Hṛdaya, Cikitsā, 12-15/16.

कपित्थशालार्जुनदीप्यकाश्च.... ।

पादैः कषाया कफमेहिनां ते दशोपदिष्टा मधुसंप्रयुक्ताः ॥

Caraka Samhitā, Cikitsā, 6-27/30.

कम्पिलसप्तच्छदशालजानि

वैभीतरोहीतककौटजानि ।

कपित्थपुष्पाणि च चूर्णितानि क्षौद्रेण लिह्यात् कफपित्तप्रमेही ॥

Caraka Samhitā, Cikitsā, 6-35.

ŚALLAKĪ

Botanical name : *Boswellia serrata* Roxb.

Family : Burseraceae

Classical name : Śallakī

Sanskrit names

Śallakī, Susravā, Vallakī, Gajabhakṣyā, Gajabhakṣa,

Surabhi, Bahusravā, Suvahā, Maheruṇā, Kunduruki, Kunduru, Kunda, Sallakī, Mukunda, Sugandha.

Regional names

Salai (Hindi); Salai (Mar.); Salai (Ma.); Saledo (Guj.); Dhupado (Guj.); Paraginsavani (Tam., Tel.); Madi (Kann.); Indian olibanum tree (Eng.).

Description

Moderate or large branching tree with a bole 12-15' in height and 3-5' in girth. Bark greenish-grey, smooth.

Leaves crowded at the ends of branches, pubescent; rachis/stout; leaflets opposite 19-23, sessile; 4.9 × 1.5-2 cm., variable in shape, coarsely serrate, unequal sided, acute.

Flowers small, in axillary racemes. Calyx pubescent, outside, 5-7 cleft, persistent. Disc annular, red, crenate. Petals 5-7 imbricate, ovate, inflexed, white. Stamens 10, anthers hairy. Ovary 3-celled, surrounded by disc, style grooved; stigma 4-5-lobed.

Drupe 1-2 cm. long, green, smooth.

Flowering and fruiting time

Plant flowers and fruits during the period from February to April. Plant becomes leafless during January-March and the flowers appear at leafless stage of trees and the fruits also begin to appear.

Distribution

Plant is generally found in dry hill areas. It is common in most parts of the Central provinces, the Deccan, Bihar, Orissa, Rajputana, Central India, Eastern States, North Gujarat and also in few other regions of India. Trees are wild in forests, and also under plantation.

Trees of *Boswellia serrata* Roxb. (Śallakī) forms almost pure forests places and supplies are abundant, particularly from the Central provinces, Tamilnadu, Maharashtra, Bihar, Orissa, Uttar Pradesh (Bundelkhand) and some other areas in country.

Śallakī Nirvāsa (Indian Olibanum) : The trees of *Boswellia serrata* Roxb. or Śallakī vṛkṣa, on tapping, exudes an oleo-gum resin which is known as Śallakī Nirvāsa or Kunduru (Indian Olibanum). It hardens slowly, retaining its golden colour and transparency. The colour is that of

olibanum, but fainter and more terebinthinate. It burns readily and diffuses an agreeable odour. The odour is that of olibanum, but fainter and more terebinthinate. It burns readily and diffuses an agreeable odour.

The imported quality of Kunduru (olibanum) is obtained from another species *Boswellia floribunda* growing in Arab and Africa.

Chemical composition

Indian olibanum has the following average composition : moisture 10-11, volatile oil 8-9; rosin 55-57, gum 20-23, insoluble matter 4-5 per cent. The volatile oil, rosin and gum are major chemical products.

Pharmacodynamics

Rasa	: Kaṣāya, tikta, madhura
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka

Properties and action

Karma	: Purīṣavirajānīya
	Dīpana-pācana-grāhī
	Vātānulomana
	Kaphaniḥsāraka-śleṣmapūtiḥara
	Mūtrala
	Vṛṣya
	Tvacya
	Svedajanana
	Jvaraghna
	Kaṭupouṣṭika
	Hṛdya-raktastambhana
	Cakṣuṣya
	Vraṇaropaṇa-śodhana
	Śothahara-vedanāsthāpana
Roga	Durgandhanāśana-jantughna
	Pittaśāmaka
	: Agnimāndya-Ādhmāna
	Atisāra-pravāhikā-grahanī
	Mukhadourgandhya
	Arśa

Purīṣavaivarnya (pittajanya)
 Mūtrakṛcchra-pūyameha
 Śukradourbalya-pradara
 Tygdoṣa
 Jīrṇajvara
 Jīrṇakāsa-śvāsa
 Maṣṭiṣka dourbalya
 Sandhivāta-gaṇḍamālā
 Jīrṇavraṇa
 Pramehapīḍikā
 Netraroga
 Dourbalya.

Therapeutic uses

The drug Śallakī specially kunduru (oleo-gum resin) is purīṣavirajanīya, stomachic, digestive, astringent and carminative. It is used in piles and discolouration of faeces (purīṣavarṇa-vikāra). Kunduru is useful in diarrhoea, dysentery, foul smell of mouth and grahaṇī.

Śallakī is heart trouble (weakness), raktapitta (intrinsic haemorrhage), chronic cough, asthma, dysuria, gonorrhoea, leucorrhoea, seminal complaints (śukra dourbalya), cutaneous affections, chronic fever. It is useful as anti-biliary agent and given in various complaints accordingly.

Externally the oleo-gum resin (kunduru) is pasted or rubbed lukewarm on joints swelling and pain, rheumatic arthritis, cervical adenitis (gaṇḍamālā), chest pain (pārśva śūla) and other similar complaints.

The olibanum is chiefly used as incense. It is reported to be employed as medicine for rheumatism and nervous diseases and as an ingredient of certain ointments.

An ointment of olibanum (śallakī niryāsa malahara) is applied on chronic ulcer (jīrṇavraṇa), carbuncle (prameha pīḍikā). It is applied as collyrium (aṇjana) mixed with honey in eye diseases especially in conjunctivitis (pittābhiṣyanda).

Śallakī is useful in brain disorders particularly mental weakness (maṣṭiṣka-dourbalya). It is used in prameha roga.

Kundurū is incorporated as an ingredient of Balā taila (Caraka Saṁhitā) and Truṭyādi yoga (Caraka Saṁhitā) indicated in vātavyādhi and calculus or aśmari respectively.

Parts used : Tvak, oleo-gum, resin (Śallakī niryāsa-kundurū)

Dose : Bark decoction 50-100 ml.

Groups (gaṇa)

Purīṣavirajaniyā, Kaṣāyaskandha, Śirovirecana (Caraka Saṁhitā), Rodhrādi, Elādi, Kaṣāyaskandha (Suśruta Saṁhitā).

ŚALLAKĪ (शल्लकी)

कुन्दरुः (सुगन्धद्रव्यं शल्लकीनिर्यासः)

क. कुन्दरुस्तु मुकुन्दः स्यात्सुगन्धः कुन्द इत्यपि ।

ख. कुन्दरुर्मधुरस्तिक्कस्तीक्ष्णस्त्वच्यः कटुहरिर्त् ।

ज्वरस्वेदग्रहालक्ष्मीमुखरोगकफानिलान् ॥

Bhāvaprakāśa Nighaṇṭu, Karpūrādi varga, 50-51.

शल्लकी

क. शल्लकी गजभक्ष्या च सुवहा सुरभी रसा ।

महेरुणा कुन्दुरुकी वल्लकी च बहुस्रवा ॥

ख. शल्लकी तुवरा शीता पित्तश्लेष्मातिसारजित् ।

रक्तपित्तव्रणहरी पुष्टिकृत्समुदीरिता ॥

Bhāvaprakāśa Nighaṇṭu, Vatādi varga, 22-23.

शल्लकीनिर्यासः (कुन्दरुः)

खपुरः कुन्दरुः कुन्दुः मुकुन्दः भीषणो बलीः ॥

नागः श्रीबल्लभस्त्वाक्षी मेदुको मेचकः परः ॥

कुन्दरुर्मधुरस्तिक्कस्तीक्ष्णस्त्वच्यः कटुहरिर्त् ॥

ज्वरस्वेदग्रहालक्ष्मीमुखरोगकफानिलान् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1377-1378.

शल्लकी—सल्लकी

सल्लकः सल्लकी सल्ली सुगन्धा सुरभिस्त्रवा ।

सुरभिर्गजभक्ष्या च सुवहा गजवल्लभा ॥

गन्धमूला मुखामोदा सुश्रीका जलविक्रमा ।
हृद्या कुण्टरिका चैव प्रोक्ता त्रांसफला च सा ।
छिन्नरुहा गन्धफला ज्ञेया चाष्टदशाह्वया ॥

शल्लकीगुणाः

शल्लकी तिक्तमधुरा कषाया ग्राहिणी परा ।

कुष्ठान्नकफवातार्शोव्रणदोषार्तिनाशिनी ॥

Rāja Nighaṇṭu, Āmrādi varga, 183-185.

क. शल्लकी तुवरा शीता श्लेष्मपित्तातिसारजित् ।

रक्तपित्तव्रणहरी पुष्टिकृत्समुदीरिता ॥

ख. तत्फलं कफवातार्शःकुष्ठारोचकनाशनम् ।

पुष्पं चास्य कफं वातमर्शःकुष्ठारुचीर्जयेत् ॥

Madanapāla Nighaṇṭu.

शल्लकीवृक्षः

वृक्षस्तु शल्लकी संज्ञः पुष्टिकरो कषायकः ।

शीतवीर्यश्च मधुरस्तिक्तो ग्राह्यान्नदोषनुत् ॥

व्रणदोषं कफं वातं पित्तं चार्शं विनाशयेत् ।

पक्कातीसारं कुष्ठं च रक्तपित्तं विनाशयेत् ॥

Nighaṇṭu Ratnākara.

शल्लकीनिर्यासः

निर्यासोऽस्य मतो नाम्ना कुन्दरुः सुज्ञभाषितः ।

कुन्दरुः मधुरः तीक्ष्णः तिक्तो रुच्यः कटुस्मृतः ।

स्निग्धश्चोष्णस्तथा त्वच्यो ज्वरस्वेदकफापहः ॥

रक्तरुक् प्रदरं वातमलक्ष्मीं ग्रहपीडनम् ।

रक्तातिसारं यूकां च नाशयेदिति कीर्तितः ॥

Nighaṇṭu Ratnākara.

प्रमेहे

‘शर्करासहितो मेहं वृषणस्य व्यथां हरेत् ।’

Śoḍhala.

श्वासे

‘....लेहयेत् क्षौद्रसर्पिषा ।

....शकलं शल्लकस्य वा ॥’

Caraka Saṃhitā, Cikitsā, 21-114.

अतिसारे

‘.....शल्लकीवेतसत्वचः ।

शर्करा क्षौद्रसंयुक्ताः पीता घ्नन्त्युदरापहम् ॥’

Suśruta Samhitā, Uttara, 40-96.

श्वासे

‘.....तुरुष्कशल्लकीनाञ्च गुग्गुलोः.....धूमा..... ।’

Suśruta Samhitā, Uttara, 51-52.

व्रणप्रक्षालने

‘शल्लकी बदरी....त्वचः ।

....योज्याः क्वाथे त्रिफलया सह ।

तेन क्वाथेन नियतं व्रणं प्रक्षालयेद्भिषक् ॥’

Suśruta Samhitā, Cikitsā, 19-42.

पित्ताभिष्यन्दे

‘पलाशं वा शोणितं चाञ्जनार्थे ।

शल्लक्या वा शर्कराक्षौद्रयुक्तम् ॥’

Suśruta Samhitā, Uttara, 10-7.

श्वासे

तुरुष्कशल्लकीनाञ्च गुग्गुलोः पद्मकस्य च ।

एते सर्वे ससर्पिष्काः धूमाः कार्या विजानता ॥

Suśruta Samhitā, Uttara, 51-52.

व्रणे

शल्लकीफलचूर्णेर्वा क्षौमध्यामेन वा पुनः ।

ततो व्रणं यथायोगं बद्ध्वाचारिकमादिशेत् ॥

Suśruta Samhitā, Sūtra, 25-28.

उपदंशे

.....शल्लकी....त्वचः ॥

....योज्याः क्वाथे त्रिफलया सह ।

तेन क्वाथेन नियतं व्रणं प्रक्षालयेत् भिषक् ॥

Suśruta Samhitā, Cikitsā, 19-42/43.

अतिसारे रक्ततिसारे

.....शल्लकीतिनिशत्वचः ।

क्षीरं विमृदिताः पीताः सक्षौद्राः रक्तनाशनाः ॥

Suśruta Samhitā, Uttara, 40-119.

‘पीताः क्षीरेण मध्याद्वाः पृथक्ः शोणितवारणाः ।’

Vṛndamādhava, 3-41.

कुन्दरुः (शल्लकीनिर्यासः)

वातव्याधौ

बलातैले

Caraka Samhitā, Cikitsā, 28-153.

अश्मरीभेदने

त्रुट्यादियोगे

Caraka Samhitā, Cikitsā, 26-64.

ऐलादिगणे

Suśruta Samhitā.

Sūtra, 28-153.

ŚĀLMALĪ

Botanical name : *Salmalia malabarica* Schott. & Endl.

Family : Bombacaceae

Classical name : Śālmali

Sanskrit names

Śālmali, Mocā, Tūlinī, Picchila, Raktapuṣpa, Raktābjapuṣpaka, Cirāyu, Kaṇṭakāḍhya, Suvāho.

Regional names

Semal, Semar (Hindi); Shimul (Beng.); Sanvar (Beng.); Shemali, Simali (Guj.); Varug (Tel., Kann.) Mullilavu (Tam., Mal.); Silk-cotton tree (Eng.).

Description

Very large, often buttressed, deciduous tree, long-lived; trunk straight, old tree buttressed at base (near root); conical prickles on branches and especially on trunk (śālmali kaṇṭaka); branches whorled, spreading nearly horizontally; bark grey when young, with sharp conic prickles.

Leaves digitate; rachis 15-25 cm.; leaflets 5-7, each 10-20 × 2.0-2.5 cm.; petiole short; leaflets oblanceolate, on petiolules.

Flowers large 7.5 cm. across, dark crimson, scarlet

or sometimes white, solitary, appearing before leaves on short and thick pedicels; stamens about 80; filaments red; polyadelphous; anthers brown; style 5-fid; petals orange colour or dark red-scarlet, thick or somewhat fleshy, 7.5-15 cm. long, white tomentose.

Capsule about 10.3 cm. long, 5-angled, green, cylindrical, smooth, tapering at both ends. Seeds 0.60 cm. diameters, smooth, ovoid, embedded in white-silky cotton. Cotton is used as household material and young fruit used as vegetable (śāka).

Bark exudes naturally resin known as Mocāsrāva or mōcaras. Young plant (1-2 years age) provides roots as semal musali.

Flowering and fruiting time

Plant flowers in winter-end and fruits ripen during summers. Generally flowering in December-January and fruiting in April-May.

Distribution

Plant occurs almost throughout India specially in warmer regions and forests in wild state. It is found in planted state along roadside and in gardens.

Chemical composition

Seeds yield a fixed oil, Resin contains 2.9% mineral matters and tannin which also consists of tannic acid and gallic acid. Roots (semal musali) contain starch 71.2, sugar 8.2, protein 1.2, mineral matter 2.1 per cent, also fat, tannin and cellulose in lower percentage, roots consist of mucilaginous substance.

Kinds and varieties

Another kind of drug is Kūṭṣāśalmali which is botanically known as *Eriodendron anfructuosum* Dc. having lesser thorns and flowers white and inner yellowish other species *Eriodendron insigne* (Wall.) Schott. & Endl. occurs Southern India and Andamans Islands in country.

Pharmacodynamics

Rasa	: Madhura; Kaṣāya (Mocarasa-exudate)
Guṇa	: Laghu, snigdha, picchila
Vīrya	: Śīta

Vipāka	: Madhura; kaṭu (mocarasa)
Doṣakarma	: Vātapittaśāmaka Kaphapittaśāmaka (mocarasa) Kaphapittaśāmaka (flowers and fruits).

Properties and action

Karma	: Purīṣavirajānīya Stambhana (mocarasa-exudate) Raktastambhana (puṣpa-flower and exudate) Kāśahara (unripe fruit-apakva phala) Mūtrala (unripe fruit) Vṛṣya (śālmālī musalī) Śukrastambhana (mocarasa) Ārtavarodhi (flowers) Balya-bṛmhaṇa (fruits) Śothahara-dāhapraśamana (bark) Raktarodhaka (flowers) Stambhana-vraṇaropana (mocarasa) Lekhana-varṇya (thorns-kaṇṭaka) Dantya
Roga	: Atisāra-pravāhikā-grahaṇī Arśa Raktapitta Plīhavṛddhi Āsmarī-mūtrakṛcchra-vṛkkaśūla Śukrakṣaya-klaibya-dhātukṣaya Kārśya-śoṣa-dourbalya Pradara-śvetapradara-asṛgdara Vraṇaśoṭha-dāha-raktasrāva Dantavikāra Mukhapāka-vraṇa Nyaccha-vyaṅga-varṇavikṛti.

Therapeutic uses

The drug Śālmālī is alterative, aphrodisiac, astringent, carminative, demulcent, hemostatic and tonic. It is used in all types of abdominal diseases, colitis, diarrhoea, dysentery, impotency, liver and spleen diseases, and uter-

ine diseases. The gum resin (mocarasa) is much used in uterine disorders in traditional medicine.

In the management of intrinsic haemorrhage (raktapitta), mocarasa is boiled with milk and given particularly in condition of rectal haemorrhage (adhoga or guda raktapitta-raktasrāva). Mocarasa is included in Priyaṅgvādi drugs used in Prameha (Suśruta Saṁhitā, Cikitsā. 11-10). Mocarasa is recommended in diarrhoea particularly in pitta doṣa. In general, Mocaras alleviates diseases caused by Kapha pitta doṣa. Mocarasa is useful as an aphrodisiac and given in excessive vaginal haemorrhage or meno-metrorrhagia (raktapradara).

Śālmali has been recommended for internal use in several diseases. Tuber or Śālmali Kanda (semal musali) is taken with milk (godugdha) as an aphrodisiac drug. Flowers juice, powder and vegetable are very effective in menorrhagia or vaginal haemorrhage (rakta pradara or asṛgdara). Immatured or young fruit is given in cough, dysuria, calculus, renal colic etc. in the form of powder or decoction. Roots are taken in debility, consumption and sexual weakness including seminal disorders. Flowers are used in splenomegaly (plīhavarḍdhi).

Externally, the bark is applied on swelling, boil and burning sensation. Juice and paste of fresh flowers or powder of flowers (dried) is applied on lesion of haemorrhage. Mocāsrāva (mocarasa) is an ingredient of dental powder, and it is dusted on ulcers and used in stomatitis, Thorns (śālmali kaṇṭaka) are ground with milk and applied on face (as facial cream or paste) in facial complaints such as freckles, acne vulgaris and other cutaneous as well as pigmentation disorders; it is lusture or complexion promotive recipe.

Mocarasa (exudate of Śālmali) powder (with other such drugs) is used as snuff to check epistaxis or nāsāgata raktapitta (Caraka Saṁhitā, Cikitsā, 4-99). In sinus (nāḍi vraṇa), Kumbhikāḍya taila (Suśruta Saṁhitā, Cikitsā. 11-10) containing Mocarasa is applied. In treatment of bleeding piles (raktārśa), Kuṭajādi rasakriyā and Suniṣaṇṇaka cāṅgeri ghṛta containing Mocarasa are prescribed.

Parts used

Roots, flowers, fruits, exudate (Mocarasa), Semal Musali (young plant roots) patioles.

Dose

Root powder 5-10 gm., Flowers juice 10-20 ml., Fruit powder 3-6 gm. Exudate 1-3 gm.

Formulations : Śālmali ghr̥ta

Groups (gaṇa)

Puriṣavirajāniya, Śonitasthāpana, Vedanāsthāpana, Kaṣāyaskandha (Caraka Saṃhitā) Priyaṅgvādi (Suśruta Saṃhitā).

ŚĀLMALĪ (शाल्मली)

शाल्मलिः शीतला स्वाद्वी रसे पाके रसायनी ।

श्लेष्मला बृंहणी वृष्या स्निग्धा पित्तास्रनाशनी ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 911.

शाल्मलीवेष्टकः

शाल्मलीवेष्टकः पिच्छा मोचनिर्यासमोचकौ ।

मोचस्त्रावो मोचरसो शाल्मलो वेष्टकः स्मृतः ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 910.

शाल्मलीपुष्पम्

पुष्पं स्वादु रसे पाके रूक्षं तिक्तं हिमं गुरु ।

कषायं वातलं ग्राहि कफपित्तास्रजित् परम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 912.

शाल्मलीनिर्यासम्

निर्यासः शीतलः स्निग्धो ग्राही वृष्यः कषायकः ।

प्रवाहिकाऽतिसारामकफपित्तास्रदाहनुत् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 913.

शाल्मलिगुणाः

शाल्मली शीतला स्वाद्वी रसे पाके रसायनी ।

श्लेष्मला पित्तवातास्रहारिणी रक्तपित्तजित् ॥

Bhāvaprakāśa Nighaṇṭu, Vaṭādi varga, 55.

मोचास्त्रावगुणाः

मोचास्त्रावो हिमो ग्राही स्निग्धो वृष्यः कषायकः ।

प्रवाहिकाऽतिसारामकफपित्तास्रदाहनुत् ॥

Bhāvaṇṇaprakāśa Nighaṇṭu, Vatādi varga, 52.

कूटशाल्मलिगुणाः

कूटशाल्मलिकस्तित्तः कटुकः कफवातनुत् ॥

भेद्युष्णः प्लीहजठरयकृद्गुल्मविषापहः ।

भूतानाहविबन्धास्रमेदःशूलकफापहः ॥

Bhāvaṇṇaprakāśa Nighaṇṭu, Vatādi varga, 58-59.

शाल्मली पिच्छिलो वृष्यो बल्यो मधुरशीतलः ।

कषायश्च लघुः स्निग्धः शुक्रदोषविवर्धनः ॥

तद्रसस्तद्वृष्णो ग्राही कषायः कफनाशनः ।

पुष्पं तादृशं निर्दिष्टं फलं तस्य तथाविधम् ॥

Rāja Nighaṇṭu, Śālmalyādi varga, 10-11.

मोचरसः

मोचरसस्तु कषायः कफवातहरो रसायनो योगात् ।

बलपुष्टिवर्णवीर्यप्रज्ञाऽऽयुर्देहसिद्धिदो ग्राही ॥

Rāja Nighaṇṭu, Śālmalyādi varga, 13.

शाल्मलीरसगुणाः

शाल्मली शीतला स्निग्धा शुक्रश्लेष्मविवर्द्धनी ।

तद्रसस्तद्वृष्णो ग्राही स च मोचरसः स्मृतः ॥

Dhanvantari Nighaṇṭu.

पुष्पस्य फलस्य च गुणाः

शाल्मली पिच्छिला वृष्या बल्या मधुरसा तथा ।

कषायस्तद्रसो ग्राही पुष्पं तद्वत्तथा फलम् ॥

Dhanvantari Nighaṇṭu.

स्नायुकरोगे

‘स्नायुकरोगं हन्याज्जयेद्वा मोचत्वचालेपः ।’

Gadanigraha, Śoḍhala.

पाददाहे

साज्यैः सक्तुभिरभ्यक्तौ वज्रीक्षीरसमन्वितैः ।

शाल्मलीत्वग्विलितौ वा पादौ सन्तापमुञ्जतः ॥

Rāja Mārtaṇḍa, 23-1.

रसायनवाजीकरणार्थम्

उदकं शाल्मलीमूलाद्व्रणितं मलितं घटे ।
शोधितं सतिलं खादेत् केवलं वा वृषायते ॥

Vaidya Manoramā, 20-17-23.

स्त्रीरोगे प्रदरे

शाल्मलीघृतम्

Baṅgasena, Strīroga, 77-78.

प्रदरे

शाल्मलीपुष्पशाकन्तु घृतसैन्धवसाधितम् ।
प्रदरं नाशयत्येव दुःसाध्यत्यञ्च न संशयः ॥

Bhāvaprakāśa, Cikitsā, 9-51.

मुखकान्तिकरलेपः

केवलाः पयसा पिष्टास्तीक्ष्णाः शाल्मलिकण्टकाः ।
आलितं त्र्यहमेतेन भवेत्पद्मोपमं मुखम् ॥

Bhāvaprakāśa, Kṣudrarogādhikāra, 61-36.

प्लीहारोगे शाल्मलीपुष्पम्

सुस्विन्नं शाल्मलीपुष्पं निशापर्युषितं नरः ।
राजिकाचूर्णसंयुक्तं खादेत्प्लीहोपशान्तये ॥

Bhāvaprakāśa, Plīhayakṛdadhikāra, 33-18.

प्रवाहणे अतिसारे

बस्तिः शाल्मलिवृन्तानां क्षीरसिद्धो घृतान्वितः ।
हितः प्रवाहणं तद्वद् वेष्टे शाल्मलिकस्य च ॥

Caraka Samhitā, Siddhi, 10-36.

शृतं शाल्मलिवृन्तेषु कषायं हिमसंज्ञितम् ।
निशापर्युषितं पेयं सक्षौद्रं मधुकान्वितम् ॥

Suśruta Samhitā, Uttara, 40-98.

पिच्छाबस्तिः (शाल्मलिवृन्तः-पुटपाकः) ।

Suśruta Samhitā, Uttara, 40-141/142.

स्नायुकरोगे

‘स्नायुकरोगं हन्याज्जयेद् वा मोचत्वचालेपः ।’

Vṛndamādhava, 55-19.

अधोगरक्तपित्ते

आर्द्रशाल्मलिवृन्तैस्तु क्षुण्णैराजं पयः शृतम् ।

सर्पिषा योजितं शीतं बस्तिमस्मै प्रदापयेत् ॥

Caraka Samhitā, Cikitsā, 7-60.

मोचरसः

नाडीव्रणे

कुम्भीकाद्यतैले

Suśruta Samhitā, Cikitsā, 17-27.

प्रमेहे

प्रियङ्वादिगणे

Suśruta Samhitā, Cikitsā, 11-10.

पित्तातिसारे

तिला मोचरसो लोध्रं समङ्गा कमलोत्पलम् ।

योगाः षडेते सक्षौद्रास्तण्डुलोदकसंयुक्ताः ॥

पेयाः पित्तातिसारघ्नाः श्लोकार्थेन निदर्शिताः ।

Caraka Samhitā, Cikitsā, 19-53/55.

रक्तार्शसि

कुटजादिरसक्रियायाम्

Caraka Samhitā, Cikitsā, 14-189.

सुनिषण्णकचाङ्गेरीघृते

Caraka Samhitā, Cikitsā, 14-237.

‘.....मोचरसश्चन्दनं तिला लोध्रम् ।

पीत्वा छगलीपयसा भोज्यं पयसैव शाल्यन्नम् ॥’

Caraka Samhitā, Cikitsā, 14-193.

रक्तपित्ते

‘विशेषतो विट्पथसम्प्रवृत्ते पयो मतं मोचरसेन सिद्धम् ।’

Caraka Samhitā, Cikitsā, 4-86.

‘नस्यं तथाग्रास्थिरसाः समङ्गा सधातकी मोचरसः सलोध्रः ।’

Caraka Samhitā, Cikitsā, 4-99.

व्रणे व्रणनिर्वापणे

शाल्मलीत्वग्बलामूलं..... ।

आलेपनं निर्वापण— ॥

Caraka Samhitā, Cikitsā, 25-63.

प्लीहवृद्धौ प्लीहरोगे

सुस्विन्नं शाल्मलीपुष्पं निशापर्युषितं नरः ।

राजिकाचूर्णसंयुक्तं खादेत् प्लीहोपशान्तये ॥

Bhāvaprakāśa, Cikitsā, 33-18.

व्यङ्गे शाल्मलिकण्टकप्रलेपः

केवलान् पयसा पिष्ट्वा तीक्ष्णान् शाल्मलिकण्टकान् ।

आलितं त्र्यहमेतेन भवेत् पद्मोपमं मुखम् ॥

Cakradatta, Kṣudraroga cikitsā, 55-46.

Vṛndamādhava, 57-38.

अग्निदग्धे व्रणे

‘पिष्ट्वा शाल्मलीतूलकैर्जलगता लेपात्तथा बालुका ।’

Cakradatta.

रक्तपित्ते

....शाल्मलेः ।

पुष्पचूर्णन्तु मधुना लीढ्वा चारोग्यमश्नुते ।’

Cakradatta, 9-27.

शुक्रवृद्ध्यर्थम्

‘शुक्रक्षये....विदारीकन्दशाल्मली....शस्यन्ते मधुराणि च ।’

Harita Samhitā, 3-44-15.

Cikitsā, 10.

रक्तपित्ते

‘विशेषतो विट् प्रथमं प्रवृत्तं पयो मतो मोचरसेन सिद्धम् ।’

Caraka Samhitā.

मुखसौन्दर्यतावर्धनार्थं शाल्मलीकण्टकप्रयोगः

Cakradatta, 55-46.

व्रणनिर्वापणे

‘शाल्मलीत्वक्....बलामूलम्....आलेपनं निर्वापणम् ।’

Caraka Samhitā, Cikitsā, 13.

पक्कातिसारे

कृतं शाल्मलीवृन्तेषु कषायं हिमसंज्ञकम् ।

निशापर्युषितं पेयं सक्षौद्रं मधुकान्वितम् ॥

विबद्धवातविट्शूलपरीतः सप्रवाहिकः ।

सरक्तपित्तश्च पयः पिबेत् तृष्णासमन्वितः ॥

Suśruta Samhitā, Uttara, 40.

शाल्मलीपुष्पगुणाः (पुष्पशाकम्)

शाल्मलीपुष्पशाकं तु घृतसैन्धवसाधितम् ।

प्रदरं नाशयत्येव दुःसाध्यं च न संशयः ॥

रसे पाके च मधुरं कषायं शीतलं गुरु।

कफपित्तास्रजिदं ग्राहि वातलं च प्रकीर्तितम् ॥

Bhāvaprakāśa Nighaṇṭu, Śāka varga, 51-52.

ŚAMĪ

Botanical name : *Prosopis cineraria* Druce.

Family : Leguminosae

Classical name : Śamī

Sanskrit names

Śamī, Śaktuphalā, Tuṅgā, Śaṅkukalikā, Keśahantrī, Śivaphalā, Maṅgalyā, Pavitra, Lakṣmī, Keśahr̥taphalā, Patrāśavatī, Śivā-śītā, Śubhakarī, Havirgandhā, Duritaśamanī, Surabhi.

Regional names

Chinkur, Cehinkor, Chhonkar (Hindi); Shami (Beng.); Jand (Punj.); Shami (Mar.); Samadi (Guj.); Khejarha, Khejrhi, Khejrha (Marwarh, Raj.); Perubai (Tam.); Jambhi Chettu (Tel.); Perumbai (Kann.); Parampu (Mal.).

Description

Small to moderate-sized tree, evergreen or nearly so, with light foliage and rather slender branches armed with conical spines, found in dry and arid zones. Tree ordinarily does not exceed a height of 12 meters and a girth of 1.2 meters, the maximum record being 18 meters and 5.4 meters respectively. Branches downy (slight downward) brownish-pale or grey. Bark grey, rough, exfoliating, in thin flakes.

Sapwood large, white; heartwood scanty, brown to purplish brown.

Leaves bi-pinnate, usually with 2 pairs of pinnate; pinnules 7-12 (8-12) pairs, sessile.

Flowers small, yellowish, in slender spikes.

Pods 4-6 in. long, 10-25 cm. × 5.10 mm., cylindric, torulose or flatish, with coriaceous exocarp.

Seeds 10-15 in a pod, oblong, compressed, with moderately hard, brown testa.

Flowering and fruiting time

Plant flowers during winter season and fruits in rainy season.

Distribution

Plant occurs in Punjab, Rajsthan, Sindh, Gujarat and also in peninsular India. It prefers a dry climate and most important areas of its distribution are characterised by extremes in temperature. It occurs throughout alluvial plains and within the drier regions where the normal rainfall is 10-45 cm.. In peninsular India, where the normal rainfall is found to vary from 50 to 90 cm., the tree is gregarious but is scattered in open dry forests in some localities; it occurs on black cotton soil in association with other trees.

The tree is light demander. The young seedlings are sensitive to frost; older plants are drought resistant. Natural regeneration through seed is confined to moist places, but in the dry situations the tree regenerates fresh by root suckers. Seeds retain their viability for at least a year and their dispersal takes place by water or through birds and animals (which eat the sweetish pulp and avoid the seeds).

As regards the ecological suitability, the tree is most successful, popular and beneficial, for the instance, in Rajsthan in India.

Kinds and varieties

There is another small variety of this plant drug in texts of indigenous materia medica (Nighaṇṭu) which is referred as Śamīra (Bhāvaprakāśa Nighaṇṭu). It is botanically known as *Prosopis stephaniana* Kunth which occurs in Punjab and Gujarat provinces in India.

Chemical composition

Wood ash contains 31 per cent of soluble potassium salts, may be used as a source of potash.

Flowers contain palulitrin, a flavone glycoside.

Leaves contain N 2.9, phosphorous 0.4, potassium 1.4, and calcium 2.8 per cent.

Pharmacodynamics

Rasa	: Kaṣāya, madhura
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta, Uṣṇa (fruits)
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka.

Properties and action

Karma	: Stambhana Rocana Kṛmighna Raktapittaśāmaka Kaphaghna Tvagdoṣahara Śāmaka-medhya Viṣaghna Keśahara-romaśātana
Roga	: Atisāra-pravāhikā-āmātisāra Kṛmiroga Arśa Raktapitta Kāsa-śvāsa Carmavikāra Mastiṣkadourbalya-bhrama Viṣa-vṛścikadaṁśa-lūtā viṣa Kaphapittajanya vikāra Kuṣṭha Netravikāra Granthi Bālaroga.

Therapeutic uses

The drug Śamī is stambhana and krimighna. It is useful in diarrhoea, dysentery and worms. The drug is given in raktapitta (intrinsic haemorrhage), cough and asthma. It is taken in vertigo (bhrama) and as brain tonic (medhya). It is useful in skin complaints. A paste of bark is applied to scorpion-sting. An ash of fruit is considered useful for external application in order to remove hairs since Śami is considered to have romaśātana or depilatory prop-

erties. Śami is useful to alleviate kapha pitta disorders. The bark, flowers, fruits, seeds and leaves are medicinally useful. The flowers are mixed with sugar and administered to prevent miscarriage.

The pods are eaten green, dried or after boiling and are considered to possess astringent, demulcent and pectoral properties. Pods are used as fodder for livestock. Before they are ripe, they are rich in a sweetish farinaceous pulp, which is consumed as food, especially in times of scarcity.

The bark has a sweetish taste. During the famine, the bark is reported to be useful in certain regions as a source of food; it was ground into flour and made into cakes. The bark as well as the galls, formed on the leaves, are used for tanning. Leaves are much lopped for fodder. They are also useful for fodder. They are also useful for green manuring.

The tree exudes a gum, which resembles the mesquite gum, from the cut ends of branches.

Śami has socio-cultural and religious importance in traditional heritage of India.

Parts used : Bark, fruits.

Dose : Decoction 50-100 ml., Fruit powder 3-6 gm.

ŚAMĪ (शमी)

- क. शमी शकुफला तुङ्गा केशहन्त्री शिवाफला ।
मङ्गल्या च तथा लक्ष्मीः शमीरः साऽल्पिका स्मृता ॥
- ख. शमी तिका कटुः शीताः कषाया रेचनी लघुः ।
कफकासभ्रमश्वासकुष्ठार्शः कृमिजित् स्मृता ॥

Bhāvaprakāśa Nighaṇṭu, Vaṭādi varga, 72-73.

शमी

शमी लक्ष्मी शिवा सीता मङ्गल्या केशहत्फला ॥
पवित्रपत्राशवती तुङ्गा शकुफला रसा ।
(शमी शाधिः शमी भूमिः शमीशानश्च शङ्करः)

शमीगुणाः

शमी तिक्ता कट्वनुष्णा कषाया रोचनी लघुः ॥
निहन्ति कफकुष्ठार्शः श्वासकासभ्रमकृमीन् ।

शमीफलम्

तत्फलं स्वादु रूक्षोष्णं मेध्यं केशघ्नपित्तलम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1083-1085.

शमी

अ. शमीशान्ता तुङ्गा कचरिपुफला केशमथनी ।
शिवेशा नीलक्ष्मीस्तपनतनुनष्टा शुभकरी ॥
हविर्गन्धा मेध्या दुरितशमनी शङ्कुकलिका ।
सुभद्रा मङ्गल्या सुरभिरश्च शापापशमनी ॥
भद्राऽथ शङ्करी ज्ञेया केशहन्त्री शिवाफला ।
सुपत्रा सुखदा चैव पञ्च विंशाभिधा मता ॥

शमीगुणाः

ब. शमी रूक्षा कषाया च रक्तपित्तातिसारजित् ।
तत्फलं तु गुरु स्वादु तिक्तोष्णं केशनाशनम् ॥

Rāja Nighaṇṭu, Śālmalyādi varga, 33-35.

‘सुरुच्यं पित्तलं रूक्षं मेध्यं केशविनाशनम् ।’

Kṣemakutūhala.

‘गुरूष्णं मधुरं रूक्षं केशघ्नं च शमीफलम् ।’

Caraka Saṃhitā.

‘शमीफलं गुरु स्वादु रूक्षोष्णं केशनाशनम् ।’

Suśruta Saṃhitā.

पुरातनत्वम्

निधानगर्भमिव सागरम्बरा शमीमिवाभ्यन्तरलीनपावकाम् ।
नदीमिवान्तः सलिलां सरस्वतीं नृपः ससत्त्वां महिषीममन्यत ॥

Raghuvamśa, Sarga, 3.

रोमशातने

‘कदलीदीर्घवृन्ताभ्यां भस्मालं लवणं
शमीबीजं शीतोपदिष्टं वा रोमशातनमाचरेत् ।’

Suśruta Saṃhitā, Cikitsā, 1-107.

विषे

क्षारागदे

Suśruta Samhitā, Kalpa, 6-3.

लूताविषे

हीबेरादिगणे

Aṣṭāṅga Hṛdaya, Uttara, 37-82.

अर्शांसि

‘अर्कमूलं शमीपत्रमर्शोभ्यो धूपनं हितम् ।’

Caraka Samhitā, Cikitsā, 14-49.

नेत्ररोगे

शङ्खताम्रे स्तन्यघृष्टं घृताक्तैः शम्याः पत्रैर्धूपितं तद्यवैश्च ।

नेत्रं युक्तं हन्ति सन्धावसंज्ञं क्षिप्रं घर्षं वेदनां चातितीव्राम् ॥

Aṣṭāṅga Hṛdaya, Uttara, 16-35.

बालरोगे

पूतीकरञ्जत्वक्पत्रं क्षीरिभ्यां बर्बरादपि ।

तुम्बीविशालारलुकाश्मरी बिल्वकपित्थतः ॥

उत्काथ्य तोयं तद्रात्रौ बालानां स्नपनं शिवम् ॥

Aṣṭāṅga Hṛdaya, Uttara, 3-60/61.

ग्रन्थौ

शमीमूलकशिग्रूणां बीजैः सयवसर्षपैः ।

लेपः पिष्टोऽम्लतक्रेण ग्रन्थिगण्डविलापनः ॥

Aṣṭāṅga Hṛdaya, Uttara, 30-16.

नेत्रामये

उदुम्बरफलं लोहघृष्टं स्तन्येन पूरितम् ।

साज्यैः शमीच्छदैर्दाहशूलरागाश्रुहर्षजित् ॥

Aṣṭāṅga Hṛdaya, Uttara, 16-35.

व्याघ्रीत्वङ्मधुकं ताम्ररजोऽजाक्षीरकल्कितम् ।

शम्यामलकपत्राज्यधूपितं शोफरुक्प्रणुत् ॥

Aṣṭāṅga Hṛdaya, Uttara, 16-42.

आमातिसारे

अरलुत्वक् तैन्दुकी च दाडिमी कौटजी शमी ।.....

.....चेत्यामपाचनाः ॥

Suśruta Samhitā, Uttara, 40-41.

SAMUDRA NĀRIKELA

Botanical name : *Lodoicea maldivica* (Poir.) Pers.

Syn. *Lodoicea seycheliarum* Labill.

Family : Palmae

Classical name : Samudra (Sāmudra) nārikela

Sanskrit name : Samudra nārikela

Regional names

Dairyai nariyal (Hindi); Daryaca naral (Mar.); Jheri nariyel (Guj.); Kadal-Tengai (Tam.); Samudraputankaya (Tel.); Narajile bahari (Arabic); Naragile dariyai (Pers.); Sea coconut, Double coconut (fruit) (Eng.), Sea coconut palm (tree).

Description

It is monotype genus represented by the plant species under reference. Plant is giant among palms. A tall, dioecious palm, with straight, smooth, annulated trunk, 18-30 meters high and 0.3 meters diam. It bears a crown of 12-20 large, fan-shaped leaves with stout petioles.

Fruits large, upto 1.2 m. in circumference and 11.4 kg. in weight (maximum recorded weight 27.2 kg.), olive-green, usually one-seeded. Nut (pyrene) large, deeply bilobed, bony, firmly attached to mesocarp; shell thick, black.

Flowering and fruiting time

Plant flowers when thirty years old and takes about 3 to 10 years from the time of flowering to the maturation of fruits.

Distribution

Plant occurs in western sea coastal regions and it is spreaded upto Sri Lanka. It is also planted in various places in India as it is grown in Indian gardens for ornament. Native of Seychellies Islands. Mostly imported into India.

Pharmacodynamics

Rasa : Madhura, kaṭu

Guṇa : Laghu, rūkṣa

Virya : Uṣṇa

Vipāka : Kaṭu

Doṣakarma : Kaphavātaśāmaka

Properties and action

Karma	: Śītapraśamana-dehāgni samrakṣaka Hṛdya-hṛdayottejaka Viśaghna Agnidīpana Jvaraghna Trṣṇānigrahaṇa Vāmaka
Roga	: Viṣūcikā Hṛddourbalya Ikṣumeha Granthiśoṭha Jāṅgama viṣa-sarpa vṛścika kīṭa daṁśa Viṣa-ahipheṇa-vatsanābha Śītajvara-jvara.

Therapeutic uses

The drug Samudra nārikela is śītapraśamana that pacifies or alleviates cold. The hard kernels (endosperm) affords vegetable ivory. the unripe kernel and crown of the trunk are edible. The water of the green fruit and its soft kernel are considered anti-bilious and antacid. A decoction of the fibrous husk is reported to bring down urinary sugar level in diabetic patients.

The kernel of the nut (phala majjā) is used externally and internally both in different ailments. A paste of kernel is applied on glandular swelling and snake-bite and scorpion-sting. In cardiac troubles (hṛddourbalya), the kernel is taken with Jaharmohra khatai. It is given duly mixed (rubbed or ground like sandal), with rose aqua (gulābajal) which cause vomiting (as an emetic drug) expelling out toxic substances from stomach and it also pacifies over thirst (trṣṇādhikya). The kernel is given in glycosuria (ikṣumeha), śītajvara and conditions of poisoning caused by vatsanābha (aconite) and ahipheṇa (opium).

The kernel is useful in ailments caused by provoked kapha and vāta doṣa. Samudra nārikela has been recommended in various ailments of children (bāla roga). Its in-

dication in certain paediatric diseases finds mention in Indian medicine (Siddhabhaiṣajya maṇimālā, 4-1129).

Besides medicinal potentialities, the Jhuts (sea coconut) and leaves (sea coconut tree) have economic utility which is in practice in the sea coastal regions of plant growth.

Parts used : Kernel

Dose : 1-10 gm.

Formulation : Javahar mohara.

SAMUDRA (SĀMUDRA) NĀRIKELA

समुद्र (सामुद्र) नारिकेल

बालरोगे

जलैः सपथ्यं विषनारिकेलं विघृष्य दद्यात् खलु शीतमेव ।

प्रदुष्टरक्तक्रिमिशोणभावविस्फोटपीडाशमनं शिशुभ्यः ॥

Siddhabhaiṣajya Maṇimālā, 4-1129.

समुद्रनारिकेलस्तु मधुरः कटुको लघुः ।

वीर्योष्णः कफवातघ्नः शीतप्रशमनो मतः ॥

हृद्यो विषघ्नोऽनलकृत् तृष्णानिग्रहणः परम् ।

विसूचिकायां हृद्रोगे ज्वरे शीते च शस्यते ॥

Dravyaguna Vigyan, part II, p. 732.

SAMUDRAŚOṢA

Botanical name : *Salvia plebeia* R. Br.

Family : Lamiaceae (Labiatae)

Classical name : Samudraśoṣa

Common name : Samundarsokh

Sanskrit name : Samudraśoṣa

Regional names

Samundar sokh, Kamarkas (Hindi); Samundar sokh, Kamarkas (Indian trade); Sathi, Samundarsokh (Punj., Sindh.); Kammarkash (Guj., Bomb.).

Description

Erect robust herbs, upto 1 meter or more high, stout, pubescent annual, deep-rooted annual 90-120 cm. tall. stems stout, branched, 4-angular, grooved (square-grooved).

Leaves oblong-lanceolate, crenate, rugose, gland punctate, irregularly crenate, hairy on nerves beneath, base often decurrent into petiole.

Verticels 4-6-flowered, combined into a paniced usually compact spicate raceme. Bracts reflexed corolla white or blue, the upper lip retuse; fls. bluish-white, small; calyx 4×3 mm., accrescent. Fls. white or lilac, in particulate-spicate racemes.

Nutlets minute, ovoid brown, very minute, ellipsoid.

Flowering and fruiting time

Plant flowers and fruits during winter and summer seasons.

Distribution

Plant occurs as a common weed throughout the plains of India and in the hills up to an altitude of 1,500 meters.

Common in moist localities along the river banks and irrigation channels in the suburbs.

Kinds and varieties

Another *Salvia coccinea* Linn. sometimes cultivated in gardens as an ornament is often confused with *Salvia splendens*; it is suspected to cause abortion in cattle feeding on it, the pre-flowering stage being the most poisonous. But the plant is reported to be used medicinally also, the decoction of the plant being taken for relief from lumbago, kidney diseases and cough of pulmonary tuberculosis.

It has been reported that the raw-drug of *Vṛddhadārūka* sold in the market as *Vṛddharukabīja*, commonly known as 'Bidhara Bija' forms actually the seeds of *Salvia plebeia* R. Br. (*Samudra sokha bīja*) which are frequently marketed as *Kamarkasa bīja* instead of *Vṛddhadārūka bīja* (*Argyrea speciosa* sweet). *Kamarkasa*

and *Samundrasokha* are commonly botanically identified as *Salvia plebeia* R. Br. (*Samudraśoṣa*).

Chemical composition

Salvia dumetorum non Andraz., occurring in Kashmir and other Western Himalayan areas, have been found to yield on steam distillation of dry leaves and flowering tops 0.24% of an essential oil. Other species *Salvia hiars* non Linn. and *S. virgata* Jacq. are also reported to yield the essential oil 0.32 and 0.34 per cent respectively.

The flowering tops yield 0.09 per cent of an essential oil from *Salvia leacantha* Cav (as in Kumoan hills, U.P.).

Pharmacodynamics

Rasa	: Tikta, madhura
Guṇa	: Snigdha, Picchila
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittaśāmaka

Properties and action

Karma	: Śukrajanana Vṛṣya Balya Br̥mhaṇa
Roga	: Śukrameha Mūtravikāra-mūtradāha Klaivya Śighrapatana-svapnadoṣa- dhātukṣaya Dourbalya.

Therapeutic uses

The drug *Samudraśoṣa* is haemostatic, aphrodisiac tonic, diuretic, astringent, anthelmintic and anti-haemorrhoidal herbal agent.

The seeds are valued on account of their mucilaginous properties and given in cases of menorrhagia, diarrhoea and haemorrhoids. Leaves are used for toothache. The mucilaginous seeds are employed to anoint hair to keep them glossy.

The seeds-powder is given with milk as sexual tonic or aphrodisiac and in spermatorrhoea and burning micturition.

The seeds are not easily or fastly digestible (cīrapāki).

Parts used : Seeds.

Dose : Powder 3-5 gm.

ŚAṆA

Botanical name : *Crotalaria juncea* Linn.

Family : Leguminosae

Classical name : Śaṇa

Sanskrit name : Śaṇa

Regional names

San, Sanai (Hind.); Shana (Beng.); Sag (Mar.); Shan (Guj.); Sanal (Tam.); Sanamu (Tel.); Sanabu (Kann.) ; Bukkunar (Mal.); Sunn, Sunn hemp (Eng.).

Description

An erect, shrubby annual 4-10 ft. high. Leaves 1-3 in. long, simple, narrow, sub-sessile leaves. Stem fibrous.

Flowers fairly large, bright yellow, bright, in umbel or clusters. Pods tough-skinned, hairy. Each pod contains 10-15 seeds or large number of seeds.

Flowering and fruiting time

Plant bears flowers in rainy season and fruits in winter season.

Distribution

Plant is cultivated almost throughout India, particularly various provinces in northern, central, eastern, southern and western India to varying extents.

Śaṇa, the sunn or Sann hemp, also known as Indian Hemp, is one of the most commonly cultivated fibre crops in India, ranking next in importance to jute as a best fibre crop. Cultivated nearly all over India, either for the fibre obtained by retting its stems or as a green manure crop in rotation with grain or cash crops. It is also a good fodder

crop. Sunn is commercially valuable product in Indian trade.

Kinds and varieties

Numerous varieties differing in morphological characters, period of maturation, resistance to pests and diseases, and yield and quality of fibre are met with different parts of the country. Efforts have been made to adopt improved type suitable to particular tracts.

Chemical composition

Leaves contain mucilage matter in high quantity, fat and resin.

Pharmacodynamics

Rasa	: Kaṣāya, amla, kaṭu
Guṇa	: Snigdha (leaves); Rūkṣa, tīkṣṇa (seeds)
Virya	: Śīta (leaves); Uṣṇa (seeds)
Vipāka	: Kaṭu
Doṣakarman	: Kaphavātaśāma (leaves) Vātapittaśāma (leaves)

Properties and action

Karma	: Ārtavajanana (seeds) Raktaśodhaka (leaves) Dāhapraśamana (leaves) Tvagodoṣahara (leaves) Dīpana-pācana-anulomana (seeds) Vāntihṛt Vāmaka-virecaka (seeds higher dose) Lekhana (seeds) Vraṇapācana
Roga	: Rajorodha Raktavikāra Carmavikāra Medoroga Agnimāndya-ajirṇa-vibandha Dāha-vraṇa.

Therapeutic uses

The drug Śaṇa is emmenagogue (ārtavajanana); it is blood purifier, stomachic, digestive, carminative, emetic and purgative (in high dose), emaciation and anti-dermatosis. It allays burning sensation and cutaneous affections.

Externally the leaves paste is applied for alleviating burning sensation and skin diseases.

The drug is useful to alleviate various diseases by administering different parts. The seeds are used in obesity, dysmenorrhoea, dyspepsia, loss of gastric power, constipation and some other ailments caused by provoked kaphavātaja doṣa.

The leaves are used in blood impurities or ailments caused by impure blood, in form of infusion. They are useful to alleviate the ailments caused by provocation of vāta and pitta doṣa.

It is suggested in the classical texts of Indian medicine that the fruits of śaṇa are cooked with milk followed by intake of milk does not suffer from senility (Suśruta Saṁhitā, Cikitsā, 27-13). Another reference of drug Śaṇa has been made in management of vidradhi (abscess) in same medical classic (Suśruta Saṁhitā, Uttara, 37-7). Seeds of śaṇa, mūlaka, śigru tila, parched grain flour, yeast and lineseed and other hot substances ripen the abscess (vraṇa pācana).

Parts used : Leaves, seeds.

Dose : Leaves juice 10-20 ml., Seeds powder 3-6 gm.

ŚAṆA (शण)

शणस्तु माल्यपुष्पः स्याद्वनः कटुतिक्तकः ।

निशावनो दीर्घशाखस्त्वक्सारो दीर्घपल्लवः ॥

Rāja Nighaṇṭu, Śatāhvādivarga, 74.

शणस्त्वम्लः कषायश्च मलगमस्त्रिपातनः ।

वान्तिकृत् वातकफनुत् ज्ञेयस्तीव्राङ्गमर्दनुत् ॥

Rāja Nighaṇṭu, Śatāhvādi varga, 75.

रसायने

पयसा सह सिद्धानि नरः शणफलानि यः ।

भक्षयेत् पयसा सार्धं वयस्तस्य न शीर्यते ॥

Suśruta Samhitā, Cikitsā, 27-13.

व्रणपाचने

शणमूकशिग्रूणां फलानि तिलसर्षपा ।

सक्तवः किण्वमतसी द्रव्याण्युष्णानि पाचनम् ॥

Suśruta Samhitā, Sūtra, 37-9.

Vṛnda mādhaba, 44-17.

ŚAṆAPUṢPĪ

Botanical name : *Crotalaria verrucosa* Linn.

Family : Leguminosae

Classical name : Śaṇa puṣpī, Ghaṇṭāravā

Regional names

Jhanjhaniya, Sanai, Jhunajhuniya, Sanphuli (Hindi); Banshan (Beng.); Ghagari (Mar.); Ghughri (Guj.); Vaillainikkilukiluppai (Tam.); Vilkerinta (Tel.).

Description

Crotalaria verrucosa Linn. Much branched under-shrub 2-4 feet high., branches angular. Leaves angular, ovate or obovate, obtuse, about 4-6 in. long. Racemes terminal, leaf-opposed, 3-7 divided, 1.5-3 in. long, 15-20 flowered, bluish-yellow coloured flowers; calyx about double to corolla. Pod 1-1.5 in. long, silky, glaucous (hairy), 10-20 seeded. Pods produce characteristic sound ('jhun jhun' naming folk-term jhunjhunia).

Flowering and fruiting time

Plant flowers and fruits in March-May or from spring to summer, June-July also extending to monsoon time.

Distribution

Plant occurs from Himalaya to Sri Lanka and Burma. It is common throughout India, Sri Lanka and Malaya.

Kinds and varieties

***Crotalaria spectabilis* Roth. syn. *Crotalaria sericea* Retz.**

Tall glaucous green herbs, 0.5-1.5 meters high, with stout striated branches.

Leaves simple, obovate or oblanceolate, subacute or obtuse, mucronate, 5-15 cm. long, glabrous above, silky pubescent beneath; petioles 1.5-3 cm. long; stipules leafy, persistent.

Racemes 20-40 cm. long, terminal often paniced, 20-50 flowered; bracts reflexed, foliaceous, 1-2 cm. long. Calyx 10-12 mm. long, teeth lanceolate, twice as long as the tube. Corolla bright yellow.

Pods linear-oblong, inflated, 3-5 cm. long, glabrous, 20-30 seeded.

Crotalaria retusa

An erect, robust undershrub attaining sometimes 0.6-1.2 meters high, with striate pubescent branches.

Leaves simple, obovate oblong, obtuse or retuse, cuneate at base, up to 20 × 1.3 cm., charataceous; stipules subulate to subacute.

Recemes terminal, 10-20-flowered. Calyx 9-12 mm. long, glabrous, teeth twice as long as the tube. Corolla 18-25 mm. long, yellow, glabrous, standard suborbicular.

Pods 2-4 × 1.2 cm. linear-oblong, 15-30 seeded. Plants occur more or less commonly in country sub-temperate regions and tropics specially in tropical regions. Flowering and fruiting from spring to rains.

Chemical composition

When shaken (in dried seeds state). Seeds have B-sitosterole, iso-vitexin, viotexin and four other substances. In addition, two other alkaloids viz. iso-senkirkine and O-Acetylise-senkirkine, have been isolated.

Pharmacodynamics

Rasa	: Tikta, kaṭu, kaṣāya
Guṇa	: Laghu, rūkṣa, tūkṣṇa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarṇa	: Kaphapittaśāmsodhaka

Properties and action

Karma	: Vamanopaga Pittaśāmaka-kuṣṭhaghna (leaves) Vraṇapācana (seeds) Vāmaka (roots) Lālāprasekaśamana (leaves) Grāhī (leaves) Raktaśodhaka (leaves) Kuṣṭhaghna
Roga	: Atisāra-pravāhikā Raktavikāra Kuṣṭha Paittika śoṭha Hṛdroga Mukha-kaṇṭha vikāra Vraṇa.

Therapeutic uses

The drug Śaṇapuspī is vamanopaga that which is useful in emesis (vamana karma) and usable alongwith other emetic drug (Vāmaka oṣadhi); for this purpose, the root of drug plant (Śaṇapuspī mūla) is employed. It is kaphapitta saṁśodhana being a vāmaka dravya (emetic).

The leaves are astringent (grāhī) and stimulating salivation (lālāprasekajanana). They are used in diarrhoea and dysentery. Leaves are blood purifier (raktaśodhana) and given in the ailments caused by blood impurity. Leaves and roots are used in kuṣṭha group of diseases.

Externally the leaves are applied to swelling, skin affections and kuṣṭha. A gargle is suggested in the ailments of vocal cavity and throat. Seeds are pounded and their paste is applied over ulcers.

Parts used : Roots, leaves.

Dose : Roots 3-6 gm., Leaves juice 5-10 ml.

ŚAṆAPUṢPĪ (शणपुष्पी)

शणपुष्पी स्मृता घण्टा शणपुष्पसमाकृतिः ।

शणपुष्पी कटुस्तिक्ता वामिनी कफपित्तजित् ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 242.

शणपुष्पी

- क. शणपुष्पी बृहत्पुष्पी शणिका शणघण्टिका ।
पीतपुष्पी स्थूलफला लोमशा माल्यपुष्पिका ॥
ख. शणपुष्पी रसे तिक्ता कषाया कफवातजित् ।
अजीर्णज्वरदोषघ्नी वमनी रक्तदोषनुत् ॥

Rāja Nighaṇṭu, Śātāhvādi varga, 66-67.

क्षुद्रशणपुष्पी

- क. द्वितीयाऽन्या सूक्ष्मपुष्पा स्यात् क्षुद्रशणपुष्पिका ।
विष्टिका सूक्ष्मपर्णी च वाणाह्वा सूक्ष्मघण्टिका ।
शणपुष्पी क्षुद्रतिक्ता वम्या रसनियामिका ॥

महाशणपुष्पिका

- ख. द्वितीयाऽन्या वृत्तपर्णी श्वेतपुष्पा महासिता ।
सा महाश्वेतघण्टी च सा महाशणपुष्पिका ॥

गुणाः

- ग. महाश्वेता कषायोष्णा शस्ता रसनियामिका ।
कुतूहलेषु च प्रोक्ता मोहनस्तम्भनादिषु ॥

Rāja Nighaṇṭu, Śātāhvādi varga, 68-70.

शरः (मुञ्जः) अश्मर्याम् (पित्तजे)

कुशः काशः शरो गुन्द्रा इत्कटो मोरटोऽश्मभित् ।

.....कथितस्तेषु साधितम् ।...घृतं ।

भिनत्ति पित्तसम्भूतामश्मरीं क्षिप्रमेव तु ॥

Suśruta Samhitā, Cikitsā, 7-9/22.

ŚĀNKHAPUṢPĪ

Botanical name : *Convolvulus pluricaulis* Choiss.

Syns. *Convolvulus prostratus* Forsk.,

C. microphyllus Sieb ex. Spreng.

Family : Convolvulaceae

Classical name : Śāṅkhaṇṭṭī

Sanskrit names

Śaṅkhapuṣpī, Kṣīrapuṣpī, Maṅgalyakusumā.

Regional names

Shankhapuli (Hindi); Sankhvel (Mar.);
Shankhavalī (Guj.).

Description

Convolvulus pluricaulis Choisy.

A prostrate or suberect, spreading hairy. perennial herb; diffuse hairy herbs with rufous-fulvous tomentose branches.

Leaves ovate-lanceolate to linear, up to 5 cm. long.

Flowers 2-4 together, sessile on pedunculate heads.

Sepals hairy on both sides. Corolla shortly funnel-shaped.

Capsules oblong-globose, ellipsoid to sub-globose, glabrous pale brown; pericarp charataceous.

Seeds brown-black, minutely puberulous, densely to sparsely white pubescent.

Flowering and fruiting time

Plant flowers and fruits during major part of the year.

Distribution

West tropical Africa to India. Plant is very common in lawns, on ridges along waysides and in unused lands.

Kinds and varieties

Viṣṇukrāntā is botanically identified as *Evolvulus alsinoides* Linn.

Evolvulus alsinoides Linn., belonging to family Convolvulaceae, is a prostrate herb with perennial under ground stems and wiry branches with leaves variable upto 2 cm. long, elliptic, oblong or lanceolate, clothed with silky hairs; flowers small, bluish in colour, solitary or two, together; corolla funnel-shaped or flat and circular in outline; ovary two-celled; styles two, each 2-cleft.

Plant is in flowering stage round the year but frequent during monsoon.

It is found in Andhra Pradesh, Bihar, Gujarat, Jammu & Kashmir, Karnataka, Kerala, Orissa, Tamilnadu, Uttar Pradesh and West Bengal.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Snigdha, picchila
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Tridoṣahara-vātapittaśāmaka.

Properties and action

Karma	: Medhya Mastiṣka nāḍibalya-sāmaka- nidrājanana Rasāyana-medhya-rasāyana Anulomana Kuṣṭhaghna-keśavardhana Hṛdaya-balya Raktastambhana Raktavātaśāmaka- raktabhārahārśaka Kaphaniḥsāraka-svarya Mūtravirecanīya Vṛṣya Prajāsthāpana
Roga	: Mastiṣkadourbalya-mastiṣkaroga Smṛtihrāsa-smṛtibhramśa Unmāda-apasmāra-anidrā-bhrama Agnimāndya-udaravikāra-ānāha- gulma Arśa-vibandha Vātavikāra Hṛdroga Raktapitta Raktabhārādhikya Kaphapaittikākāsa-svarabheda Mūtrakṛcchra-pūyameha Śukradourbalya-śukradoṣa Garbhāśaya dourbalya-calitagarbha Carmavikāra-kuṣṭha Raktavikāra Dāha-jvara Tridoṣaja jvara-anidrā-pralāpa

Santāpa-dāha-amśughāta
Dourbalya.

Therapeutic uses

The drug Śaṅkhapuṣpī is medhya (or intellect-promoting) herbal agent; it is bitter, brain tonic and medhya rasāyana (intellect-promoting rasāyana) drug. Classical texts appreciate that Śaṅkhapuṣpī is a rasāyana specifically promoting intellect (Caraka Saṁhitā, Cikitsā, 1-3/31). Ghee may be cooked with three times juice of Śaṅkhapuṣpī alongwith milk; its regular makes even a dull the sharp and intelligent (Aṣṭāṅga Hṛdaya, Uttara. 39-47). The drug is used in insanity, insomnia, epilepsy and other mental disorders. Śaṅkhapuṣpī has wide use in mental and psychosomatic diseases. It is employed in several formulations indicated in various diseases. Śaṅkhapuṣpī has become a drug of choice and also in combination with other similar drugs (e.g. Brāhmī, Vacā, Jyotiṣmatī and Jaṭāmāsi etc. depending on therapeutic requirement) which is frequently recommended as memory promotor, brain tonic, antistress, hypotensive, herbal drug, and also in other various disorders related to nervous system and other system of body, and geriatrics as a whole a rasāyana (medhya rasāyana) drug. The drug is useful to children as well as adults for various therapeutic purposes including health protective and curative specifically mānasika roga, mental equilibrium and health of human body.

Śaṅkhapuṣpī is useful in abdominal diseases, flatulence, dyspepsia, loss of gastric power, gulma, piles, heart diseases, raktapitta, haemetemesis, cough, svarabheda (hoarseness of voice), dysuria, gonorrhoea, seminal disorders, uterine disorders (causing habitual or ordinary abortion), blood impurities, kuṣṭha, skin diseases, fever, burning sensation, delirium, general debility intestinal poison and other ailments.

Externally the drug is applied as paste in skin diseases and its oil is used as hair oil.

Parts used : Whole plant.

Dose : Paste 10-20 gm.

Formulation (yoga)

Śaṅkhapuṣpīpānaka, Medhya kaṣāya, Śaṅkhapuṣpī
ghṛta.

ŚĀṆKHAPUṢPĪ (शङ्खपुष्पी)

शङ्खपुष्पी सरा स्वर्या कटुस्तिक्ता रसायनी ।
अनुष्णा वर्णमेधाग्निबलायुःकान्तिदा हरेत् ॥
दोषापस्मारलूताश्रीकुष्ठभूतविषकुमीन् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1495-1496.

शङ्खपुष्पी सरा मेध्या वृष्या मानसरोगहृत् ॥
रसायनी कषायोष्णा स्मृतिकान्तिबलाग्निदा ।
दोषापस्मारभूताश्रीकुष्ठक्रिमिविषप्रणुत् ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 269-270.

शङ्खपुष्पी हिमा तिक्ता मेधाकृत् स्वरकारिणी ।
ग्रहभूतादिदोषघ्नी वशीकरणसिद्धिदा ॥

Rāja Nighaṇṭu, Guḍūcyādi varga, 133.

क्षीराश्रभृक् पिबेत् यत्नात् विष्णुक्रान्तां सशर्कराम् ।
उर्ध्वरक्तार्दितः सम्यक् गव्येन पयसा सह ॥

Śoḍhala; Gadanigraha.

‘शङ्खपुष्पिकास्वरसाः ।

उन्मादहतो दृष्टाः पृथगेते कृष्ठमधुमिश्राः ॥’

Cakradatta.

उन्मादापस्मारयोः

ब्राह्मीरसत्वचाकुष्ठशङ्खपुष्पीभिरेव च ।

पुराणं घृतमुन्मादालक्ष्म्यपस्मारपापनुत् ॥

Caraka Saṁhitā, Cikitsā, 10-25.

शङ्खपुष्पीघृतम्

Aṣṭāṅga Hṛdaya, Uttara, 39-40.

मेध्यरसायने

‘तत्सेव्यं शङ्खपुष्पी च यच्च सेव्यं रसायनम् ।’

Caraka Saṁhitā, Cikitsā, 15.

कल्कः प्रयोज्यः खलु शङ्खपुष्पाः.... ।

मेध्या विशेषेण च शङ्खपुष्पी ॥

Caraka Samhitā, Cikitsā, 1/3-30/31.

मेध्यरसायनानि

मण्डूकपर्ण्याः स्वरसः प्रयोज्यः क्षीरेण यष्टीमधुकस्य चूर्णम् ।

रसो गुडूच्यास्तु समूलपुष्पा कल्कः प्रयोज्यः खलु शङ्खपुष्पाः ॥

आयुःप्रदान्यामयनाशनानि बलाग्निवर्णस्वरवर्धनानि ।

मेध्यानि चैतानि रसायनानि मेध्या विशेषेण च शङ्खपुष्पी ॥

Caraka Samhitā, Cikitsā, 1-3/30-31.

अतत्त्वाभिनिवेशे मेध्यरसायनम्

ब्राह्मीस्वरसयुक्तं यत् पञ्चगव्यमुदाहृतम् ।

तत् सेव्यं शङ्खपुष्पी च यच्च मेध्यं रसायनम् ॥

Caraka Samhitā, Cikitsā, 10-62.

SAPTACAKRĀ

Botanical name : *Salacia chinensis* Linn.

Syns. *Salacia latifolia* Wall ex. M. Laws.,

S. prinoides Dc.

Family : Hippocrastaceae

Classical name : Saptacakra

Sanskrit names

Saptacakra, Svarṇamūlā.

Regional names

Satarangi (Hindi); Dimal (Beng.); Ingali (Mar.); Cherukuranti (Mal.); Satagunda (Goanese).

Description

A small erect or straggling tree or large, woody climbing shrub found almost throughout India including Andaman Islands thriving along seashore and river banks as well as in forests at altitudes upto 750 meters.

Leaves ovate to lanceolate, 3-6 in. long and 3/4 in.-2 in. broad, entire, minutely dentate.

Flowers 2-6-clustered together on axillary tubercles, yellowish.

Fruits small, globose, 1-2 cm. in diameter, red when ripe, one seeded; seeds surrounded by an edible pulp. Ripe fruits eatable.

Flowering and fruiting time

Plant flowers in December-January and fruits in April.

Distribution

Plant occurs in sea-coastal regions, from Malabar to Coorg, along river, rivulets, Nallahs and in forests, ascending to 3,000 ft. elevation.

Root outer skin or external appearance of golden colour and by cutting transversely its structure appears of seven rounds (saptacakra) or circulars. Fresh root of plant has appearance of various distinct colours.

Chemical composition

Root bark contains two 1.3-diketones, fatty matter, rubber, dulcitol, mangiferin, phlobtannin and glycosidal tannins. Roots contain leucopelargonidin and its dimer and tetramer.

Seeds contain gutta (a linear isomer of natural rubber), dulcitol and a dimer of leucopelargonidin. Leaves also contain gutta. Presence of triterpenes has been reported in the leaves and bark.

Pharmacodynamics

Rasa	: Kaṣāya, tikta
Guṇa	: Laghu, rūkṣa, tikṣṇa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāma Vātodāśina.

Properties and action

Karma	: Mūtrasaṅgrahaṇīya- madhumehahara Śothahara-raktaśodhaka Dīpana-anulomana Yakṣduttejaka-pittasāraka Ārtavajanana-garbhāśayottejaka

	Svedāpanyana
	Vedanāsthāpana
Roga	: Madhumeha
	Raktavikāra-pramehapīḍikā-śoṭha
	Yakṛdvikāra
	Arśa
	Rajorodha-kaṣṭārtava-garbhasrāvaka
	(higher dose)

Therapeutic uses

The drug Saptacakrā is an antidiabetic herbal drug (madhumehaghna vanouṣadhi) which has been clinically substantiated by clinical trials and other biological and pharmacological experimental studies proving its efficacy in diabetes which is treated conventionally in indigenous system of medicine, particularly with background of folk and tribal traditional medical practices. Roots decoction or powder is orally given to the diabetics.

The roots are astringent. They are considered to be abortifacient and decoction is useful in amenorrhoea, dysmenorrhoea and venereal diseases.

The drug is anti-inflammatory and analgesic. It is stomachic, liver-stimulant and cholagogue. It is blood purifier and anti-oedema. It mūtrasaṅgrahaṇīya and madhumehahara. Drug is emmenagogue and anti-diaphoretic. It allays aggravation of vātapitta doṣa.

Saptacakrā is used in liver disorders, haemorrhoids, blood impurities, carbuncle, oedema, amenorrhoea, venereal diseases, excess sweating and ailing conditions.

Parts used : Root.

Dose : 50-100 ml. decoction., 1-3 gram. powder.

SAPTACAKRĀ (सप्तचक्रा)

सप्तचक्रा लघुरूक्षा तीक्ष्णा तिक्तकषायका ।

वीर्योष्णा मधुमेहघ्नी यकृद्द्वारोहारा परम् ॥

रजोरोधं रजःकृच्छ्रं कफपित्तं च नाशयेत् ॥

Dravyaguṇa Vijnāna, Part II, p. 687.

SAPTAPARNA

Botanical name : *Alstonia scholaris* R. Br.

Family : Apocynaceae

Classical name : Saptaparna

Sanskrit names

Saptaparna, Viśālatvak, Śālmaliṣātra,
Gandhapuṣpa, Śārada-śāradi, Sāptadala, Gajamada,
Vikasanaśīla, Guccapuṣpa, Bahutvak, Śālmaliṣāda,
Uccavṛkṣa.

Regional names

Chhitavan, Satouna (Hindi); Chhatim (Beng.);
Satouna (Punj.); Satavina (Mar.); Satavana (Guj.); Pala
(Tam., Mal.); Edakuliriti (Tel.); Maddale (Kann.); Dita
(Eng.).

Description

Large evergreen tree with a straight, often fluted and buttressed stem, 40 feet high and upto 5 feet in girth; tree with whorled branches. Bark yellow inside and exudes a milky juice when injured; bark usually greyish brown, 1.3 cm. thick, lenticillate, wood white. Wood white when first exposed, but gradually turns yellowish to pale-brown; light lustrous, smooth and tastes bitter when fresh.

Leaves in whorls of 5-10, 10-20 cm. × 2.5-6.5 cm., obovate, elliptic-oblong or oblanceolate, obtuse sub-sessile, bright green above, pale beneath; petiole short 0.60-1.25 cm.

Flowers greenish-white 1.25 cm. long with strong smell; cymes pubescent, umbellate, 7.5-10.0 cm. long; calyx small, 5-lobed; corolla small, twisted and spreading.

Follicles 2.30-60 cm. Seeds long 0.85 cm., flattened clothed densely with ciliate long hairs.

Flowering and fruiting time

Plant flowers in November-March and fruits January-May.

Distribution

Plant occurs throughout tropical and moister parts of India, especially in the west coast forests, but is nowhere

very abundant. It is found in Assam, Kerala, Bengal and other regions in country. Plant is in wild state and planted in different provinces; also found in old gardens, along roadsides and in forest patches. It occurs in the Himalayan region ascending to 3,000 feet elevation.

Chemical composition

The total alkaloidal content of Indian bark is reported to be 0.16-0.27 per cent and 0.8-0.10 per cent, of the hydroxide of the chief alkaloid echatimine; but higher values have been reported (0.5% of echatimine) in bark from Mysore (Shimoga).

Among non-alkaloidal constituents, two isomeric lactones were isolated. Bark is also rich in sterols. Bark also contains echicerine, echitine and echiretine and other constituents.

Latex is found to contain 2.8-7.9% caoutchouc. The coagulum contains caoutchic 12.9-26.5 and resins 69.0-78.7 percent.

The presence of a blood sugar reducing principle in bark has also been reported.

Pharmacodynamics

Rasa	: Tikta, kaṣāya
Guṇa	: Laghu, snigdha
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāma (tridoṣaghna).

Properties and action

Karma	: Viṣamajvaraghna Raktaśodhaka-kaṇḍūghna- kuṣthaghna Vraṇaśodhana-vraṇaropana Dīpana-anulomana-sara Yakṛdbalya Kṛmighna Hṛdya Pramehaghna Kaṭupouṣṭika Kaphaghna.

Roga	: Viṣamajvara-jvara Raktavikāra Hṛdroga Kāsa-śvāsa Prameha Sutikāroga-(jvaraghna- agnivardhana-balya-stanyajanana) Agnimāndya-śūla-gulma Pravāhikā Yakṛddourbalya Kṛmiroga Kuṣṭha Udarda Jirṇavraṇa Jvarajanya dourbalya Danta kṛmi.

Therapeutic uses

The drug Saptaparṇa is antipyretic, antiseptic, carminative, cardi tonic and vermifuge (wormifuge). It is used in abdominal pain, fever, respiratory diseases and skin diseases. The drug is very much used in traditional medicine against malarial fever.

The bark is a very effective drug internally used in viṣamajvara as an anti-malarial herbal agent without any side-effects. Bark is also useful in debility caused by fever as a good bitter tonic. Bark in the form of powder, decoction, extract and others (as single drug and an ingredient of compound formulatoin) is commonly prescribed in malarial fever and allied ailing conditions.

Saptaparṇa bark is taken in peripural stage (sūtikā kāla) to prasūtā mothers; it is also galactagogue besides other beneficial actions for allaying certain disorders of this stage.

The bark is taken in raktavikāra (blood impurities) and hṛdroga (cardiac diseases). It is given in cough, asthma, prameha, skin diseases, dermatosis, kuṣṭha, udarda, worms, liver dysfunction, abdominal colic, dyspepsia, gulma and dysentery.

Externally the bark is applied on chronic ulcers and Kuṣṭha; it is wound healing.

Parts used : Bark, latex, flowers.

Dose : Decoction (bark) 50-100 ml.

Formulations (yoga)

Saptacchādi kvātha, Saptacchadādi taila,
Saptaparna satvādi vaṭi.

Group (gaṇa)

Tiktaskandha, Kaśāyaskandha, Kuṣṭhaghna,
Udardapraśamana, Śirovirecana (Caraka Saṁhitā),
Āragvadhādi, Lākṣādi, Adhobhāgahara (Suśruta Saṁhitā).

SAPTAPARNA (सप्तपर्ण)

सप्तपर्णः कषायोष्णः सुस्निग्धो दीपनः सरः ॥

हृद्यो दोषकृमिश्वासकुष्ठगुल्मव्रणस्रजित् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 954-955.

सप्तपर्णो व्रणश्लेष्मवातकुष्ठस्रजन्तुजित् ।

दीपनः श्वासगुल्मानः स्निग्धोष्णस्तुवरः सरः ॥

Bhāvaprakāśa Nighaṇṭu, Vaṭādi varga, 75.

त्रिदोषशमनो हृद्यः सुरभिर्दीपनः सरः ।

शूलगुल्मकृमीन् हन्ति कुष्ठं शाल्मलिपत्रकः ॥

Dhanvantari Nighaṇṭu.

सप्तपर्णस्तु तिक्तोष्णः त्रिदोषघ्नश्च दीपनः ।

मदगन्धो निकन्धोऽयं व्रणरक्तामयकृमीन् ॥

Rāja Nighaṇṭu.

त्रिदोषशमनो हृद्यः सुरभिः दीपनः सरः ।

शूलगुल्मकृमीन् कुष्ठं हन्ति शाल्मलीपत्रकः ॥

Dhanvantari Nighaṇṭu.

सप्तपर्णः त्रिदोषघ्नो वीर्योष्णोऽग्निदीपकः ।

मदगन्धिः व्रणहरः तिक्तः कृमिविनाशनः ॥

कुष्ठं जीर्णज्वरं श्वासं गुल्मं च ग्रहणीं तथा ।

प्रवाहिकां सरक्तां च वातरक्तं विनाशयेत् ॥

Bhāvaprakāśa.

दुष्टव्रणे

‘सप्तदलदुग्धकल्कः शमयति दुष्टव्रणं प्रलेपेन’

Cakradatta; Śodhala; 44-34.

कुष्ठे

दाव्याः रसाञ्जनस्य च निम्बपटोलस्य खदिरसारस्य ।

आरग्वधवृक्षकयोः त्रिफलायाः त्रिफलायाः सप्तपर्णस्य वा ॥

इति षट्कषाययोगाः विशिष्टाः सप्तभद्रश्च तिनिशस्य ।

स्नाने पाने च मताः तथाऽष्टकाश्चाश्वमारस्य ॥

आलेपनं प्रघर्षणमवचूर्णनमेत एव च कषायाः ।

तैलघृतपाकयोगे चेष्ट्यन्ते कुष्ठशान्त्यर्थम् ॥

Caraka Samhitā, Cikitsā, 7-97/99.

कुष्ठे स्नान-पान-लेपार्थं सप्तपर्णक्राथयोगः

वृषकुटजसप्तपर्णाः करवीरकरञ्जनिम्बखदिराश्च ।

स्नाने पाने लेपे क्रिमिकुष्ठनुदः सगोमूत्राः ॥

Caraka Samhitā, Cikitsā, 7-158.

मूत्रकृच्छ्रे सप्तच्छदादियवागू क्राथश्च

सप्तच्छदारग्वधकेबुके लाघवं करञ्जं कुटजं गुडूचीम् ।

पिबेत्तथा तण्डुलधावनेन प्रवालयूषं कफमूत्रकृच्छ्रे ॥

पक्त्वा जले तेन पिबेद्यवागूं सिद्धं कषायं मधुसंयुक्तं वा ॥

Caraka Samhitā, Cikitsā, 26-57.

सप्तच्छादिकषायबस्तियोगः

Caraka, Cikitsā, 10-26.

कुष्ठचिकित्सायां महातिक्तकघृतम्

Cakradatta, Kuṣṭha Cikitsā, 50/104-110.

कुष्ठ-नीडीव्रण-दुष्टव्रणादयः चिकित्सायां वज्रकतैलम्

Cakradatta, 50/132-134.

क्रिमिदन्तहरसप्तपर्णयोगः

‘सप्तच्छदार्कदुग्धाभ्यां पूरणं क्रिमिदन्तनुत् ।’

Cakradatta, Mukharoga Cikitsā, 56-35.

दन्तक्रिमिषु

‘सप्तच्छदार्कक्षीराभ्यां पूरणं क्रिमिशूलजित् ।’

Aṣṭāṅga Hṛdaya, Uttara, 22-20.

श्वासे

स्वरसं सप्तपर्णस्य पुष्पाणां वा शिरीषतः ।

हिध्माश्वासे मधुकणायुक्तं पित्तकफानुगे ॥

Aṣṭāṅga Saṅgraha, Cikitsā, 6-35.

Aṣṭāṅga Hṛdaya, Cikitsā, 4-32.

शिरीषपुष्पस्वरसः सप्तपर्णस्य वा पुनः ।

पिप्पलीमधुसंयुक्तः कफपित्तानुगे मतः ॥

Caraka Samhitā, Cikitsā, 17-114.

सप्तच्छदस्य पुष्पाणि पिप्पलीश्चापि मस्तुना ।

पिबेद् सञ्जूर्ण्य मधुना धानाश्चाप्यथ भक्षयेत् ॥

Suśruta Samhitā, Uttara, 51-36.

ŚARA

Botanical name : Sachharum munja Roxb.

Syns. Erianthus munja Jesw. Sachharum bengalense Retz., E. sara Rumke, E. ciliaris Jesw., Sachharum sara Roxb., S. ciliare Anders. S. arundinaceum Hook. f.

Family : Poaceae (Gramineae).

Classical name : Śara

Sanskrit names

Śara, Vāṇa, Muñja, Sthūladarbha, Sumekhala.

Regional names

Sarapat, Munja, Kanda (Hindi); Shar (Beng.); Kana (Beng.); Tirkande (Mar.); Tirkans (Guj.).

Description

A very large erect grass growing clumps, with flowering culms upto 6 m. tall. culms biennial, pale, solid pithy, smooth, with an inconspicuous growth ring and root zone.

Leaves 1-2 m. long and upto 3 cm. broad, glaucous green, rough on the margins, with dense hairs close to the ligule; leaf-sheath glabrous, smooth; panicle 30-90 cm. long, pale cream to dark reddish purple.

Spikelets in pairs, one sessile and the other pedicelled, awnless.

Flowering and fruiting time

Plant flowers during autumn season.

Kinds and varieties

The plant species *Saccharum munja* Roxb. includes a large number of forms varying in habit, nature of the inflorescence and adaptability to soil conditions. Some of them grow in very dry situations. Unlike those of *Saccharum arundinaceum*, the culms are formed only at the time of flowering. The chromosomes as number of reported in the different forms is $2n=30, 40$ and 60 .

In classical texts of medicine, there are two varieties ('*muñja dvaya*') of Śara or Muñja viz. Muñja and Bhadramuñja.

The plant species, known as muñja itself, is of great value for the fibre (muñja) extracted from the upper leaf sheaths of the flowering culms. For this purpose, only the two uppermost leaves are used, as they have the longest sheaths, some measuring as much as 100-20 cm. The fibre obtained from muñja grass is quite strong and elastic and not affected by moisture. It is excessively employed in manufacture of cordage and ropes and for making mats, baskets etc. Grass is also employed for other rural uses. Grass ripe and green (in spring) may be used also for fodder (in scarcity) or as a substitute for rice-straw.

Distribution

Plant occurs mainly in Punjab, Uttar Pradesh, Bihar, Bengal, Orissa and other province in country, growing well on alluvial sandy banks of streams not subject to water-logging.

Chemical composition

Grass contains (oven-dry basis) : cellulose 58.2, lignin 20.5, pentosams 23.7 and ash 2.3 per cent.

Grass is good source of furfural (yield 5.67%, dry basis). It can also be tried as a potential source of alcohol. It yield 19.5 per cent (on dry wt.) of reducing sugars when digested with sulphuric acid; glucose, xylose, galactose and rhamnose have been identified in the hydrolysate 34.5% fermentable sugars.

Pharmacodynamics

Rasa	: Madhura, tikta
Guṇa	: Laghu, snigdha
Virya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Tridoṣahara

Properties and action

Karma	: Mūtravirecanīya Tr̥ṣṇānigrahaṇa Raktaśodhaka Raktapittahara Stanyajanana Vṛṣya Dāhapraśamana Cakṣuṣya
Roga	: Mūtrakṛcchra-mūtrāghāta Dāha-tr̥ṣṇā Raktapitta-visarpa Pradara Śukradourbalya Netraroga Arśa.

Therapeutic uses

The drug Śara is mūtravirecanīya (mūtrala or mūtrajanana) which is an important diuretic agent belonging to pentad group of diuretic drugs (pañcatṛṇamūla). The roots of drug plant are internally given in different forms in dysuria (mūtrakṛcchra), urinary calculus or stone (mūtrāśmarī), pittedolvaṇāśmarī (āśmarī caused by predominance of pitta doṣa), urinary tract diseases including U. T. I. (mūtramārga vikāra) and urinary bladder diseases (basti roga).

The drug is used in leucorrhoea (pradara) and loss of lactation (stanyakṣaya) as galactagogue, seminal weakness (śukra dourbalya), burning sensation (dāha), intrinsic haemorrhage (raktapitta), haemorrhoids (arśa), erysepals (visarpa), raktavikāra, overthirst (tr̥ṣṇā) and blood impurities (rakta duṣṭi janya vikāra) as blood purifier (raktaśodhana).

Śara is useful as rasāyana and vājikaraṇa. It is used in Kāsa, pittaja kāsa, kṣataja kāsa, vṛddhi and akṣiroga (eye diseases).

Besides pañcatrṇamūla formulations (yogakalpanā), the roots (śaramūla) are employed as ingredient of some other compounds such as brāhmarasāyana, brmhanī guṭikā, sukumāra ghṛta, indrokta rasāyana and trṇapañcamūlādyā ghṛta.

Parts used : Roots.

Dose : Decoction 50-100 ml.

Formulation : Trṇapañcamūla kvātha.

Group (gaṇa)

Trṇapañcamūlādyā ghṛtam, Śarādīpañcamūlādyā ghṛtam.

ŚARA (शर)

भद्रमुञ्जः

भद्रमुञ्जः शरो वाणस्तेजनश्चेक्षुवेष्टकः ।

मुञ्जः

मुञ्जो मुञ्जातको वाणः स्थूलदर्भः सुमेखलः ।

भद्रमुञ्जः मुञ्जश्च, तयोर्गुणाः

मुञ्जद्वयन्तु मधुरं तुवरं शिशिरं तथा ।

दाहतृष्णाविसर्पास्त्रिमूत्रकृच्छ्राक्षिरोगजित् ।

दोषषत्रयहरं वृष्यं मेखलाषूपयुज्यते ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 158-160.

मूत्रकृच्छ्राश्मरीरोगे शरादिपञ्चमूलाद्यघृतम्

शरादिपञ्चमूल्या वा कषायेण पचेद् घृतम् ।

प्रस्थं गोक्षुरकल्केन सिद्धमद्यात्सशर्करम् ॥

अश्मरीमूत्रकृच्छ्रञ्च रेतोमार्गरुजाऽपहम् ॥

Bhāvaprakāśa, Madhyakhanda, Aśmarīrogādhikāra, 37-82.

अश्मर्यादिमूत्ररोगे तृणपञ्चमूलाद्यघृतम्

Bhāvaprakāśa, Aśmarīrogādhikāra, 37/55-57.

अश्मरीचिकित्सायां शरपञ्चमूलादिघृतम्

शरादिपञ्चमूल्या वा कषायेण पचेद् घृतम् ।
 प्रस्थं गोक्षुरकल्केन सिद्धमद्यात् सशर्करम् ॥
 अश्मरीमूत्रकृच्छ्रघ्नं रेतोमार्गरुजापहम् ॥

Cakradatta Aśmarī cikitsā, 34-40.

मूत्रबस्त्यामये

शरेक्षुदर्भकासानां शालीनां मूल एव च ।
 शरादिपञ्चमूलं स्यान्मूत्रबस्तिरुजापहम् ॥

पित्तोल्बणाश्मर्याम्

कुशकाशः शरो गुन्द्रा इत्कटो मोरटोऽश्मभित् ।
 क्वाथितास्तेषु साधितम् ।.....घृतं..... ॥
 भिनत्ति पित्तसम्भूतामश्मरीं क्षिप्रमेव तु ॥

Suśruta Samhitā, Cikitsā, 7-9/12.

तृष्णायाम्

‘शृतशीतं ससितोत्पलमथवा शरपूर्वपञ्चमूलेन ।’

Caraka Samhitā, Cikitsā, 22-27.

वृद्धौ

सुकुमारघृते

Aṣṭāṅga Hṛdaya, Cikitsā. 13-42.

रसायने

ब्राह्मरसायने

Caraka Samhitā, Cikitsā, 1-1-44.

इन्द्रोक्तरसायने द्वितीये

Caraka Samhitā, 1/4-16.

बाजीकरणे

बृंहणीगुटिका

Caraka Samhitā, Cikitsā, 2/1-24.

कासे

क. पित्तजे

शरादिपञ्चमूलस्य पिप्पलीद्राक्षयोस्तथा ।
 कषायेण शृतं क्षीरं पिबेत् समधुशर्करम् ॥

Caraka Samhitā, Cikitsā, 18-100.

ख. क्षतजे

‘तृष्णार्तानां पयश्छागं शरमूलादिभिः घृतम्।’

Caraka Samhitā, Cikitsā, 18-141.

SARALA

Botanical name : *Pinus roxburghii* Sargent.

Family : Pinaceae

Classical name : Sarala

Sanskrit names

(a) Sarala (tree)

Sarala, Surabhidārūka, Kalidrūma, Pūtikāṣṭha, Dīpataru, Bhūtamāri, Cīḍa, Pūtidāru.

(b) Saralaniryāsa (oleo resin)

Śrīveṣṭaka, Śrīvāsa, Śrīrasa, Vṛkṣadhūpa, Rasāṅgaka, Veṣṭasāra, Lakṣmīveṣṭa, Veṣṭa-veṣṭaka.

Regional names

Chir, Chirh (Hindi); Telio devdar (Guj.); Saral devadru (Tam.); Devadaru-chettu (Tel.); Long-leaved or Chir-pine (Eng.).

Description

Large tree, typical gregarious trees, with spreading crown, more or less deciduous tree, with rough branches, more or less branched whorled; bark dark grey, often reddish, deeply fissured, rough, exfoliating in longitudinally elongated plates.

Wood moderate hard, sapwood white; heartwood brownish red; annual rings very distinct, many fine, rough irregular; medullary rays; resin ducts large numerous, irregularly distributed, prominent on vertical section.

Leaves in fascicles of 3, needles-like each 20-33 cm., nearly triquetrous, finely toothed, light green, persisting on an average for a year and a half.

Male flowers about 0.5 cm. long, arranged in the form of cones; female cones solitary or 2-5 together, ovoid, 10-20 cm. × 7.5-13.0 cm. when ripe, brown; cones on short stalks; scales 2.5-5 × 1.6 cm., beak thick, pyramidal, pointed

somewhat recurved; seeds winged, without wings 7.5-13.0 mm. $\times$ 3.0-6.5 mm.; wings long, membranous; cotyledons about 12.

Flowering and fruiting time

Plant bears male flowers in January and fruit becomes matured by next year June-July; and cones begin to April-May of third year i.e. about 24 months after their appearance.

Distribution

Plant is found in the Himalayas from Kashmir to Bhutan and in the outer hills and valleys which receive the bulk of rainfall during the monsoon and it does not usually extend beyond the monsoon range. The chir forms pure forest over extensive areas, though it also often occurs mixed with other species, particularly towards its upper and lower limits of altitude; pine forest is a major composition of Himalayan forest types.

The chir belt, in which the tree is found pure or nearly so over considerable areas-occurs at altitudes of 600-1,500 meters. Artificial regeneration and plantation of chir are carried out on large scale in the forest areas for developing pine forests in the Himalayan regions.

Chemical composition

Oleoresin is obtained by incision or blazes in trunk of trees under two methods of tapping (light and heavy tapping); and the oleoresin product is known Sarala-niryāsa or Śrīveṣṭaka (gandhabiroja) which is source of Sarala niryāsa taila or Śrīvāsa taila, the turpentine oil. The rosin, rosin spirit or pinoline and rosin oil 80-85% are obtained. The pine oil (natural) is obtained by steam distillation of pinus woods. Leaves (also from tender leaves and flowers) yield aromatic oil 0.26% and remain material (after extraction) of leaves is pine-wool.

Oleoresin yields 20% oil of turpentine which contains pinene, carene, longifolene and other terpenes. Detailed screening of pines and various parts and products have been chemically conducted and ample data available on record, in view of wide and multipurpose utility.

Kinds and varieties

There are a number of pine species naturally occurring in the Himalayas and many of them are introduced being exotic species. Some important species found in various Himalayan regions in country to varying extents, such as *Pinus gerardiana* Wall., *Pinus insularis* Endl. and *Pinus wallichiana* A. B. Jackson. Nearabout 12 extotic species of *Pinus* or kinds of pines are reportedly tried in India and further work on their different aspects have experimentally been conducted including regeneration, production, chemistry, utility etc.

Pharmacodynamics

Rasa	: Kaṭu, tikta, madhura
Guṇa	: Laghu, tiksṇa, snigdha
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma

Properties and action

Karma	: Śleṣmapūtiḥara Jantughna-putiḥara-raktotkleśaka Raktarodhaka-vraṇaśodhana Mastiṣka-nāḍibalya Anulomana-yakṛduttejaka Kṛmighna Uttejaka-raktarodhaka Kaphaghna-kaphaniḥsāraka- śleṣmapūtiḥara Mūtrajanana Garbhāśayaśothahara Tvagdoṣahara
Roga	: Jirṇakāsa-svarabheda-yakṣmā- saraktakāsa Sandhivāta-phuphphusaśotha- pārśvaśūla Agnimāndya-ādhmāna- āntrāvarodha Āmāśayika vraṇa āntrika jvara (rakta srāva) Hṛddourbalya-raktasrāva

Jirṇa bastiśoṭha-pūyameha
 Śvetapradara
 Tvagdoṣa-svedadourgandhya
 Kṛmiroga-sphītakṛmi.

Therapeutic uses

The drug Sarala is anthelmintic, antihistaminic, antiseptic, cardiotonic, diaphoretic and stimulant. It is cardiac, anti-tubercular and antiasthmatic drug. The drug is used in cardiac diseases, chronic cough, dyspepsia, tuberculosis and urinary diseases. It is frequently used in chronic cough, bronchial asthma and tuberculosis.

Sarala is a śleṣmapūtihara drug. It is germicide, antiseptic, expectorant and rubefacient. The drug useful in vātavyādhī, agnimāndya, ādhmāna, pittāsamārī and kṛmiroga. It is used in worms especially tapeworms; an enema of oil is also given. Śrīveṣṭaka is useful in chronic bastiśoṭha and pūyameha. Śrīveṣṭaka satva is also used in śveta pradara (leucorrhoea).

Turpentine oil (Śrīveṣṭaka taila) is medicinally useful other than its chief utility as solvent (specially in the paints and varnishes); it is used in pharmaceutical preparations perfumery industry and in the manufacture of the synthetic pine oil, disinfectants, insecticides and denaturant. The turpentine oil is valued in medicine and is included in the Indian Pharmacopoeia and the Indian Pharmacuetical Codex under the name Oleum terebinthinae. Most of the therapeutic uses of oil and its effects may be attributed to its local irritant action. It is also feebly antiseptic. During its elimination through the mucous membrane of the lungs it acts as an expectorant and is useful in chronic bronchitis; it is especially recommended in the treatment of gangrene of the lungs. It has been benefecial as a carminative in flatulent colic. It is also used to arrest minor haemorrhage (as an haemostatic, dentrific and germicide) in toothsockets and nose. In the form of enema the oil is useful in obstinate constipation, tympanitis and seatworms infestation. Externally it is used as a rubefacient in lumbago, arthritis and neuralgia. In the

form of terpineum stupe, it is used as a counter-irritant in various deep-seated inflammation especially in abdomen.

Parts used : Wood, oleo-resin, oil.

Dose : Wood powder 1-3 gm., Oil 1-3 drops,

Oleo-resin (Śrīveṣṭaka) 1-3 gm.

SARALA (सरल)

- क. सरलस्तु पूतिकाष्ठं तुम्बी पीतद्रुत्थितो दीपतरुः ।
स स्निग्धदारुसंज्ञः स्निग्धो मारीचपत्रको नवधा ॥
- ख. सरलः कटुतिक्तोष्णः कफवातविनाशनः ।
त्वग्दोषशोफकण्डूतिव्रणघ्नः कोष्ठशुद्धिदः ॥

Rāja Nighaṇṭu, Candanādi varga, 38-39.

चीडा

- अ. चीडा च दारुगन्धा गन्धबधूर्गन्धमादनी तरुणी ।
तारा च भूतमारी मङ्गल्या तु कपाटिनी ग्रहभीतिजित् ॥
- ब. चीडा कटूष्णा कासघ्नी कफजिहीपनी परा ।
अत्यन्तसेविता सा तु पित्तदोषभ्रमापहा ॥

Rāja Nighaṇṭu, Candanādi varga, 33-34.

श्रीवेष्टकः

- अ. श्रीवेष्टो वृक्षधूपश्च चीडगन्धो रसाङ्गकः ।
श्रीवासः श्रीरसो वेष्टो लक्ष्मीवेष्टस्तु वेष्टकः ॥
वेष्टसारो रसावेष्टः क्षीरशीर्षः सुधूपकः ।
धूपाङ्गस्तिलपर्णश्च सरलाङ्गोऽपि षोडश ॥
- ब. श्रीवेष्टः कटुतिक्तश्च कषायः श्लेष्मपित्तजित् ।
योनिदोषरुजाजीर्णव्रणघ्नाध्मानदोषजित् ॥

Rāja Nighaṇṭu, Candanādi varga, 149-151.

सरलः

- क. उत्थितः सरलः चीडः खलिर्मरिचपत्रकः ॥
पीतवृक्षो दीपवृक्षः पूतिदारु कलिद्रुमः ।
नमेरुर्नन्दनो दारुः सुरदारु सुदारु च ॥
- ख. सरलो मधुरस्तिक्तः कटुपाकरसो लघुः ।
स्निग्धोष्णः कर्णकण्ठाक्षिरोगघ्नो विनियच्छति ॥

रक्षोऽलक्ष्मीव्रणस्वेदयूकाकासकफानिलान् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1311-1313.

श्रीवासः सरलनिर्यासः

- अ. (श्रीवासः सरलस्त्रावः श्रीवेष्टो वृक्षधूपकः)
 श्रीवेष्टो दधिसाह्वस्तु श्रीवासः श्रीनिवासकः ॥
 चीडास्त्रावः क्षीरशीर्षः पायसो रक्तशीर्षकः ।
 वेष्टको विष्टको दासी कलिद्रुस्तडितस्तडी ॥
- ब. श्रीवासो मधुरस्तिक्तः स्निग्धोष्णस्तुवरः सरः ।
 पित्तलो वातमूर्द्धाक्षिस्वररुक्कफपीनसान् ॥
 रक्षोघ्नः स्वेददौर्गन्ध्ययूकाकण्डूव्रणान् जयेत् ।

Rāja Nighaṇṭu, Oṣadhi varga, 1314-1317.

सरलः

सरलः पीतवृक्षः स्यात्तथा सुरभिदारुकः ।

सरलगुणाः

सरलो मधुरस्तिक्तो कटुपाकरसो लघुः ॥
 स्निग्धोष्णः कर्णकण्ठाक्षिरोगरक्षोहरः स्मृतः ।
 कफानिलस्वेददाहकासमूर्च्छाव्रणापहः ॥

Bhāvaprakāśa Nighaṇṭu, Karpūrādi varga, 26-27.

सरलनिर्यासः गुग्गुलुः

श्रीवासः सरलस्त्रावः श्रीवेष्टो वृक्षधूपकः ।

सरलनिर्यासगुणाः

श्रीवासो मधुरस्तिक्तः स्निग्धोष्णस्तुवरः सरः ॥
 पित्तलो वातमूर्द्धाक्षिरचररोगकफापहः ।
 रक्षोघ्नः स्वेददौर्गन्ध्ययूकाकण्डूव्रणप्रणुत् ॥

Bhāvaprakāśa Nighaṇṭu, Karpūrādi varga, 39-40.

मसूरिकारोगे सरलधूपनम्

‘क्रिमिपातभयाद्योऽपि धूपयेत् सरलादिना’

Cakradatta, 54-40.

व्रणधूपने

श्रीवेष्टके सर्जरसे सरले देवदारुणि ।
 सारेष्वपि च कुर्वीत मतिमान् व्रणधूपनम् ॥

Suśruta Samhitā, Sūtra, 37-21.

कर्णरोगे

कुर्यादेवं भद्रकाष्ठे कुष्ठे काष्ठे च सारले ।
मतिमान् दीपिका तैलं कर्णशूलनिवर्हणम् ॥

Suśruta Saṁhitā, Uttara, 21-22.

क्रिमिरोगे

‘सुराहसरलस्नेहं पृथगेवं प्रकल्पयेत् ।’

Aṣṭāṅga Hṛdaya, Cikitsā, 20-32.

उरुस्तम्भे

‘....सरलं देवदारु च ।

....तान् पिबेत् ।

सक्षौद्रानर्धश्लोकोक्तान् कल्कानूरुग्रहापहान् ॥’

Caraka Saṁhitā, Cikitsā, 27-31/32.

ŚARAPUNĪKHĀ

Botanical name : *Tephrosia purpurea* Pers.

Syn. *Tephrosia hamiltonii* Drum.

Family : Fabaceae (Papilionaceae)

Classical name : Śarapunīkhā

Sanskrit names

Śarapunīkhā, Plīhaśatru, Nīlavṛkṣākṛti, Śimbīphalā,
Nīlavarṇā, Mahouṣadhi.

Regional names

Sarfonka (Hindi.); Bananila (Beng.); Unhali
(Mar.); Sharapankho (Guj.); Sharapankh (Punj.); Kolingi
(Tam.); Venpili (Tel.); Egyali (Kann.); Kantamiri (Mal.);
Jhojharu (Punj.); Varasuphar (Pers.); Purple Tephrosia,
Wild Indigo (Eng.).

Description

Polymorphic, much-branched, erect or sub-erect,
perennial herb, 30-90 cm. tall; stem cylindrical, smooth or
somewhat stellate.

Leaves imparipinnate, 5-15 cm. long; leaflets 5-9
pairs, a leaflet odd-pinnate, 2.5 cm. long and 1.5 cm.
broad, oblong-oblancheolate, bristle-tipped, glabrous

above, obscurely silky below, leaflet gives shap of arrow (śara) point (puṅkha) when broken (hence named 'Śarapuṅkhā' in Sanskrit); plant as a whole somewhat resembles plant of *Indigofera tinctoria* (Nīla) but leaves (leaflet) do not break in the manner of *Tephrosia purpurea* Pers. (Śarapuṅkhā).

Flowers red or purple, in leaf-opposed racemes, 7.5-15 cm. in length; fl. 6.25 mm. long, pods 2.5-5 cm. long, slightly flat, hairy, recurved at the tip. Seed small, kidney-shaped, 5-10 in number, testa, mottled, yellow in colour or greenish grey, smooth.

Flowering and fruiting time

Plant flowers during rains and fruits in autumn season or colder months.

Distribution

Plant occurs throughout India, ascending to an altitude of 1,500 meters in the Himalayas. It grows mostly in waste land alkaline, sandy soil, areas of old gardens and unutilised lands of premises and fields etc.

Kinds and varieties

Some other species of *Tephrosia* also occur and they are referred in regard to varieties of Śarapuṅkhā.

As regards the texts of materia medica (Nighaṇṭu), Narahari mentions Kaṇṭapuṅkhā as a kind of Śarapuṅkhā ('anyā tu kaṇṭapuṅkhā syāt' : Rāja Nighaṇṭu, Śatāhvādī. 74) which appears to be allied to *Tephrosia spinosa* Pers.

***Tephrosia spinosa* Pers.** is a low stiff and spiny shrub. Leaves 1.25-2.50 cm. long; leaflets 5-7, narrow-oblongate. Flowers red, 1-2 rarely 3, axillary. Pods sickle-shaped, tip to 3.3 cm. long, 5-6-seeded. Plant occurring in South India and known as Mulkolinji (Tamil), Mullavempali (Telugu) and Mukkavala (Malayalam) etc.

Broadly, two kinds of Śarapuṅkhā are also considered on the basis of flower-colour. *Tephrosia purpurea* Pers. is red or purple-flowered kind which is mainly identified and commonly known as Śarapuṅkhā. White-flowered Śarapuṅkhā is mostly identified as *Tephrosia villosa* Pers.

***Tephrosia villosa* Pers.** is a much-branched, procumbent herb, upto 90 cm. high, densely, clothed with

white silky hair. Leaves 5.0-7.5 cm. long; leaflets 9-19, grey-green, persistent, silky below, oblanceolate. Flowers pale pink or pale violet, in erect racemes. Pods much curved, 2.5-3.7 cm. $\times$ 4-5 mm., 6-8 seeded. Plant occurring in Punjab, Rajsthan, Gujarat, Madhya Pradesh, Uttar Pradesh, Bihar, West Bengal as and other regions.

A few other species may also be indicated bearing mostly white flowers such as *Tephrosia candida* Dc. (white *Tephrosia*) and *Tephrosia procumbens* Buch Ham. syn. *T. purpurea* Pers. var. *pumilla* Baker. (flowers white or reddish-pinkish).

***Tephrosia maxima* Pers.** non Baker syn. *T. purpurea* Baker var. *maxima* Baker. (flowers bright purple or pale pink), *Tephrosia lanceolata* Grain ex Wight & Arn. syn. *T. purpurea* Baker (flowers deeply bright-purple) and *Tephrosia pumila* (Lamk.) Pers. syn. *T. purpurea* var. *pumila* (Lamk.) Baker. etc. are also medicinally useful more or less (other than insecticidal and piscidal and other utility). Genus and its species and alongwith varieties are subject to nomenclature taxonomical revision and verification.

The plant *Tephrosia purpurea* Pers. has also attracted cytological interest of studies.

Two cytological types ($n=11$, $n=D$) have been reported. The existence of naturally occurring diploid ($n=11$) and tetraploid ($n=22$) forms have been reported. Probably the tetraploid has originated as a result of allopolyploidy. The observed number of seeds per pod varied from four to so in the tetraploid, but was invariably six in the tetraploid but was invariably six in the diploid.

Chemical composition

Leaves contain rutin and rotenoids contents in different parts of plant (possessing piscidal and insecticidal properties which are attributed to the presence of rotenoids in *Tephrosia purpurea* Pers. and other species).

Leaves contain high amounts of nitrogen and potassium. An analysis of a sample of the leaves (Rajsthan, August-September) gave the following values for mineral constituents (dry basis) : ash 9.96, calcium 2.0, magnesium

1.03, potassium 3.38, phosphorous 0.49, sodium 0.87, nitrogen 7.25, and silica 2.19 percent. Seeds yield on oil.

The chemical constituents of wild plants on dry basis follow with values of leaves : crude protein 24.43; ether extr. 2.45, crude fibre 27.97, N-free extr. 37.41, mineral matter 7.73, calcium 1.65 and phosphorous 0.52 per cent.

The leaves yield a colouring matter, which gives excellent and comparatively fast shades, but its extraction is difficult.

Pharmacodynamics

Rasa	: Tikta, Kaṣāya
Guṇa	: Laghu, rūkṣa, tikṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

Properties and action

Karma	: Plīhaghna
	Pittasāraka
	Dīpana-anulomana
	Kṛmighna
	Raktaśodhaka
	Kaphaniḥsāraka
	Mūtrala
	Garbhāśayottejaka
	Kuṣṭhaghna
	Jvaraghna
	Visaghna
	Śothahara
	Jantughna
	Vraṇaropaṇa
	Raktarodhaka
	Dantya.
Roga	: Plīhavikṛti-plīhāvṛddhi
	Yakṛdvikāra
	Agnimāndya-vibandha-śūla-gulma
	Arśa
	Kṛmiroga
	Raktavikāra-śoṭha
	Kāsa-śvāsa

Mūtrakṛcchra-pūyameha
 Mūḍhagarbha-kaṣṭārtava
 Carmaroga
 Jīrṇajvara
 Vraṇa-śāstrakṣata
 Viṣa-mūṣakaviṣa-dhātuja viṣa
 Ślīpada
 Gaṇḍamālā-Apacī-granthi
 Dantaroga
 Śoṭha
 Carmaroga
 Mūḍhagarbha.

Therapeutic uses

The dried herb is considered to possess tonic, laxative, diuretic and deobstruent properties. It is given for the treatment of bronchitis and bilious febrile attacks, and also for the treatment of boils, pimples and bleeding piles. It is reported to be useful in cough and kidney disorders.

Pharmacological studies have shown that extracts of the bark are useful in insufficiency of the liver, they are effectively also used for infantile cirrhosis. The herb was also tested for ascites and found to improve the functioning of the liver. A decoction of the herb when administered in Bright's diseases with dropsy, showed mild diuretic effect. It is employed also as a gargle. The leaves are reported to be useful in joundice.

A decoction of the root is given in dyspepsia, diarrhoea, asthma, rheumatism and urinary disorders, and is used also as a vermifuge. The fresh root bark is given with black pepper for relief from obstinate colic. The root pounded and boiled in milk, is reported to be applied to leprous wounds, and the juice to the eruptions on the skin. A liniment prepared from roots is employed in elephantiasis. The roots are powdered and smoked for relief from asthma and cough.

An extract of the pods is given as a cure for pains and inflammation. The decoction of pods is used to stop vomiting and as a vermifuge. The oil from seeds is reported

to be specific against scabies, itch, eczema and other eruption on the skin. The seeds are reported to be used as a substitute for coffee.

The juice of the leaves of another kind or plant source of Śarapuṅkhā (*Tephrosia villosa* Pers.) is given in dropsy. The fresh root is credited with hypglycaemic properties, but for the leaves it needs further observations. Other kind of Śarapuṅkhā (*Tephrosia spinosa* Pers.), named as Kaṇṭapuṅkhā, is medicinally useful. A decoction of the roots-bark is given in rheumatism indigestion, diarrhoea and liver and to control excessive thirst. It is applied to the swellings of the joints. Another known as white *Tephrosia* plant species (*Tephrosia candida* Dc.) is reported to be poisonous to fish. The bark and leaves are chiefly used as a fish-poison; the seeds have also shown well-marked insecticidal properties. The piscidal and insecticidal properties are ascribed to presence of rotenoids in seeds. Likewise some other relevant species have more or less, insecticidal activity and also medicinal effects in view of their chemical constituents.

The drug Śarapuṅkhā is chiefly acting on spleen and most effective herbal agent for splenic and liver orders. Its prominent Sanskrit name Plihaśatru speaks itself about the same specific medicinal potentiality in spleen disorders.

The root of śarapuṅkhā chewed and swallowed in order to alleviate splenomegaly (Rājamārtanḍa, 7-1). The paste of śarapuṅkhā is taken with buttermilk for removing splenic disorder (incorporated in various works on medicine and therapeutics i.e. Cakradatta 38-11, Vṛndamādhava, 37-49 and Bhāvaprakāśa, Cikitsā, 33-16 etc.). The roots as well as kṣāra of whole plant (śarapuṅkhā pañcāṅga) are specifically used for this purpose.

Similarly the drug is effectively recommended in liver disorders, piles, worms abdominal colic, gulma, constipation, loss of gastric power and appetite and other diseases of digestive system.

The drug is internally taken in oedema, blood disorders, cough, asthma, dysuria, gonorrhoea, difficult labour,

dymenorhoea, skin affections, chronic fever, rat-poison and metallic poisoning (seeds powder).

It is externally used in different ailing conditions. The paste of roots is applied on swelling, skin complaints, cervical adenitis, filiarisis, scrofula and boils. Leave juice is applied on incised wounds. In dental complaints the tender twig is used as tooth-brush and powder is also used as tooth-powder (dantamañjana). Seeds and their oil is applied on cutaneous complaints.

Śarapuṅkhā has been prescribed in various diseases and incorporated in classical compendia and therapeutic texts. In gulma roga (abdominal lump), and ash of śarapuṅkhā (śarapuṅkhā kṣāra) and powder of myrobalan (haritākī cūrṇa), both in equal quantity, have been recommended for oral use in the dose of 2.5 gm. (Bhāvaprakāśa, Ci. 32-32). An inhalation of the smoke (dhūma) of śarapuṅkhā has been prescribed in cough (Gadanigraha, 2-10-61).

For treatment of accidental wound (abhighāta ja vṛaṇa-śastrakṣata), the juice of śarapuṅkhā root may be applied to be wound (Gadanigraha, 4-4-55). Śarapuṅkhā mixed with honey is applied for healing of all types of wounds (vṛdamādhava, 44-34). The root of śarapuṅkhā is pounded with rice-water is used as snuff or applied as paste for curing dirty wounds, scrofula (apacī) poison and organisms (Aṣṭāṅga Hṛdaya, 30-26, Vṛdamādhava, 17-11).

In order to hasten difficult labour (mūḍha garbha-kaṣṭa prasava) and for easy delivery, Śarapuṅkhā is suggested for application in as a snuff (Vaidya Manoramā, 13-33) and the root is kept within hairs (Gadanigraha, 6-4-35).

The root of white śarapuṅkhā (śveta śarapuṅkhā) is suggested to keep in mouth as well as its applicaiton of its paste made with sour gruel for retention of semen (śukrastambhana) as prescribed in therapeusis (Vaidya Manoramā, 18-23). In ākhu-viṣa (rat-poisoning), the powder of śarapuṅkhā has been suggested for use as an antidote. (Aṣṭāṅga Hṛdaya, Uttar, 38-27)

Besides the medicinal potentialities, the herb also has other utility. The herb is used as a fodder for cattles.

Plant is commonly cultivated as a green manure. The plant has insecticidal and piscidal properties. The odour of the decaying plant is very offensive. Some other species of *Tephrosia* are not relished by the cattles.

Parts used : Roots, whole plant (alkali-kṣāra).

Dose : Powder 3-6 gm. Juice 10-20 ml., Alkali 1-3 gm.

Formulation : Śarapunkhākṣāra.

ŚARAPUNKHĀ (शरपुङ्खा)

शरपुङ्खः प्लीहशत्रुर्नीलीवृक्षाकृतिश्च सः ।

शरपुङ्खो यकृत्प्लीहगुल्मव्रणविषापहः ॥

तिक्तकषायः कासश्वासज्वरहरो लघुः ।

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 210.

शरपुङ्खा कटूष्णा च क्रिमिवातरुजापहा ।

श्वेता त्वेषा गुणाख्या स्यात् प्रशस्ता च रसायनी ॥

Rāja Nighaṇṭu, Śatāhvādi varga, 73.

कण्टपुङ्खा

अन्या तु कण्टपुङ्खा स्यात् कण्टालु कण्टपुङ्खिका ।

कण्टपुङ्खा कटूष्णा च कृमिशूलविनाशनी ॥

Rāja Nighaṇṭu, Śatāhvādi varga, 74.

कासे

‘शरपुङ्खाजटा धूम्रपानात् कासः पलायते ।’

Vaidyāmṛtam.

‘मूलेन शरपुङ्खायाः धूमः कासहरः परः ।’

Gadanigraha, 2-10-61.

प्लीहवृद्धौ

याः विशालविटपा शरपुङ्खामूलमात्मदर्शनः मुहुरस्याः ।

चर्चितं निगिरतं विनिहन्ति प्लीहवृद्धिवृद्धिमर्कटोरभुजश्च ॥

Rāja Mārtaṇḍa, 7-1.

दन्तरोगे

वाणपुङ्खशिफा क्षुष्णा दन्तमूले श्रिता जयेत् ।

दन्तरोगास्तु यावत्प्राग्दन्तधावनमन्वहम् ॥

Vaidya Manoramā, 16-74.

मूढगर्भभयनिवारणार्थम्

स्वरसेनेषुपुङ्खायाः कृतान्मधुकरस्य वा ।

नस्यात्र स्याद्भयं स्त्रीणां मूढगर्भसमुद्भवम् ॥

Vaidya Manoramā, 13-33.

प्लीहरोगचिकित्सायां शरपुङ्खाकल्कः

प्लीहजिच्छरपुङ्खायाः कल्कस्तक्रेण सेवितः ।

शरपुङ्खैव सञ्चर्य जग्धा पेयाभुजाऽथवा ॥

Cakradatta, 38-11.

प्लीहवृद्धिविकारे

शरपुङ्खायाः कल्कस्तक्रेण निषेवितो यथाग्निबलम् ।

यदि न जायेत प्लीहानं शैलोऽपि तदा जले प्लवते ॥

Bhāvaprakāśa, Cikitsā, 33-66.

Vṛndamādhava, 37-49.

शुक्रस्तम्भनप्रयोगः

सितेषुपुङ्खिकामूलं केवलं वदने घृतम् ।

तुषाम्बु पिष्टं लिप्तं च शुक्रं संस्तम्भयेद् रतौ ॥

Vaidya Manoramā, 18-23.

कृमिपातनार्थम्

‘जठरोपरि परिलिप्तं शरपुङ्खे पातयेद्भि कृमीन्’

Vaidya Manoramā, 11-65 (p. 27).

कासे

मूलेन शरपुङ्खायाः कल्कः तक्रेण निषेवितो यथाग्निबलम् ।

Gadanigraha, Śoḍhala.

‘मूलेन शरपुङ्खायाः धूमः कासहरः परः ।’

Gadanigraha, 2-10-61.

मूढगर्भे

‘मूलेन वा चिकुरमध्यमतेन वाणपुङ्खोद्भवेन सुखमेव भवेत्प्रसूतिः ।’

Śoḍhala, Gadanigraha, 6-4-35.

शस्त्रक्षते

‘शस्त्रक्षते दशनचर्चितवाणपुङ्खामूलोद्भवं विनिदधीत रसं प्रयत्नात्’ ।

Śoḍhala, Gadanigraha, 6-4-35.

व्रणरोपणे

‘मधुयुक्ता शरपुङ्खा सर्वव्रणरोपणी कथिता ।’

Vṛndamādhava, 44-34.

Śodhala.

Cakradatta, Vraṇasōtha cikitsā, 44-36.

गुल्मे शरपुङ्खाक्षरः

शरपुङ्खस्य लवणं पथ्याचूर्णं समं द्वयम् ।

शाणप्रमाणमश्नीयात् चूर्णं गुल्मगदापहम् ॥

Bhāvaprakāśa, Cikitsā, 32-32.

आखुविषे

‘तक्रेण शरपुङ्खायाः बीजं सञ्चूर्ण्य वा पिबेत् ।’

Aṣṭāṅga Hṛdaya, Uttara, 38-37.

अपचीविषकृमिषु

‘शरपुङ्खमूलं पिष्टं तण्डुलवारिणा’

Aṣṭāṅga Hṛdaya, Uttara, 30.

‘नस्याल्लेपनाच्च दुष्टारपचीविषजन्तुजित् ॥’

Aṣṭāṅga Hṛdaya, Uttara. 30-26.

Vaidya Manoramā, 17-1.

SĀRIVĀ

Botanical name

A. Henidesmus indicus R. Br. : Śveta Sārivā

B. Cryptolepis buchanana Roem. & Schult. : Kṛṣṇa

Sārivā (Jambūpatra Sārivā)

Ichnocarpus frutescens R. Br. : Kṛṣṇa Sārivā

Family : Asclepiadaceae

Classical name : Sārivā

Sanskrit names

Sārivā, Utpala sārivā, Gopavallī, Anantā.

Regional names

Anantamul, Kapuri, Sariva (Hindi); Uparasal, Upalasari (Mar.); Upalasari, Kapuri-Madhuri (Guj.); Nannari (Tam.); Muttavapulgamu (Tel.); Logarhe (Kann.); Naratinti (Mal.); Indian sarsaparilla (Eng.).

Description

A. Hemidesmus indicus R. Br.

Twining or prostrate, wiry shrub; slender,

laticiferous (twining sometimes prostrate) or semi-erect shrub.

Leaves opposite, short-petioled, very variable, elliptic, oblong to linear-lanceolate, 11-4 in. $\times$ 0.3-1.5 in., often variegated with white above, some-times silvery white and pubescent beneath; lvs. opposite or in whorls of 4, varying from elliptic, oblong or circular to linear.

Flowers greenish outside, purplish inside, crowded in subessile axillary cymes; corolla lobes 5, flat, fleshy, valvate; corona scales 5, thick on corolla tube alternating with lobes; filaments free; anthers small cohering at tip, ending in inflexed appendages.

Follicles slender, C 4 in. long, cylindrical, sometimes curved, divaricate; pods length 10-15.2 cm. tapering to apex.

Flowering and fruiting time

It flowers in cold months or post-autumn season and subsequently fruiting begins on plants.

Distribution

Plant occurs throughout India. It is found in Andhra Pradesh, Assam, Bihar, Gujarat, Jammu & Kashmir, Karnataka, Kerala; Tamilnadu, Uttar Pradesh and West Bengal. It grows in greater part of India from Upper Gangetic Plains eastwards to Assam and throughout central, western and southern India.

Roots Drug : The cork cells in tangential section of the root appear polygonal and iso-diametric, in transverse section they appear to be radially flattened and rectangular in appearance. Cork cells are filled with tannin. Cork combium consists of 2-3 layers of more or less compressed cells with dark brown contents. Secondary phloem is a complex tissue and consists of sieve tubes with companion cells, phloem parenchyma, phloem ray cells and laticiferous ducts. Parenchyma cells contain starch grain. Some cortical cells contain prismatic crystals of calcium oxalate. Cambium is very narrow and consists of about 3 layers of tangentially elongated flattened cells. Wood consists of vessels and tracheides and is traversed by narrow

medullay rays. The walls of the vessels as well as the tracheids are characterised by pitted markings.

The drug comes to the market in small bundles of root pieces, 6 in.-1 ft. long or as compact bundles of the entire root system of one or more plants tied up with a piece of the stem.

The roots are cylindrical, 0.2-0.7 in. or more in thickness, somewhat tortuous, seldom branched, brownish or purplish in colour, with a short fracture at the periphery and fibrous at the centre. The surface of young roots is generally smooth, but in older roots the surface transversely cracked and longitudinally fissured. The bark has no characteristic taste or odour and is easily separable from the inner tissue surrounding the central wood which is the official part. In the fresh condition the inner cortical tissue is mealy white in colour, but on exposure is becomes dark brown; it has a characteristic fragrane and aromatic sweetish taste.

The drug is specified in Indian Pharmacopoeia should contain not more than 2% foreign organic matter and 4% ash. It should contain alcohol-soluble extractive not less than 13.5%. the drug deteriorates with age and fresh roots are preferred.

Chemical composition

Air dried roots yield essential oil 0.225 per cent, containing p-methoxy salicylic aldehyde (m. p. 42°) as the major component constituent (C. 80%). The aroma of the drug is attributed to this aldehyde. Other constituents present in the roots are : B-sitosterol, a-and B- amyrins (both free and as esters), lupeol, tetracyclic, triterpene alcohols, small amounts of resin acids, fatty acids, tannins, saponins, a glycoside and a ketone.

Kinds and varieties

There are two kinds of Sārivā viz. Śveta (white) and Kṛṣṇa (black) Sārivā. Śveta sārivā is botanically known as *Hemidesmus indicus* R. Br. Presently, two source plants of Kṛṣṇa sārivā are botanically identified as *Cryptolepis buchananiana* Roem. & Schult. and *Ichnocarpus*

frutescence R. Br. belonging to families Asclepiadaceae and to Apocynaceae respectively.

B. *Cryptolepis buchanani* Roem. & Schult.

A climbing or twining glabrous shrub. Leaves 7.5-15 × 2.5-7.5 cm., coriaceous, shining above sometimes obovate, apiculate or acuminate, base acute; petiole 1.25 cm.; cymes very shortly peduncled, paniculate; branches short divaricate. Leaves somewhat resembling with leaves of Jambū (*Eugenia jambolana* Lam.) in shape and hence it is also named as Jambūpatra sārivā. Lvs. milky when broken. Flowers sepals short, lobes lanceolate, coronal scales clavate. Follicles 5-10 cm., straight, rigid, gradually narrowed from about the middle where they are 1.25-1.8 cm. diam. Seeds 0.65 cm. long, oblong, ovate, contracted below the tip, compressed, comma 2.5 cm.

Plant occurs throughout India and Ceylon. It is found in Andhra Pradesh, Gujarat, Jammu & Kashmir, Karnataka, Tamilnadu, Uttar Pradesh and West Bengal.

***Ichnocarpus frutescens* (Linn.) R. Br.**

A woody climber or twining vine; large evergreen laticiferous, woody creeper with rusty red appearance. Leaves opposite, elliptic-oblong to broadly lanceolate, 1-4 in. × 0.5-2 in., coriaceous, pubescent when young. Flowers fragrant, greenish white or purplish, in axillary or terminal panicles of cymose clusters. Follicles cylindrical, slender, usually two, divaricately placed. Seeds 0.5-0.7 in. long, slender, black comose.

Plant occurs almost throughout India, ascending upto an altitude of 4,000 ft.

Pharmacodynamics

Rasa	: Madhura, tikta
Guṇa	: Guru, snigdha
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Tridoṣaśāma

Properties and action

Karma	: Raktaprasādana Raktaśodhaka Dāhaprasāmana-śothahara

	Rocana-dīpana-pācana-anulomana
	Kaphaghna
	Vṛṣya
	Stanyaśodhaka-gārbhasthāpana (prajāsthāpana)
	Mūtrajanana-mūtravirajāniya
	Kuṣṭhaghna
	Jvaraghna
	Rasāyana
	Viṣaghna
	Dourgandhyahara.
Roga	: Raktaduṣṭijanya vikāra (raktavikāra)
	Vātarakta
	Upadamśa-phiraṅga
	Jirṇa-ānavāta
	Ślīpada-gaṇḍamālā
	Aruci-agnimāndya
	Pravāhikā-grahaṇī
	Dāha-śoṭha
	Netrābhiṣyanda
	Kāsa-śvāsa
	Stanyavikāra-stanyakṣaya- stanyadurgandhi
	Mūtrakṛcchra-paittika prameha
	Kuṣṭha-visarpa-visphoṭa
	Jvara-dāha
	Pāṇḍu-sarvāṅga śoṭha
	Dourbalya.

Therapeutic uses

The drug Sārivā (Kṛṣṇa) or Kṛṣṇa Sāriva is alterative and febrifuge. It is used in anorexia, biliousness, blood diseases, diarrhoea, eczema, epilepsy, fever, respiratory diseases and skin diseases. Śveta sārivā is alterative and febrifuge.

The dried Indian Sarsaparilla roots are medicinal and constitute the Hemidesmus or Anantamul which is official in Indian Pharmacopoeia; they were at one time official also in British Pharmacopoeia. This drug is Sārivā or Anantā i.e. Śveta Sārivā finding its use since ancient times D.V.3-27

of classical compendia or Tri-Saṃhitās (Caraka, Suśruta and Vāgbhaṭa) belonging to early medicine in India. The medicinal properties of both kinds of Sārivā drug e.g. Śveta and Kṛṣṇa (white and black kinds of drug) were initially described in Indian medical system.

The drug has long enjoyed a reputation as tonic, alterative, demulcent, diaphoretic, diuretic and blood purifier. It is employed in nutritional disorders, syphilis, chronic rheumatism, gravel and other urinary diseases and skin affections. It is administered in the form of powder, infusion or decoction as syrup. It is also an ingredient of several medicinal preparations. Root drug is used as substitute as for Sarsaparilla (from *Smilax* spp.).

The source plant *Cryptolepis buchanani* Roem. & Schult. for drug Śveta Sārivā yields a latex containing water and water solubles 42.4 and caoutchouc 6.5%; the coagulum contains caoutchouc 11.3, resins, 47.6 and insoluble matter 41.1 per cent. Another sample of latex gave the following values : water and water 47.1 and caoutchouc 6.3%, the coagulum gave : caoutchouc 11.8, resins 12.8 and insoluble 15.6%.

The roots of another source plant for drug Śveta Sārivā, *Ichnocarpus frutescens* R. Br., are used in medicine as a substitute for Indian Sarsaparilla (from *Hemidesmus indicus*) are often mixed with the latter; their therapeutic properties and their suitability for use as a Sarsaparilla substitute have been matter of confirmation.

The roots of Śveta Sārivā, obtained from *Ichnocarpus frutescens* R. Br., possess a sweetish astringent taste, but are devoid of the characteristic odour of Indian Sarsaparilla. They are sold fresh or dried, either entire or in irregularly curved pieces of rusty or purplish brown colour. Fresh roots are somewhat turgid and when scratched or incised, exude an abundance of creamy white or light yellowish latex. It contains moisture 91.0, total solids 9.0, alcohol extr. 4.56, chloroform extr. 2.93 and residue 1.41 per cent. The skin of fresh roots is soft and easily separable, but in dry roots it adheres firmly to the wood. Unlike the roots of Indian Sarsaparilla, the roots of Śveta

Sārivā (*Ichnocarpus frutescens* R. Br.) particularly the old roots, contain a central pithy core.

The roots of *Śveta Sārivā* (*Ichnocarpus frutescens* R. Br.) are reported to possess demulcent, alterative, tonic, diaphoretic and diuretic properties and are used in fevers, dyspepsia and skin troubles, usually in combination with bitters and aromatics. The root powder is administered with milk for diabetes, stone in the bladder and as blood purifier. The decoction of the shoots is used in fevers. Leaves are boiled in oil and applied in headaches and fevers; they are also applied to wounds between fingers.

The roots of *Kṛṣṇa Sārivā* (*Hemidesmus indicus* R. Br.) are also used as substitute for another type of *Sarsaparilla* (from *Smilax* spp.). It is employed as a vehicle for potassium iodide and for purposes for which *Sarsaparilla* is used. A syrup is made from the roots is used as a flavouring agent and in the preparation of a sherbet which is reported to have cooling properties.

The milky latex of the plant drug is useful for relieving inflammation in the eye. Other extract of roots exerts some inhibitory effect on the growth of *Escherichia coli*. The leaves are chewed and are said to be refreshing; narrow leaved forms which are generally found in open country are preferred for the purpose.

In general, the drug *Sārivā* is *raktaprasādana* which is one of the effective drugs as blood purifier (*raktaśodhaka*); it is widely recommended in ailments caused by blood impurities (*raktavikāra*), gout (*vātarakta*), soft chancre or gonorrhoea (*upadāṃśa*), syphilis (*phiraṅga*), chronic rheumatism (*jīrṇa āmavāta*), filariasis (*ślīpada*) and cervical adenitis (*gaṇḍamālā*). The drug allays provoked tri-humors (*tridoṣa*) and its application in various ailments caused by *tridoṣa* is useful.

Sārivā is useful as anti-inflammatory, stomachic, digestive, carminative, blood purifier, aphrodisiac, purifying latex (mother or breast milk) or galacto-depurant, stabilising foetus (promoting conception), diuretic, antileprotic, anti-dermatosis, antipyretic, promotive (*rasāyana*), anti-poison and anti-burning sensation.

Besides the frequent and effective use of drug Sāriva in the pathological conditions relating blood, skin, lusture and allied diseases, it is quite useful in fever, dysuria, prameha (pittaja), anaemia, oedema, poisons or toxic conditions, leucorrhoea, menorrhagia, miscarriage (abortion), spermatorrhoea, vaginal complaints, cough asthma, diarrhoea, dysentery, loss of appetite (gastric power), intrinsic haemorrhage and other diseases.

There are a number of medicinal preparations or formulations including recipes as well as prescriptions of Sārivā as a single drug and a major ingredient, incorporated in medical texts for therapeutic management of several diseases such as wound (vraṇa), bronchial asthma (śvāsa), malarial and chronic fever (viṣama-jirṇa jvara), intrinsic haemorrhage (raktapitta-nāsāgata raktasrāva), kuṣṭha, erysipelas (visarpa), poisoning (viṣa) paediatric rasāyana (bala or Kaumāra rasāyana) pregnancy ailments and other different diseases.

Parts used : Roots.

Dose : Infusion 50-100 ml., Paste 5-10 gm.

Formulations (yoga)

Sārivādyāsava, Sārivādi kvātha, Sārivādi vaṭi, Sārivādyavaleha.

Groups (gaṇa)

Stanyaśodhana, Purīśasaṅgrahaṇīya, Jvarahara, Dāhapraśmana, Madhuraskandha (Caraka Saṁhitā), Vidarigandhādi, Sārivādi Vallīpañcamūla (Suśruta Saṁhitā).

SĀRIVĀ (सारिवा)

श्वेत-कृष्णसारिवागुणाः

सारिवा मधुरा तिक्ता सुस्निग्धा शुक्रला हिमा ।

गुर्वी ज्वरातिसारामदोषत्रयविषापहा ॥

अग्निसादारुचिश्वासकासास्त्रप्रदरान् जयेत् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 994-995.

सारिवाद्यस्य गुणाः

सारिवायुगलं स्वादु स्निग्धं शुक्रकरं गुरु ।
अग्निमान्द्यारुचिश्वासकासामविषनाशनम् ।
दोषत्रयसप्रदरज्वरातीसारनाशनम् ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 238.

सारिवे द्वे तु मधुरे कफवातास्त्रनाशने ।
कुष्ठकण्डूज्वरहरे मेहदुर्गन्धिनाशने ॥

Rāja Nighaṇṭu, Candanādi varga, 119.

‘अनन्ता सङ्ग्राहकरक्तपित्तप्रशमनानाम् ।’

Caraka Samhitā, Sūtra, 25

सारिवे द्वे तु मधुरे पित्तवातास्त्रनाशनी ।
कण्डूकुष्ठज्वरहरे मेहदुर्गन्धिनाशने ॥

Dhanvantari Nighaṇṭu.

रक्तपित्ते सारिवा-चन्दनयोगः

Caraka Samhitā, Cikitsā, 4-76.

स्तन्यदुर्गन्धिनाशनार्थं सारिवादिलेपः

सारिवोशीरमञ्जिष्ठाश्लेष्मातककुचन्दनैः ।
पत्राम्बुचन्दनोशीरैः स्तनौ चास्याः प्रलेपयेत् ॥

Caraka Samhitā, Cikitsā, 30-275.

विसर्पे सारिवादिकषायः

सारिवामलकोशीरमुस्तानां वा विचक्षणः ।
कषायान् पाययेद्वैद्यः सिद्धान् विसर्पनाशनान् ॥

Caraka Samhitā, Cikitsā, 21-54/55.

विसर्पे सारिवादिप्रलेपः

सारिवा पद्मकिञ्जल्कमुशीरं नीलमुत्पलम् ।
मञ्जिष्ठा चन्दनं लोध्रमभया च प्रलेपनम् ॥

Caraka Samhitā, Cikitsā, 21-76.

मसूरिकारोगे सारिवामूलप्रयोगः

‘....वाप्यनन्तामूलमेव वा ।
विधिगृहीतं ज्येष्ठाम्बु पीतं हन्ति मसूरिकाम् ॥’

Cakradatta. 54-7.

वातरक्ते

महापिण्डतैलम्

पिण्डतैलम्

सारिवासर्जमञ्जिष्ठायाष्टीसिक्थैः पयोऽन्वितैः ।

तैलं पक्वं प्रयोक्तव्यं पिण्डाख्यं वातशोणिते ॥

*Bhāvaprakāśa, Madhyakhaṇḍa,
Dvīṭiyabhāga, 29-119/124.*

व्रणशोधनार्थे सारिवालेपः

‘एकं वा सारिवामूलं सर्वव्रणविशोधनम् ।’

*Bhāvaprakāśa, Vraṇaśothādhikāru, 47-58.
Vṛndamādhava, 44-33.*

सुखप्रसवकरप्रयोगः

‘.....स्थिरामूललेपस्तद्वत् पृथक् पृथक् ।’

Cakradatta, Strīroga cikitsā, 63-13.

श्वासे

‘गोपवल्ल्युदके सिद्धं स्यादन्यद् द्विगुणे घृतम् ।’

Suśruta Saṁhitā, Uttara, 51-26.

जीर्णज्वरे

पिप्पल्यादिघृते

Caraka Saṁhitā, Cikitsā, 3-219.

विषमज्वरे

पटोलः सारिवाः मुस्तं पाठा कटुकरोहिणी ।.....

कषायाः शमयन्त्याशु पञ्च पञ्चविधान् ज्वरान् ॥

Caraka Saṁhitā, Cikitsā, 3-201/203.

बालरसायने

सिद्धार्थकादिघृते

Suśruta Saṁhitā, Śārīra, 10-45.

कुष्ठे

....पाने स्नाने चोद्धर्तने प्रलेपे च ।

....ससारिवा....चैव ॥

Caraka Saṁhitā, Cikitsā, 7-128.

गर्भिण्यां मासानुमासिके

अनन्ता सारिवा.... ।....

नवो मधुकानन्तासारिवा पिबेत् ॥

Suśruta Saṁhitā, Śārīra, 10-60, 64.

विषे

‘सनिम्बसारिवाक्षौद्राः पानं लूताविषापहः ।’

Caraka Samhitā, Cikitsā, 23-202.

अमृतघृते

Caraka Samhitā, Cikitsā, 23-243.

SARJA

Botanical name : *Vateria indica* Linn.

Family : Dipterocarpaceae

Classical name : Sarja

Sanskrit names

Sarja, Ajakarna, Bastakarna, Gandhavrksa, Kusarira, Ranjanadruma, Ciraparni, Divyasara.

Regional names

Kaharuva, Safed damar, Sandrasa (Hindi); Candras (Beng.); Telladamaru (Tel.); Vellai Kundarukkam (Tam.); Payin (Mal.).

Description

A large, elegant, evergreen tree, upto 30 meters high, with a clean, cylindrical bole of C. 15 meters and a girth of 4.5 meters. Bark rough, whitish to grey, peeling off in thick round flakes.

Leaves coriaceous, ovate or oblong entire; lvs. 5-8 in. × 2.5-3.5in; leaf-veins 14 pairs, light; peduncle 1.5 in. long.

Flowers white, fragrant, in terminal corymbose panicles; fls. spike 6-8 in. long, branched, on branch ending; stamens many (often 50). Capsules ovoid, pale brown, fleshy, 8-11 cm. long, 3.5-6.0 cm. in diam., 1-seeded. Seeds reddish white or cream-coloured, filled with fat.

Sarjarasa (Oleogum resin) :

Resin is exuded by the tree which is known as Piney Resin, white Dammar or Dhupa. It is obtaining by tapping the tree by making semicircular incisions on the stem through the cork cambium, upto the surface of the sapwood. Blazes or cuts are spaced as to cause the less damage to the tree. The resin starts oozing from the incisions in 3-4

days and continuous for 60-90 days. The resin is also exuded when the bark is scorched by lightning fire around the base of the tree the method gives high yield of resin, but damages the timber and may even kill the trees (Sarja vṛkṣa).

Flowering and fruiting time

Fruits ripen June-July (artificial regeneration-plantation) with the commencement of monsoon and start falling to the ground.

Distribution

Plant occurs in Southern-Western India. It is indigenous to the evergreen forests of the Western ghats from North Kanara to Kerala. It is also planted extensively as an avenue tree in Karnataka and suitable for afforestation the evergreen forests of Eastern ghats.

Pharmacodynamics

Rasa	: Kaṣāya, tikta
Guṇa	: Snigdha
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Vātapittanāśaka

Properties and action

Karma	: Mūtrasaṅgrahaṇīya
	Raktadoṣahara
	Kuṣṭhaghna
	Kaṇḍūghna
	Uttejaka (oil)
	Vātaghna
	Snehana (oil)
	Vedanāsthāpana (oil).
Roga	: Jīrṇa āmavāta (oil)
	Prameha-Jantughna
	Atisāra
	Raktavikāra
	Kuṣṭha
	Kaṇḍū-visphoṭa
	Vātavikāra.

Therapeutic uses

The drug Sarja is mūtrasaṅgrahaṇīya and mūtra

saṅkramaṇarodhi, it is used to counter bacterial infection in urine and given in gonorrhoea and other similar conditions; it is given in certain disorders under prameha roga (on account of its stambhana action).

The medicinal properties and utility of Sarja in general is almost similar to that of Śāla (*Shorea robusta* Gaertn.). The drug is useful in haemorrhage, cough, prameha, pradara, yonivyāpad, kuṣṭha, skin affections, fracture, obesity, bleeding piles and anaemia (due to excess haemorrhage). The oil is useful as demulcent, stimulant and analgesic, and it is used in chronic rheumatism. Its oleo-gum resin known as chandras or damar, is medicinally used particularly in fumigation (dhūpana).

Sarjarasa, the oleo-resin of Sarja (*Vateria indica* Linn.) has been incorporated in therapeutics given medical texts. For the instance, Sarjarasa mixed with less quantity of jagger (guḍa) is used in grahaṇi roga. The sarjarasa is recommended to be used in the form of fumigation (dhūpana) in treatment of vraṇa (wounds) alongwith other similar dhūpana drugs. For treatment of Kṣudra roga, the powder of Sarjarasa and rocksalt mixed with honey and mustard are churned and applied externally and the powder of sarjarasa is applied to wound of pādādāri (Vraṇa-crackes in feet). After fomentation of affected part of pāda organ in cippa roga (whitlow), the powder of sarjarasa is recommend to be applied to the wound and bandaged. The oil is cooked with sour gruel and one-fourth sarjarasa and then churned in water, it is used to alleviate fever, burnning sensation and pain.

The bark of Indian Copal-Tree (Sarja vṛkṣa tvak) is acrid and used as an aleximarpic in preparations of indigenious medicine. It is also employed in the production of arka and jaggery to control fermentation. The juice of leaves is applied to cure burns and also used in the diseases of blood. It is also used to prevent vomiting.

The essential oil of Sarja shows, marked anti-bacterial activity against gram-positive and gram-negative micro-organism. Pronounced inhibition of growth has been recorded in vitro against *Bacillus subtilis*, *B. pumilis*, *Vibria*

cholera, Micrococcus pyogenes var. aurea, Pseudomonas solanaceum, Salmonella typhi, Sarcina pyogenes, Shingella dysenteriae, Streptococcus faecalis and S. pyogenes, whereas the lesser response was shown towards Staphylococcus albus and Corynebacterium diphtheriae.

The resin, classically known as Sarjarasa, finds extensive use in indigenous system of medicine. It is credited with tonic, carminative and expectorant properties and is used for the treatment of several diseases, such as throat troubles, chronic bronchitis, piles, diarrhoea, rheumatism, tubercular glands, boils etc. Mixed with sesamum oil, it is given in gonorrhoea and with ghee and long-pepper for the treatment of syphilis and ulcers.

An ointment of the resin with wax and the fat of *Garcinia indica* is considered to be effective in carbuncle. It forms a good emollient for plasters and ointment basis.

Parts used : Oleo-resin.

Dose : 1-3 gm.

Group (gana) : Kaṣāyaskandha (Caraka Saṁhitā).

SARJA (SARJARASA) सर्ज (सर्जरस)

सर्जस्तु तुवरस्तिक्तः हिमः स्निग्धोऽतिसारजित् ।

पित्तास्रदोषकुष्ठघ्नः कण्डूविस्फोटवातजित् ॥

Rāja Nighaṇṭu.

अजाकर्णो लतावृक्षो बस्तकर्णोऽथ सर्जकः ।

कुशरीरः स्नेहहरः कषायी रञ्जनद्रुमः ॥

सर्जकषायो वर्ण्यश्च कफस्वेदमदकृमीन् ।

वध्मविद्रधिबाधिर्ययोनिकर्णरुजाः हरेत् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 842-843.

सर्जः

अ. सर्जः सर्जरसः शालः कालकूटो रजोद्भवः ।

वल्लीवृक्षश्चीरपर्णी रालः काश्योऽजकर्णकः ॥

वस्तकर्णः कषायी च ललनी गन्धवृक्षकः ।

वंशश्च शालनिर्यासो दिव्यसारः सुरेष्टकः ॥

शूरोऽग्निवल्लभश्चैव यक्षधूपः सुसिद्धकः ।

- ब. सर्जस्तु कटुतिक्तोष्णो हिमः स्निग्धोऽतिसारजित् ।
पित्तास्रदोषकुष्ठनुत् कण्डूविस्फोटवातजित् ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 78-80.

सर्जरसतैलम्

- तैलं सर्जरसोद्भूतं विस्फोटकविनाशनम् ॥
कुष्ठपामाकृमिहरं हन्यात् श्लेष्मानिलामयान् ।
कषायतिक्तकटुकं सारलं व्रणजन्तुजित् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 329-330.

रालः सर्जरसः

- क. रालः सर्जरसश्चैव शालः कनकलोद्भवः ।
ललनः शालनिर्यासो देवेष्टः शीतलस्तथा ॥
बहुरूपः शालरसः सर्जनिर्यासकस्तथा ।
कालः कललजः प्रोक्तो नाम्ना सप्तदशाङ्कितः ॥

रालगुणाः

- ख. रालस्तु शिशिरः स्निग्धः कषायस्तिक्तसङ्ग्रहः ।
वातपित्तहरः स्फोटकण्डूतिव्रणनाशनः ॥

Rāja Nighaṇṭu, Candanādi varga, 110-112.

रालः

- अ. रालस्तु शालनिर्यासस्तथा सर्जरसः स्मृतः ।
देवधूपो यक्षधूपस्तथा सर्जरसश्च सः ॥
ब. रालो हिमो गुरुस्तिक्तः कषायो ग्राहको हरेत् ।
दोषास्रस्वेदवीसर्पज्वरव्रणविषादिकाः ॥
ग्रहभग्नाग्निदग्धांश्च शूलातीसारनाशनः ।

Bhāvaprakāśa Nighaṇṭu, Karpūrādi varga, 48-49.

ग्रहण्यां सर्जरसचूर्णम्

- श्वेतो वा यदि वा रक्तः सुपक्वो ग्रहणीगदः ।
गुडेनाधिकसर्जेन भक्षितेनाशु नश्यति ॥

Bhāvaprakāśa, Grahaṇīrogādhikāra, 4-58.

चिप्पोपचारार्थं सर्जरसचूर्णप्रयोगः

- चिप्पमुष्णाम्बुना स्विन्नमुद्धृत्याभ्यज्य तं व्रणाम् ।
दत्त्वा सर्जरसं चूर्णं बद्ध्वा व्रणवदाचरेत् ॥

Cakradatta, Kṣudraroga cikitsā, 55-19.

Vṛndamādhava, 57-17.

वातरक्ते

आरनालाढके तैलं पादसर्जरसं शृतम् ।
प्रभूते खजितं तोये ज्वरदार्तिनुत् परम् ॥

Caraka Samhitā, Cikitsā, 29-122.

व्रणे

श्रीवेष्टके सर्जरसे सरले देवदारुणि ।
सारेष्वपि च कुर्वीत मतिमान् व्रणधूपनम् ॥

Suśruta Samhitā, Sūtra, 37-21.

पाददार्याम्

सर्जाह्नसिन्धूद्भवयोश्चूर्णं मधुघृतान्वितम् ।
निर्मथ्य कटुतैलाक्तं हितं पादमार्जनम् ॥

Vṛndamādhava, 57-11.

SARPAGANDHĀ

Botanical name : *Rauwolfia serpentina* Benth ex Kurz.

Rauwolfia serpentina Benth ex Kurz.

Family : Apocynaceae

Classical name : Sarpagandhā

Sanskrit names

Sarpagandhā, Dhavalaviṭapa, Candramāra.

Regional names

Dhavalbarua (Hindi); Dhanamarava (Bihar); Chandmaruva, Isaragaj (Bihar, Eastern U.P.), Choudar, Chhota Chand (Beng.); Adakai, Saisan (Mar.); Anelpodi (Guj.); Patalagani (Tel.); Chivanamelpodi (Tam.); Chivon avalpori (Mal.); Sūtranavi (Kann.).

Description

Erect, evergreen, perennating undershrub, 13-45 cm. (rarely 90 cm.) high, herbaceous undershrub.

Tap-root tuberous, soft, sometimes irregularly nodular. Bark pale-brown, corky with irregular longitudinal fissures.

Leaves in whorls of 3 in number, 7.5-17.5 × 2.5-6.5 cm., lanceolate or elliptic, lanceolate, acute or acuminate,

tapering to base, thin, bright, green above, pale or pale-green beneath.

Flowers white or pinkish, in many-flowered cymes or fls. in many-fid cymes, red pedicels; calyx lobes 5, red, ovate; corolla lobes spreading, shorter than tube, cup shaped, slightly lobed, disc at the centre of the corolla tubes; stamens 15, connate carpels, collateral ovules 2.

Fruit a drupe, slightly connate, obliquely ovoid, purplish black; pyrenes slightly rugose.

Flowering and fruiting time

Plant flowers in November-December.

Distribution

Plant is widely distributed in the sub-Himalayan tract from Punjab eastwards to Nepal, Sikkim and Bhutan, in Assam, in the lower hills of the Gangetic plains, eastern and western ghats, in some parts of Central India and in the Andamans. It is mainly occurring in (and being procured from) in Uttar Pradesh, Bihar, Orissa, West Bengal, Assam, Andhra Pradesh, Tamilnadu, Kerala, Mysore and Maharastra.

As a major medicinal plant selected for cultivation, it is cultivated in different provinces in country at various places on varying scales for catering the requirement of root-drug. It has become a commercially important plant under drug farming widely adopted in country in suitable regions.

Kinds and varieties

There are some other species of *Rauvolfia* genus which need reference as substitute or adulterants. viz. *Rauvolfia Canescence* Linn., *R. densiflora* Benth. and *R. micrantha*. The group of such *Rauvolfia* species also include *Rauvolfia tetraphylla*, *R. densiflora* and *R. beddomei*.

Chemical composition

Reserpine is a most important and principal active constituent among nearabout 80 alkaloids isolated from *Rauvolfia* species. Total content of alkaloids present in the root of *Rauvolfia serpentina* Benth ex Kurz. ranges from 1.7 to 3 per cent (normal range of alkaloidal content) vary-

ing considerably. Root and root-bark contain chemical constituents (mainly root-bark) majorly.

Besides reserpine, some of the *Serpentina* alkaloids may be indicated viz. deserpine, reserpinine serpentine, serpenticine, serpagine, azamaline, iso-azamaline, rauwolfinine, yohimbine (rovulcine) and serpedine among a number active constituents. In addition, various other substances are found in the root.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Rūkṣa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka.

Properties and action

Karma	: Nidrājanana-raktabhāraśāmaka Śāmaka-mastiṣka śāmaka Pittavardhaka-sraṁsana Kṛmighna Hṛdayāvasādaka Kāmāvasādaka Āmarasa-jvaraghna Viṣaghna.
Roga	: Raktabhārādhikya (uccarakta-cāpa) Mānasika vikāra-nidrānāśa-bhrama Unmāda-apasmāra Dhvajacchāya-kāmātiśaya Kaṣṭārtava-rajorodha-kaṣṭaprasava Tivrajvara Sarpaviṣa Āmaja vibandhaśūla.

Therapeutic uses

The drug *Sarpagandhā* is cardio-depressant, anthelmintic, carminative, digestive, febrifuge, hypnotic and sedative. It is used in anorexia, blood pressure, colic, dyspepsia, insomnia, intestinal worms, sexual aggression and virgigo. The drug is much used in schizophrenia, sexual aggression and in the conditions involving influence of evil spirits (bhūtavādhā).

The classical texts of Indian medicine mention about drug. Sarpagandhā is included in aparājītā gaṇa which is indicated in mental disorders (Suśruta Saṁhitā, Uttara. 60-47). Sarpagandhā is also included in Ekasāra gaṇa (Suśruta Saṁhitā, Kalpa. 5-84) useful against viṣa. It is recommended particularly in mūṣaka viṣa or rate-bite poisoning (Suśruta Saṁhitā, Kalpa. 7-29). Sarpagandhā is indicated in viṣucikā for using with warm water (Vṛndamādhava, 6-26).

The drug is chiefly recommended as a potent and most efficacious hypotensive agent of herbal source; the roots powder (as a single drug as well as major ingredient of formulations) is commonly prescribed in cases of hypertension as the internal use of the drug induces sleep, pacifies mental tension and other mental disorders besides lowering down high blood pressure, without any side-effects and thus it maintains mental equilibrium. The drug is used in insomnia, insanity and epilepsy and other similar nervous disorders.

Sarpagandhā is sedative of sexual aggression or excess sexual desire including abnormal (undesirable) erection of male genital (akāraṇa dhvajotthāna). In females, it is useful in dysmenorrhoea (kaṣṭārtava) and difficult labour (kaṣṭaprasava).

The drug is useful in worms (kṛmiroga), āmaja vibandha, fever (especially high temperature), snake-bite (sarpaviṣa), viṣucikā and some other ailments.

It is a pharmacopoeial drug as official drug in Indian Pharmacopoeia and British Pharmacopoeial codex. The drug has wide use in medical field.

Parts used : Root.

Dose

Powder 1-2 gm. (hypertension), 3-6 gm. (unmāda-apasmāra; mental disturbances), 3-6 gm. (sleeplessness; insomnia).

Formulations

Sarpagandhā vaṭi, Sarpagandhādi cūrṇa, Sarpagandhā yoga.

SARPAGANDHĀ (सर्पगन्धा)

‘....विषघ्नी सुवहा सर्पगन्धा चीरितपत्रिका ॥
सुगन्धा नाकुली सर्पलोचना गन्धनाकुली ।’

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 775-776.

नाकुली गन्धनाकुली च

नकुलेष्टा कटुस्तिक्ता कषायोष्णा निगच्छति ।

व्रणकृमीन् सर्पलूतावृश्चिकाखुविषं गरम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 777-778.

नाकुली तुवरा तिक्ता कटुकोष्णा विनाशयेत् ।

भोगिलूतावृश्चिकाखुविषज्वरहरकृमिव्रणान् ॥

Bhāvaprakāśa Nighaṇṭu, Haritakyadi varga, 136.

कुक्कुटी सर्पगन्धा च तथा काणविषाणिके ।

...नैपाली हरितालञ्च रक्षोघ्ना ये च कीर्तिताः ॥

Suśruta Samhitā, Uttara, 60.

सर्पगन्धाऽतितित्कोष्णा रूक्षा कटुविपाकिनी ।

दीपनी पाचनी रुच्या शूलप्रशमनी सरा ॥

कफवातहरा निद्राप्रदा हृदवसादिनी ।

कामावसादिनी चैव हन्ति शूलज्वरक्रिमीन् ॥

अनिद्रां भूतमुन्मादमपस्मारं भ्रमं तथा ।

अग्निमान्द्यं विषं रक्त-वाताधिक्यं व्यपोहति ॥

Dravyaguṇa Vijñāna (Dvītiya-tṛtiya Bhāga), p. 33.

ईषन्नीलारुणमुमदला पुष्पिता ग्रीष्मकाले

वर्षाकाले फलपरिचितं नीलरक्तां दधाति ।

मूलं यस्या हरिणधवलं स्थूलमन्तःस्थचक्रम्

चन्द्राख्या सा धवलविटपा सर्पगन्धा प्रसिद्धा ॥

Dravyaguṇa Vijñāna, II-III, p. 33.

विसूचिकायाम्

‘अशक्तस्तु पिबेत् कोष्णसलिलैः सर्पगन्धिकम् ।’

Vaidya Manoramā, 6-26.

मानसरोगे

अपराजितगणे

Suśruta Samhitā, Uttara, 60-47.

विषे

मूषिकविषे

Suśruta Saṁhitā, Kalpa, 7-29.

एकसरगणे

Suśruta Saṁhitā, Kalpa, 5-84.

SARŚAPA

Botanical name

Brassica campestris Linn. var. *Sarson* Prain.

Family : Cruciferae

Classical name : Sarśapa

Sanskrit names

Sarśapa, Kaṭusneha, Tantuma.

Regional names

Sarson (Hindi.); Shirasi (Mar.); Sarasale (Guj.); Sarisha (Beng.); Sarasun (Mal.); Saireyan (Punj.); Tilaguggulu (Kann.); Avalu (Tel.); Hurphhavayaj (Arabic); Sarpaph (Pers.); Mustard (Eng.); Indian Colza or Yellow Sarson (Common name).

Description

An erect, tall annual, glabrous, sparsely branched herb with lower leaves and lower part of stem generally hairy.

Basal leaves lyrate-pinnatifid, 10-30 cm. long, 5-10 cm. broad dentate; lvs. lyrate, upper smaller.

Flowers bright yellow, in corymbs elongating into racemes. Racemes 20-45 cm. long, 30-40-flowered, terminal. Fls. 6-11 mm. across, yellow. Pedicels 1-2.5 cm. long in fruiting. Sepals 4-6 mm. long 2 mm. broad. Petals 8-10 mm. long, 3.5-5 mm. broad. Stamens 4-6 mm. long. Petals narrow end do not overlay as in toria.

Fruits upto 6 cm. long (incl. 1.5-2 cm. long beak), linear-cylindric, reticulately veined, glabrous. Seeds light yellow or brown with a smooth seed coat and non-mucilaginous epidermis. Pods plumpy with a slightly flattened beak, often containing 1 or 2 seeds.

Flowering and fruiting time

Farming season. Flowering and fruiting in December-March. Plant occurs belongs crop; it is a common cold season crop. Cultivated for edible oil; plant is also an escape. Mustard farming throughout country. Mustard crop from October to March.

Distribution

Plant is extensively cultivated throughout India as an important seed oil crop which is more commonly grown in Central India and Northern Indian states alongwith West Bengal. Certain varieties of oil seeds of this group are preferred in particular states and regions in country.

Kinds and varieties

In indigenous materia medica (nighaṇṭu-works), Sarṣapa has two kinds viz. Śveta (white) or Goura-sarṣapa-siddhārtha which is commonly known as Pili sarson, and rakta (red) sarṣapa of which seeds are brown or greyish and larger than seeds of rājikā. For medicinal purposes, gourasarṣpa is appreciated as best category in medical texts.

Sarson is easily distinguished from rai by its stem-elasping leaves, and from toria by its rigid, compact, and tall habit. It has fewer branches, greater amount of bloom, and plumpy pods with stout beaks.

A number of forms, based on the colour of seeds (yellow or brown), the number of valves or chambers in the pods (2, 3 or 4) and the direction of ripe fruits in relation to the stalks (erect or pendent) are distinct species. Thus, the 3-valved and 4-valved forms are known as *Brassica trilocularis* Hook. f. & Thoms. and *B. quadrivalvis* Hook. f. & Thoms. respectively.

Sarson is a self-sterile species, and also matures later than toria. *Brassica campestris* var. *dichotoma* Watt. syn. *B. campestris* var. *dichotoma* sp. Roxb. is Brown Sarson (Kāli sarson) and *Brassica campestris* var. *glauca* sp. Roxb. is yellow sarson (pili sarson).

Brassica campestris Linn., in general, is an oleigorous species, with broad-based stem-elasping leaves,

which are somewhat hairy and glaucous. It is represented by the varieties sarson and toria.

Chemical composition

Seeds yield Kaṭu taila (sarṣapa taila) 35-45 per cent. Besides fixed oil, sinalbin, a crystalline substance, sinarpine, sulphocyanamide, lecithin, mucilaginous substance, myrocine, protein and alkaline substances which comprise potassium, magnesium and calcium.

Pharmacodynamics

Rasa	: Kaṭu, tikta
Guṇa	: Tīkṣṇa, rūkṣa (śāka-vegetable); śnigdha (seeds and oil)
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātanāśaka, Pittavardhaka

Properties and action

Karma	: Kaṇḍūghna Varṇya-kuṣṭhaghna-lekhana (seeds) Jantughna-vedanāsthāpana- snehana (oil) Dīpana-vidāhī Kṛmighna Plīhanāśana Hṛdayottejaka Mūtrajanana Vājīkaraṇa Garbhāśayottejaka Vraṇaropaṇa Rakṣoghna-bhūtahara Śūlapraśamana Dantya Viṣaghna Keśya Cakṣusya Raktapittaprakopaka Balya Kāmaśaitya
Roga	: Tvagvikāra-kaṇḍū-vicarcikā-dadru

Vraṇa-visphoṭa-apacī
 Udarda-sītapitta
 Kuṣṭha
 Vātarakta
 Vātavyādhi-śūla-śoṭha-urustambha
 Ślipada
 Kṛmiroga
 Udaravikāra-śūla-kaphodara
 Plīhavrddhi
 Agnimāndya-gulma
 Mūtrāghāta
 Rajorodha
 Dourbalya
 Bhūta-grahavādhā
 Dantavikāra
 Karṇavikāra
 Apasmāra
 Viṣa-kiṭadaṁśa
 Netravikāra.

Therapeutic uses

The drug Sarṣapa is kaṇḍūghna, vedanāsthāpana and snehana. The sarṣapa taila (mustard oil) or kaṭu taila is externally applied to skin diseases, painful lesions, ulcers and kuṣṭha roga. As an anti-septic it is applied on ulcerations. The oil or seeds are employed for abhyaṅga and udvartana in pigmentation disorders of skin (varṇa-vikāra) for promoting lusture and complexion. The oil is used dantamañjana in dental complaints including pyorrhoea and also dental health care; the oil and salt powder are used in dental care as a household recipe. The seeds are pasted over skin (for a restricted time) as śoṇitoṭkleśaka.

The seeds powder is useful to promote gastric power (agnimāndya) and worms (kṛmi). The oil (kaṭutaila) is appreciated as a valued drug in Indian medicine (Kāśyapa Saṁhitā). Sarṣapa taila is widely used for massage (abhyaṅga) which has very effective and health promotor as well as curative of diseases in general; it promotes body strength as a tonic and its use as snuff (nasya) is quite benefecial. It is used as hair oil and alleviating

śīroroga and nāsāroga. The oil is employed in various formulations and pharmaceutical preparations.

The sarṣapa taila is a common edible oil in country as cooking media. The leaves and other parts (sarṣapa śāka) are used as medicated vegetable. Seeds are used as spice.

Parts used : Seeds, oil, leaves.

Dose

Seeds powder 2-4 gm., Oil (external and internal); edible.

SARṢAPA (सर्षप)

सर्षपं कटुकं रुक्षं गुरूष्णं बद्धमूत्रविट् ।

सक्षारं लवणं स्वादु दोषत्रयकरं परम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 640.

सर्षपो रक्तः पीतश्च

सर्षपस्तु रसे पाके कटुः स्निग्धः सतिक्तकः ।

तीक्ष्णोष्णः कफवातघ्नो रक्तपित्ताग्निवर्धनः ॥

रक्षोहरो जयेत्कण्डूं कुष्ठकोष्ठक्रिमिग्रहान् ।

यथा रक्तस्तथा गौरः किन्तु गौरो वरो मतः ॥

Bhāvaprakāśa Nighaṇṭu, Dhānyavarga, 70-71.

सर्षपं पत्रमत्युष्णं रक्तपित्तप्रकोपनुत् ।

विदाहि कटुकं स्वादु शक्रहृद्गुचिदायकम् ॥

Rāja Nighaṇṭu, Mūlakādi varga, 147.

राजसर्षपकः राजक्षवकः

क. राजक्षवकः कृष्णस्तीक्ष्णफला राजराजिका राजी ।

सा कृष्णसर्पाख्या विज्ञेया राजसर्षपाख्या च ॥

ख. राजसर्षपकस्तिक्तः कटूष्णो वातशूलनुत् ।

पित्तदाहप्रदो गुल्मकण्डूकुष्ठव्रणपहः ॥

Rāja Nighaṇṭu, Śālyādi varga, 121-122.

सिद्धार्थः तीक्ष्णकः

अ. तीक्ष्णकश्च दुराधर्षो रक्षोघ्नः कुष्ठनाशनः ।

सिद्धप्रयोजनः सिद्धसाधनः सितसर्षपः ॥

ब. सिद्धार्थः कटुतिक्तोष्णो वातरक्तग्रहापहः ।
त्वग्दोषशमनो रुच्यो विषभूतव्रणापहः ॥

Rāja Nighaṇṭu, Śālyādi varga, 123-124.

सर्षपतैलम्

सर्षपतैलं तिक्तं कटुकोष्णं वातकफविकारघ्नम् ।
पित्तास्रदोषदं क्रिमिकुष्ठघ्नं तिलजवच्च चक्षुष्यम् ॥

Rāja Nighaṇṭu, Kṣīrādi varga, 110.

सार्षपं शाकम्

कटुकं सार्षपं शाकं बहुमूत्रमलं गुरु ।
अम्लपाकं विदाहि स्यादुष्णं रूक्षं त्रिदोषकृत् ।
सक्षारं लवणं तीक्ष्णं स्वादु शाकेषु निन्दितम् ॥

Bhāvaprakāśa Nighaṇṭu, Śāka varga, 47.

सार्षपनालगुणाः (सार्षपनालशाकम्)

तीक्ष्णोष्णं सार्षपं नालं वातश्लेष्मव्रणापहम् ।
कण्डूकुमिहरं ददुकुष्ठघ्नं रुचिकारकम् ॥

Bhāvaprakāśa Nighaṇṭu, Śāka varga, 90.

गौरसार्षपकोऽत्युष्णो रक्षोघ्नः कफवातजित् ।
क्रिम्यामकण्डूकुष्ठघ्नः श्रुतिशीर्षानिलार्तिजित् ॥
तद्वत् रक्तस्तु सिद्धार्थः तिक्तः स्निग्धोष्णकः कटुः ।

Dhanvantari Nighaṇṭu.

सार्षपं शाकम्

त्रिदोषं बद्धविण्मूत्रं सार्षपं शाकमुच्यते ।
सार्षपशाकं शाकानाम् ॥

Caraka Samhitā, Sūtra, 25.

विदाहि बद्धविण्मूत्रं रूक्षं तीक्ष्णोष्णमेव च ।
त्रिदोषं सार्षपं शाकम् ॥

Suśruta Samhitā.

कटुतैलम्

कटुतैलोपदेशं तु वक्ष्यामि प्लीहनाशनम् ।
नातः परतरं किञ्चिदोषधं प्लीहशान्तये ॥

Kāśyapa Samhitā.

कटुपाकमचक्षुष्यं स्निग्धोष्णं बहुपित्तलम् ।
कृमिघ्नं सार्षपं तैलं कण्डूकुष्ठापहं लघु ॥

Suśruta Samhitā.

कटूष्णं सार्षपं तैलं रक्तपित्तप्रदूषणम् ।
कफशुक्रानिलहरं कण्डूकोठविनाशनम् ॥

Caraka Samhitā.

श्लीपदे

वार्ताकपत्रसम्मिश्रैः सर्षपैः परिपेषितैः ।
लेपनं सम्प्रशसन्ति श्लीपदघ्नं भिषग्वराः ॥

Gadamigrara, 4-2-39; Śoḍhala.

वातरक्ते

गौरसर्षपकल्केन प्रदेहो वातरक्तहा ।

Baṅgasena.

कुष्ठे

सर्षपकरञ्जकोशातकीनां तैलानि ।
....कुष्ठेषु हितान्याहुः ॥

Caraka Samhitā, Cikitsā, 7-119.

श्लीपदे

पिबेत् सर्षपतैलं वा श्लीपदानां निवृत्तये ।

Suśruta Samhitā, Cikitsā, 19-60.

Vṛndamādhava, 42-11.

उरुस्तम्भे

‘दिह्याच्च मूत्राढ्यैः करञ्जफलसर्षपैः ॥’

Suśruta Samhitā, Cikitsā, 5-37.

विचर्चिकायाम्

खण्डे महावृक्षभवे निलीनं स्विन्नं कुकुले पुटपाकयुक्त्या ।

विचर्चिकां सर्षपकल्कपिण्डो निहन्ति लज्जामिव ॥

Aṣṭāṅga Saṅgraha, Cikitsā, 21-50.

अपस्मारोन्मादादिषु

नक्तमालकबीजानि तथा च गौरसर्षपाः ।

बस्तमूत्रेण पिष्टैस्तु गुडी छायाविशोषिता ॥

अञ्जनं हन्त्यपस्मारमुन्मादञ्चैव दारुणम् ॥

Harita Samhitā, Cikitsā, 19.

दन्तरोगे

‘....घर्षो लवणसर्षपैः ।’

Hārīta Samhitā, Cikitsā, 45.

श्लीपदे कटुतैलमिश्रितधान्याम्लप्रयोगः

Cakradatta, 42-14.

शीतपित्ते

‘अभ्यङ्गः कटुतैलेन सेकश्चोष्णेन वारिणा ।’

Bhāvaprakāśa, Madhyakhaṇḍa, 58-8.

उन्मादरुग्णाभ्यङ्गः

‘वृद्धसर्षपतैलाक्तं रक्षेदुत्तानमातपे ।’

Bhāvaprakāśa, Madhyakhaṇḍa, 22-38.

दारुणगलगण्ड-गण्डमाला-ग्रन्थिचिकित्सायां सर्षपादितैलम्

Cakradatta, 413-4.

अपचीरोगे सर्षपादिप्रलेपः

Cakradatta, 41-30.

कर्णरोगे

कर्णशूले कर्णनाहे वाधिर्ये क्ष्वेड एव च ।

पूरणं कटुतैलेन हितं वातघ्नमौषधम् ॥

Bhāvaprakāśa, Madhyakhaṇḍa, 64-37.

श्वासे गुडकटुतैलप्रयोगः

गुडं कटुकतैलेन मिश्रयित्वा समं लिहेत् ।

त्रिसप्ताहप्रयोगेण श्वासं निर्मूलतो जयेत् ॥

Cakradatta, Hikkāśvāsa cikitsā, 12-14.

बालरसायने

Suśruta Saṁhitā, Śārīra, 10-45.

अपस्मारे बस्तमूत्राद्यतैलम्

अभ्यङ्गः सार्षपं तैलं बस्तमूत्रे चतुर्गुणे ।

सिद्धं स्याद् गोशकृन्मूत्रैः स्नानोत्सादनमेव च ॥

Cakradatta, Apasmāra cikitsā, 21-34.

विचर्चिकाशमनार्थं भृष्टसर्षपकल्कप्रयोगः

स्नुक्काण्डे सर्षपात् कल्कः कुकूलानलपाचितः ।

लेपाद्विचर्चिकां हन्ति रागवेग इव त्रयाम् ॥

Cakradatta, Kuṣṭha cikitsā, 50-36.

उदरदशमनार्थं सिद्धार्थकाद्युद्वर्तनम्

Cakradatta, Udardakoṭhaśītapitta cikitsā, 51-5.

युवानपीडिकायामपरः सिद्धार्थादिलेपः (वमनार्थञ्च)

Cakradatta, Kṣudraroga cikitsā, 55-43.

कफजकण्टक-जिह्वाकण्टकरोगे श्वेतसर्षपकवलः

‘गृह्णीयात् कवलान् वाऽपि गौरसर्षपसैन्धवे ।’

Vṛndamādhava, 98-45.

Cakradatta, Mukharoga cikitsā, 56-4.

नेत्रविकाराणां (चक्षुस्त्राव-राग-शूल-शोथादयः) सर्षप (सकाञ्जिकं सैन्धवञ्च) योगः

सलवणकटुतैलं काञ्जिकं कांस्यपात्रे घनमुपलमुद्घृष्टं धूपितगोमयाग्नौ ।

सपवनकफकोपं छागदुग्धावसिक्तं जयति नयनशूलं स्त्रावशोथं सरागम् ॥

Cakradatta, Netraroga cikitsā, 59-38.

कीटविषे

नृकेशाः सर्षपाः पीता गुडो जीर्णाश्च धूपनम् ।

विषदंशस्य सर्वस्य काश्यपः परमोऽब्रवीत् ॥

Aṣṭāṅga Hṛdaya, Uttara, 37-23.

कफजे प्रतिश्याये

‘कफजे लङ्घनं लेपः शिरसो गौरसर्षपैः ।’

Aṣṭāṅga Hṛdaya, Uttara, 20-93.

कर्णक्ष्वेडे

‘कर्णक्ष्वेडे हितं तैलं सार्षपञ्चैव पूरणम् ।’

Suśruta Samhitā, Uttara, 21-54.

Aṣṭāṅga Hṛdaya, Uttara, 18-26.

दन्तरोगे शीतादे

‘घर्षो लवणसर्षपैः ।’

Hārta Samhitā, Cikitsā, 3-46-15.

शीतादे हतरक्ते तु तोये नागरसर्षपान् ।

निष्काथत्रिफलां चापि कुर्याद् गण्डूषधारणम् ॥

Vṛndamādhava, 58-7.

व्रणोपचारे

सर्षपारिष्टपत्राभ्यां सर्पिषा लवणेन च ।

द्विरहः कारयेद् धूपं दशरात्रमतन्द्रितः ॥

Suśruta Samhitā, Sūtra, 19-28.

अपच्याम्

सर्षपारिष्टपत्राणि दग्ध्वा भस्मातकैः सह ।

छागमूत्रेण सम्पिष्टामपचीघ्नं प्रलेपनम् ॥

Vṛndamādhava, 41-47.

शोधे

‘सिराकफघ्नश्च विधिः समस्तस्तत्रेष्यते सर्षपलेपनञ्च ।’

Caraka Samhitā, Cikitsā, 12-98.

वातरक्ते

‘श्वेतसर्षपकल्कः,.....इत्येते पञ्चप्रदेहाः सुखोष्णाः क्षारोदकपिष्टाः ।’

Suśruta Samhitā, Cikitsā, 5-10.

कफोदरे

उपनाहं ससिद्धार्थं किण्वैर्बीजैश्च मूलकात् ।

कल्कितैरुदरस्वेदमभीक्षणं चात्र योजयेत् ॥

Aṣṭāṅga Hṛdaya, Cikitsā, 15-75.

SATĀPA-SIDAVA

Botanical name

Ruta graveolens Linn.

Syn. Ruta graveolens L. var. augustifolia Hook. f.

Family : Rutaceae

Classical name : Satāpa

Common names : Sitaba-Sidava-Sidaba

Sanskrit names

Satāpa, Sadāpāka.

Regional names

Sitaba, Sitab, Sitav (Hindi); Satapa (Mar.); Satab (Guj.); Arubadarh, Arubadana (Tam.); Sudapaka (Tel.); Sujaka, Faijana (Arabic); Suddab (Persian); Garden Rue (Eng.).

Description

A strong-scented, erect, glabrous herb or shrub, 30-90 cm. high, native of Mediterranean region and sometimes cultivated in Indian gardens. Leaves 2-3-pinnate, petioled, decompound, segments oblong to spathulate, covered with a bloom and strongly aromatic. Ovary 2-5 lobed. Flowers small, yellowish in corymbs; Fls. in divaricately spreading corymbs, hermaphrodite. Sepal triangular petals oblong, obovate with dentate or wavy margin. Capsules small with lobes somewhat rounded; obtuse, shortly pedicelled; seeds angled.

Flowering and fruiting time

October-April.

Distribution

Plant is native of Mediterranean region. It is planted in the gardens in India (in the same way as *Ruta chalepensis* Linn.).

It is often cultivated for household use also. It prefers a well-drained, calcerous, clayey soil. It grows well at higher altitude, but can also be grown at medium elevations. As a pot herb it thrives well during the cold weather but seldom survives the rainy season.

Kinds and varieties

Another species *Ruta chalepensis* Linn. (syn. *Ruta bracteosa* Dc., *R. angustifolia* Pers., *R. graveolens* Linn. var. *angustifolia* Hook. f.) is considered to be substitute plant drug.

Ruta chalepensis Linn. A perennial herb, 25-75 cm. high, cultivated in Indian gardens. Leaves shortly petiolate, ultimate, segments, obovate-lanceolate to narrowly oblong, inflorescence lax; flowers yellow, petals ciliate. Capsules glabrous, with sharply pointed lobes. It is indigenous to southern Europe and North Africa; and the plant is cultivated in the gardens in India.

The plant is propagated by seeds, cuttings, layerings or divisions. Seeds may be sown in pots during October and the seedlings transplanted. Subsequent planting may be done by cuttings from well drained established plants.

Chemical composition

Plant contains a pale yellow or greenish volatile oil Rue oil; often a inflorescence is obtained (0.6%), on steam distillation of the fresh plant material. Oil also occurs in smaller quantities in leaves and roots but somewhat in greater amount in seeds.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Laghu, rūkṣa, tikṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu

Doṣakarṇa : Kaphavātaśāmaka
Pittavardhaka

Properties and action

Karma : Garbhāśayaśaṅkocaka-ārtava janana
Mūtrala
Svedajanana
Jvaraghna
Raktokleśaka-vedanāsthāpana-
jantughna-uttejaka
Akṣepahara-mādhaka
Dīpana-anulomana
Kṛmighna
Kaphaghna

Roga : Kaṣṭaprasava
Rajorodha-kaṣṭārtava
Mūtrāghāta
Carmavikāra
Kāsa-pratiśyāya
Apasmāra-akṣipāka-apatantṛaka
Ādhmāna-ajirṇa-udaraśūla
Kṛmiroga
Vātavikāra-pakṣāghāta
Śoṭha
Karṇaśūla-karṇasrāva
Sarpa-vṛścika daṁśa-jāṅgama viṣa
Jvara.

Therapeutic uses

The drug Satāpa (sidava) is garbhāśaya śaṅkocaka and emmenagogue (ārtavajanana), it is used in dysmenorrhoea, amenorrhoea and difficult labour (kaṣṭaprasava).

It is used for fumigation in infants catarrh. Rue-oil has medicinal properties. The juice of leaves is useful in cough, coryza and catarrhal affections.

The drug is useful in nervous and mental disorders. It is used in convulsions, epilepsy and hysteria. Drug is specifically indicated for children and women patients suffering from such diseases.

It is used in flatulence, dyspepsia, abdominal colic and worms. As a diuretic, it is given in dysuria. Being-diaphoretic, the drug is useful in fever and regulating sweating and urination. It is useful in skin diseases. An alcoholic extract of the herb shows antibacterial activity against *Micrococcus pyogenes* var. *aureus* and *Escherichia coli*.

Externally the leaves are ground for preparing a paste; it is applied on paralytic organs (*pakṣāghāta*) and in other nervous disorders. Leaves paste is applied on swelling (*śoṭha*). The leaves juice is used ear-drop in otorrhoea and earach in ear complaints. Leaves are applied over bitten-lesion (*daśasṭhala*) in case of snake-bit and scorpion-sting.

The plant is often cultivated for its aromatic leaves, and used as an ingredient in salads, stews and ragouts. They are used as condiments. (*Ruta chalepensis* Linn.) and garnish. Leaves are sometimes pickled and used for flavouring foods and beverages.

Another plant species is considered a perfect substitute in India for *Ruta graveolens* Linn. It possesses antispasmodic and sudorific properties and stimulates the nervous system. The oil is reported to have abortifacient properties.

The rue oil (*satāpa taila*) is used as an anthelmintic, antispasmodic, antiepileptic, rubefacient and emmenagogue. In large doses it acts as acro-naecrotic poison, causing vomiting, prostration with a feeble slow pulse and coldness of the extremities, gastroenteritis, swelling of the tongue and salivation also occurs. The oil is also used as a flavouring agent.

The plant (*R. chalepensis* L.) contains an essential oil, rutin, and a coumarin-like odoriferous principle have also been isolated. In large doses, it may act as an abortifacient. It is used in indigenous medicine as a fumigation in catarrhal affections in children. *Satāpa taila* or Rutin oil, obtained from *Ruta graveolens* Linn. (*Satāpa* or *Sidava*) is used as anthelmintic, antispasmodic, antiepileptic, rubefacient and emmenagogue. It is particularly

used in veterinary medicine. The herb is considered useful for treating coup in poultry.

The herb is considered resolvent, diuretic, emmenagogue, stimulant and antispasmodic. It is useful in hysteria and amenorrhoea. Herb juice is reported to be useful for relieving toothache and earache. In large doses, the herb acts as a narcotic poison and abortifacient. It is applied locally for the treatment of rheumatism of joints, feet and loins.

Parts used : Whole plant (specially leaves).

Dose

Juce 5-10 ml., Powder 1-3 gm., Infusion 10-20 ml.
Oil 1-5 drops.

SATĀPA-SIDAVA (सताप-सिदाव)

सतापं कटूष्णं परं तिक्तयुक्तं तथैवोग्रगन्धि प्रभूताग्निकारि ।

सदाक्षेपशूलक्रिमिघ्नं प्रयुक्तं रजःस्त्रावकं गर्भपातकारि ॥

Dravyaguṇa Vigyāna, Part II, p. 610.

ŚATAPUṢPĀ

Botanical name : *Anethum sowa* Kurz.

Syn. *Peucedanum graveolens* Linn.

Family : Apiaceae (Umbelliferae)

Classical name : Śatapušpā

Sanskrit names

Śatapušpā, Chatrā, Śatāhvā.

Regional names

Soya (Hindi); Shaluka (Beng.); Shepu (Mar.); Suva (Guj.); Shatakuppivirai (Tam.); Shatakuppivittalu (Tel.); Shivitt (Arabic); Dill (Eng.).

Description

Herb 1-3" high, with pinnately divided leaves, glabrous, branched, perennial herb; slender, erect scented herb of green and striated stem.

Leaves 3-4-pinnate; ultimate segments filiform, entire. Lvs. finely dissected fennel-like. Pedicels slender.

Flowers yellow. Petals bifid, obovate. Ovary glabrous, style small.

Fruits 3-4 mm. long, dorsal and intermediate ridges distinct, wine large; narrowly winged, 4×2 mm.

Flowering and fruiting time

Farming season. Plant is flowering and fruiting in during the period from January to March.

Distribution

Plant is found throughout India and it is often cultivated. It is cultivated as cold weather crop. Green herb is used as a pot-herb and as a flavouring agent. It is often cultivated as vegetable.

Kinds and varieties

The fruits of Indian variety (*Anethum sowa* Kurz.) are longer than those of the European species, and their dorsal ridges are paler in colour.

Chemical composition

Seeds contain aromatic oil 3-4 per cent and a fixed oil. Normally sowa seeds yield 3-3.5% of an essential oil, part of which, being heavier than water, sinks in the receiver during distillation.

The dried residue left after the distillation of the essential oil from the seeds oil sowa which contains fat 16.8, protein 15.1 per cent.

Sowa herb yields 0.05% of an essential oil, which has high proportion of terpenes (a-phellandrene) but no carvone.

Pharmacodynamics

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, rūkṣa, tikṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma

Properties and action

Karma	: Vātānulomana
	Dīpana-pācana-rocana
	Kṛmighna

	Hṛdayottejaka-śothahara
	Kaphaghna
	Ārtavajanana
	Stanyajanana
	Svedajanana
	Jvaraghna
	Śukranāśana.
Roga	: Aruci-agnimāndya-ajirṇa-ādhmāna- udaraśūla Kṛmiroga Bala udaraśūla Hṛddourbalya-śoṭha Kāsa-śvāsa-hikkā Mūtrakrcchra Rajorodha-yoniśūla-kaṣṭhārtava- sūtika vikāra Stanyakṣaya Carmavikāra Jvara.

Therapeutic uses

The drug Śatapuspā is vātānulomana which has chiefly carminative action; it is anodyne, antipyretic, aphrodisiac, carminative, stomachic and tonic. It is used abdominal pain, consumption, cough, emaciation, eye disorders, mental retardation, thirst and vomiting.

The seeds are used as medicine and also as a common condiment and pot herb as flavouring agents.

The drug is allaying aggravated kaphavāta doṣa and generally useful in ailments caused by them. It is used in various diseases in medicine in different forms, its fruits and oil are mainly given. It is used also externally.

The powder, aqua and infusion are given orally in dyspepsia, vomiting, loss of gastric power, flatulence, abdominal colic and abdominal worms. In abdominal colic infantile bowel complaints e.g. gripping, colic, śatapuspā arka (aqua dill) is given with lime-water (sudhodaka). Dill water (Arka Soya) is commonly used in therapeutics.

Śatapuspā is used in cough, asthma, hiccough, fever, dysuria and some other diseases. In various woman dis-

eases, it is given particularly during puerperal stage; it is orally suggested in vaginal pain (yonishūla), dysmenorrhoea and painful menses. Its use as galactagogue in baby feeding for regulating and generating adequate breast milk.

Externally, the leaves-paste is applied on ulcers. Decoction of Śatapuspā is used as poultice, pasting and fomentation in inflamed and swollen organs. Oil of dill (śatapuspā taila) is applied for massage in abdominal, flatulence, paralysis, joints pain and sandhivāta. It is used in earache. Śatapuspā is useful in cutaneous affections.

The green herb is used as a pot herb and as a flavouring agent. The seeds are well known for their medicinal properties, mostly due to the essential oil present in seeds. They enter into the composition of various indigenous medicinal preparations.

The essential oil, dill oil (Śatapuspā taila), or its emulsion in water, dill water, is considered to be an aromatic carminative, specially useful in the flatulence of children. Pharmacopoeial dill oil is used as an aromatic carminative.

Parts used : Fruits, oil.

Dose

Powder 1-3 gm., Oil 1-3 drops, Aqua (dill water) 20-40 ml.

Formulation

Dill water, Śatapuspā arka, Śatapuspādya cūrṇa, Śatapuspā-śatavarī kalpa.

Group (gana)

Āsthāpana (Suśruta Saṁhitā).

ŚATAPUṢPĀ (ŚATĀHVĀ) शतपुष्पा (शताह्वा)

शताह्वा कटुका तिक्ता स्निग्धोष्णा श्लेष्मवातजित् ।

ज्वरनेत्रव्रणान् हन्ति बस्तिकर्मणि शस्यते ॥

शतपुष्पादलं चोक्तं वृष्यं मधुरगुल्मजित् ।

वातघ्नं दीपनं स्तन्यं कफकृद् रुचिदायकम् ॥

Dhanvantari Nighaṇṭu.

शताह्वाऽनिलादाहामशूलतृट्छर्दिनाशिनी ।

Rāja ballabha Nighaṇṭu.

शताह्वा तु कटुस्तिक्ता स्निग्धा श्लेष्मातिसारनुत् ।

ज्वरनेत्रव्रणघ्नी च बस्तिकर्मणि शस्यते ॥

Rāja Nighaṇṭu, Śatāhvādi varga, 13.

सतिक्ता योनिशूलघ्नी मधुरा मागधी शठी ।

शतपुष्पा कटुस्तिक्ता तीक्ष्णोष्णा दीपनी लघुः ॥

पित्तला कफवातघ्नी मेध्या स्निग्धा ज्वरापहा ।

निहन्ति शूलानाहाक्षिरोगतृष्णावमिब्रणान् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1191.

शतपुष्पा लघुस्तीक्ष्णा पित्तकृद्दीपनी कटुः ।

उष्णा ज्वरानिलश्लेष्मव्रणशूलाक्षिरोगहत् ॥

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 90-91.

योनिव्यापदि

शतपुष्पा-शतावरीकल्पः

Kāśyapa Samhitā, p. 186.

रसायने

शतपुष्पा-शतावरीकल्पः

Kāśyapa Samhitā, p. 185-187.

शुष्काशःसु

‘स्तब्धानि स्वेदयेत् पूर्वं शोफशूलान्वितानि च ।

वचाशताह्वापिष्टैर्वा सुखोष्णैः स्नेहसंयुतैः ॥’

Caraka Samhitā, Cikitsā, 9.

वाताधिके वातरक्ते

क्षीरपिष्टं....लेपनम् ।

कुर्याच्छूलनिवृत्त्यर्थं शताह्वं वाऽनिलेऽधिके ॥

Caraka Samhitā, Cikitsā, 29.

आमवाते शतपुष्पाऽऽदिचूर्णम्

Cakradatta, Āmavāta cikitsā, 25-23.

मक्षिकाविषे

शतपुष्पासमायुक्तं सैन्धवं परिपेषितम् ।

सघृतं लेपनं दद्यात् मक्षिकाविषनाशनम् ॥

Baṅgasena.

शतपुष्पा (शतपुष्पाशतावरीकल्पे) कल्पः

चूर्णितायाः पलशतं नवे भाण्डे निधापयेत् ।
 तच्चूर्णं शतपुष्पायाः प्रातरुत्थाय जीर्णवान् ॥
 पलार्धार्धं पलार्धं वा पलं वा सर्पिषा लिहेत् ।
 शक्त्या वा तस्य जीर्णान्ते भुञ्जीत पयसोदनम् ॥
 उपयुक्ते पलशते यथेष्टान् लभते सुतान् ।
 अपि बन्ध्या च षण्ढा च सूयते शतपुष्पया ॥
 युवा भवति वृद्धोऽपि बलवर्णो लभते च सः ।
 तेजसा चौजसा बुद्ध्या दीर्घायुष्केन मेधया ॥
 युज्यते प्रजया धृत्या वलीपलितवर्जितः ।
 अतो विडालपदकं लिह्यान्मधुघृताप्लुतम् ।
 मेधावी शतपुष्पाया मासाच्छ्रुततरो भवेत् ॥

Kāśyapa Saṁhitā, p. 19, 14-18 (p. 185-187).

शतपुष्पापत्रम्

शतपुष्पादलं सोष्णं मधुरं गुल्मशूलजित् ।
 वातघ्नं दीपनं मेध्यं पित्तहृद्बुचिदायकम् ॥

Rāja Nighaṇṭu, Mūlakādi varga, 144.

वृद्धिब्रध्नचिकित्सायां शतपुष्पाद्यघृतम्

Cakradatta, 40/30-35.

मक्षिकाविषे

शतपुष्पासमायुक्तं सैन्धवं परिपेषितम् ।
 सघृतं लेपनं दद्यान् मक्षिकाविषनाशनम् ॥

Bhaṅgasena, Viṣa, 216.

शुष्कार्शःसु

स्तब्धानि स्वेदयेत् पूर्वं शोफशूलान्वितानि च ।
 वचाशताह्वापिण्डैर्वा सुखोष्णैः स्नेहसंयुतैः ॥

Caraka Saṁhitā, Cikitsā, 14-41.

वातरक्ते

क्वाथेन शतपुष्पायाः कुष्ठस्य मधुकस्य च ।
 एकैकं साधयेत्तैलं वातरक्तरुजापहम् ॥

Bhāvaprakāśa, Cikitsā, 29-118.

क्षीरपिष्टमुमालेपमेरुण्डस्य फलानि च।
 कुर्याच्छूलनिवृत्त्यर्थं शताह्वं वानिलेऽधिके ॥

Caraka Samhitā, Cikitsā, 29-140.

ŚATĀVARĪ

Botanical name : *Asparagus racemosus* willd.

Family : Liliaceae

Classical name : Śatāvarī

Sanskrit names

Śatāvarī, Śatamūlī, Śatavīryā, Bahusūtā, Atirasā.

Description

Scandent climber, tall climbing excessively branched, prickly under shrub. Roots tuberous; prickles 0.6-1.5 cm. straight or recurved; eladodes 2.5 cm. curved, terete, spreading in tufts of 2-6, channelled beneath. Flowers in racemes 2.5-5 cm. pedicels 0.4 cm. jointed in the middle; perianth 0.8-0.12 diam., anthers minute; oblong purplish; ovules 6-8 in. each cell. Fruit a berry 0.4-0.6 cm. diam., pea-like, red when ripe; fruit containing seeds 1-2.

Drug morphology : The drug comprises of dried tuberous succulent roots which arise adventitiously from the root stock. the tuberous dry cylindrical in the middle, tapered towards the ends and brown in colour. Surface of the fresh roots are easily removable and cover glistening material inside. The drugs are either entire roots or longitudinally broken pieces. The drug in dimensions measure 10.0-24.0 cm. in length and 0.5-2.5 cm. in diameter. Surface of the dried roots exhibit deep irregular longitudinal furrows and minute transverse wrinkles due to shrinkage during drying. The broken pieces of the drug have irregular uneven transvers surface and hollow cavity in the centre portion of the drug devoid of tapering end or middle portion of the drug devoid of tapering ends. The drug is hard, however, it breaks with a short fracture. The drug has no odour and has slightly mucilaginous taste which leaves bitterish blend after chewing for few minutes.

Flowering and fruiting time

Plant almost dies or dries up in summers and it resprouts with new tender branches from underground root. Flowers begin to appear in September-December and fruits appear afterwards.

Distribution

Plant occurs throughout India almost commonly ascending upto an altitude of 4,000 feet in the Himalayas, and in Ceylon.

Kinds and varieties

There are two kinds of the drug in classical texts viz. Śatāvarī and Mahāśatāvarī. Śatāvarī is commonly used and plant source known as *Asparagus racemosus* Willd. while Mahāśatāvarī is botanically suggested as *Asparagus sarmentosa* Linn. which a larger climber and longer tuberous roots.

Another kind of Śatāvarī is botanically identified as *Asparagus filicinus* Ham. which is thornless (without prickles) plant occurring in the Himalayan region (4,000-9,000 ft. elevation).

Some other species of *Asparagus* are also referred in context of Śatāvarī particularly *Asparagus currilus* Buch-Ham. and *A. gonoclados* Baker.

Pharmacodynamics

Rasa : Madhura, tikta

Guṇa : Guru, snigdha

Vīrya : Śīta

Vipāka : Madhura

Doṣakarṇa : Vātapittaśāmaka

Properties and action

Karma : Śukrajanana-vṛṣya
Balya-rasāyana
Garbhapoṣaka
Stanyajanana
Pittaśāmaka-śūlahara
Grāhī
Hṛdya-raktapittaśāmaka
Raktabhārahṛāsaka
Mūtrala

	Medhya-nāḍibalya
	Vedanāsthāpana
Roga	: Śukrakṣaya
	Garbhasrāva-calitagarbha
	Pradara-rakta śveta pradara
	Stanyakṣaya
	Dourbalya-dhātukṣaya
	Mūtrakṛcchra
	Kṣayaroga
	Ḍṛṣṭimāndya
	Amlapitta-śūla
	Grahaṇī
	Arśa
	Vātavyādhī
	Śīroroga
	Apasmāra-mūrcchā.

Therapeutic uses

The drug Śatāvarī is alternative, anti-diarrhoeal, anti-dysenteric, anti-spasmodic, aphrodisiac, astringent, cardiac, tonic, carminative, demulcent, diuretic, galactagogue; nervine tonic, nutritive, ophthalmic, strengthening and tonic. It is also used in blood diseases, pulmonary complaints, rheumatism, scanty urine and seminal weakness. The roots are also utilised for medicated oils, used for nervous and rheumatic disorders.

The alcoholic extract and fractions of tuberous roots of drug have shown significant oxicotic activity. The drug Śatāvarī possesses properties of aphrodisiac, demulcent, diuretic, galactagogue, nutritive, refrigerant, antiseptic, anti-diarrhoeal and anti-dysenteric. It is much used in consumption (kṣaya), diarrhoea (atisāra), blood dysentery (rakta āmātisāra), epilepsy (apasmāra), haemophilic disorders and swelling (śoṭha).

The roots are very useful in leucorrhoea; the roots cooked in milk which is given to female patients or powder of root is used.

The roots of drug are exploited for use in several preparations belonging to group of classical formulations

viz. Elādyā modaka, Guḍūcyādi modaka, Bṛhanmañjiṣṭhādi kvātha cūrṇa, Trayodaśāṅga guggulu, Elādi ghṛta, Amṛtaprāśa ghṛta, Narasiṁha cūrṇa, Aṇu taila, Candrakalā taila, Lakṣmī vilāsa rasa, Śatāvarī guḍa, Marma guṭikā, Prabhañjana vimardana rasa, Navaratna rājamṛgāṅka rasa, Vāsā ghṛta, Khaṇḍakādyā leha, Śatāvaryādi ghṛta, Śatāvarī maṇḍūram, Śatāvarī pākam, Viṣṇu taila, Śatamūlyādi louha, Śatāvarī pānaka, Phala ghṛta and various other medicinal preparations incorporated in context of the management of different diseases early classical texts of medicine which recognizes Śatāvarī as a valuable, major and highly potent drug of ancient medical system.

Parts used : Roots.

Dose

Juice 10-20 ml., Decoction 50-100 ml., Powder 3-6 gm.

Formulations (yoga)

Śatāvarīghṛta, Nārāyaṇa taila, Viṣṇutaila, Śatamūlyādi louha, Śatāvarī pānaka.

Groups (gaṇa)

Balya, Vayaḥsthāpana, Madhuraskandha (Caraka Saṁhitā), Vidārigandhādi, Kaṇṭakapañcamūla, Pittapraśamana (Suśruta Saṁhitā).

ŚATĀVARĪ (शतावरी)

शतावरी

शतावरी हिमा तिक्ता स्वाद्वी गुर्वी रसायनी ॥

सुस्निग्धा शुक्रला बल्या स्तन्यमेधानि पुष्टिदा ।

चक्षुष्या वातपित्तास्रगुल्मातीसारशोफजित् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1063-1064.

महाशतावरी

महाशतावरी हिमा हृद्या मेधाग्निबलशुक्रदा ॥

ग्रहण्यर्शोऽक्षिरोगघ्नी शीतवीर्या रसायनी ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1066-1067.

महाशतावर्यङ्कुरः

तदङ्कुरो लघुस्तिको वृष्यो हृद्यस्त्रिदोषनुत् ॥

निहन्ति वातपित्तास्रग्रहणीगुदजक्षयान् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1067-1068.

शतावरी महाशतावरी च तयोस्तदङ्कुरस्य च गुणाः

क. शतावरी गुरुः शीता तिक्ता स्वाद्वी रसायनी ।

मेधाऽग्निपुष्टिदा स्निग्धा हृद्या गुल्मातिसारजित् ॥

शुक्रस्तन्यकरी बल्या वातपित्तास्रशोधजित् ।

ख. महाशतावरी मेध्या हृद्या वृष्या रसायनी ॥

शीतवीर्या निहन्त्यर्शोग्रहणीनयनामयान् ।

ग. तदङ्कुरस्त्रिदोषघ्नो लघुरर्शः क्षयापहः ।

Bhāvaprahāsa Nighaṇṭu, Guḍūcyādi varga, 184-188.

शतावर्योगुणाः (शतावरी महाशतावरी च)

क. शतावर्यो हिमे वृष्ये मधुरे पित्तजित्परे ।

कफवातहरे तिक्ते महाश्रेष्ठे रसायने ॥

ख. शतावरीद्वयं वृष्यं मधुरं पित्तजिद्धिमम् ।

महती कफवातघ्नी तिक्ता श्रेष्ठा रसायनी ।

कफपित्तहरास्तिक्तास्तथा एवाङ्कुरा मताः ॥

Rāja Nighaṇṭu, Satāhvādi varga, 123.

शतावरी हिमा तिक्ता रसे स्वादुः क्षयास्रजित् ।

वातपित्तहरी वृष्या रसायनवरा स्मृता ।

Dhanvantari Nighaṇṭu.

वाजीकरणार्थं शतावरीप्रयोगः

‘भुक्त्वा वरीं क्षीरयुतां विलासीं भुङ्क्ते शतं सुन्दरि ! सुन्दरीणाम् ।’

Vaidya Jīvanam.

अम्लपित्तचिकित्सायां शतावरीघृतम्

शतावरीमूलकल्कं घृतप्रस्थं पयःसमम् ।

पचेन्मृद्वग्निना सम्यक् क्षीरं दग्ध्वा चतुर्गुणम् ॥

नाशयेदम्लपित्तञ्च वातपित्तोत्तरान् गदान् ।

रक्तपित्तं तृषां मुच्छां श्वासं सन्तापमेव च ॥

Cakradatta, 52/59-60.

वातपित्तहरी वृष्या स्वादुतिक्ता शतावरी ।
 महती चैव हृद्या च मेध्याग्निबलवर्धिनी ॥
 ग्रहण्यर्शोविकारघ्नी वृष्या शीता रसायनी ।
 कफपित्तहरास्तिक्तास्तस्या एवाङ्कुरा स्मृताः ॥

Suśruta Samhitā, Sūtra, 46.

राजयक्ष्मणि शतावरी-वासाधृतयोगाः

हस्तपादाङ्गदाहेषु ज्वरे रक्ते तथोर्ध्वगे ।
 वासाधृतं शतावर्या सिद्धं वा परमं हितम् ॥

Caraka Samhitā, Cikitsā, 8-105.

रक्तातिसारे शतावरीघृतम्

रक्तं विट्सहितं पूर्वं पश्चाद्वा योऽतिसार्यते ॥
 शतावरीघृतं तस्य लेहार्थमुपकल्पयेत् ।

Caraka Samhitā, Cikitsā, 19-97/98.

अतिसारे शतावरीकल्कम्

पीत्वा शतावरीकल्कं पयसा क्षीरभुग्जयेत् ।
 रक्तातिसारं पीत्वा वा तथा सिद्धं घृतं नरः ॥

Caraka Samhitā, Cikitsā, 19-78.

अतिसारे शतावरीकल्कम्

पीत्वा शतावरीकल्कं पयसा क्षीरभुग्जयेत् ।
 रक्तातिसारं पीत्वा वा तथा सिद्धं घृतं नरः ॥

Bhāvaprakāśa, Atisārādhikāra, 2-61.

रक्तपित्ते शतावरीपाकः

शतावरीमूलकल्कं कल्कात्क्षीरं चतुर्गुणम् ।
 क्षीरतुल्यं घृतं गव्यं सितया कल्कतुल्यया ॥
 घृतशेषं पचेत्तत्तु पलाद्धं लेहयेत्सदा ।
 रक्तपित्तं ह्यम्लपित्तं क्षयं श्वासञ्च नाशयेत् ॥

Bhāvaprakāśa, Raktapittādhikāra, 9-90/91.

रक्तपित्ते खण्डकाद्यलौहम्

Bhāvaprakāśa, Raktapittādhikāra, 9-75/89.

वातरक्ते शतावरीघृतम्

शतावरीकल्कगर्भं रसे तस्माच्चतुर्गुणे ।
 क्षीरतुल्यं घृतं सिद्धं वातशोणितनाशनम् ॥

Vṛndamādhava, 23-25.

Bhāvaprakāśa, Madhyakhanda, Dvītiyabhāga, 29-93.

शूले (पित्तजशूल-दाह-पित्तजविकारे) शतावरीप्रयोगः

शतावरीरसं क्षौद्रयुतं प्रातः पिबेन्नरः ।

दाहशूलोपशान्त्यर्थः सर्वपित्तामयापहम् ॥

Cakradatta, Śūla cikitsā, 26-28.

Baṅgasena, Śūla, 32.

Vṛndamādhava, 26-21.

शूलचिकित्सायां (सदाहशूल-ज्वर-रक्तपित्ते) शतावर्यादिक्वाथः

Cakradatta, 26-30.

परिणामशूलचिकित्सायां शतावरीमण्डूरम्

संशोध्य चूर्णितं कृत्वा मण्डूरस्य पलाष्टकम् ।

शतावरीरसस्याष्टौ दध्नुस्तु पयसस्तथा ॥

पलान्यादाय चत्वारि तथा गव्यस्य सर्पिषः ।

विपचेत् सर्वमैकध्यं यावत् पिण्डत्वमागतम् ॥

सिद्ध्यन्तु भक्षयेन्मध्ये भोजनस्याग्रतोऽपि वा ।

वातात्मकं पित्तभवं शूलञ्च परिणामजम् ॥

निहन्त्येव हि योगोऽयं मण्डूरस्य न संशयः ॥

Cakradatta, Parīṇāma cikitsā, 27/35-37.

वृष्यशतावरीघृतम्

घृतं शतावरीगर्भं क्षीरे दशगुणे पचेत् ।

शर्करापिप्पलीक्षौद्रयुक्तं तद् वृष्यमुच्यते ॥

Cakradatta, Vṛṣyādhikāra, 66-36.

रसायने

शतावरीघृतम्

Aṣṭāṅga Hṛdaya, Uttara, 39-157.

कासे

‘शतावरीनागबलाविपक्वं घृतं विधेयं च हिताय कासिनाम् ।’

Suśruta Saṁhitā, Uttara, 52-47.

मूत्रकृच्छ्रे

‘पिबेच्छतावरीमूलं चूर्णितं शीतवारिणा ।’

Hārīta Saṁhitā, 3-29-6.

स्तन्यवर्धनार्थम्

‘शतावरीं क्षीरपिष्टा पीता स्तन्यविवर्धनी ।’

Yogarātnākara, p. 427.

वातज्वरे

गुडूच्या स्वरसो ग्राह्यः शतावर्याश्च तत्समः ।

निहन्यात् सगुडः पीतः सद्योऽनिलकृतं ज्वरम् ॥

Suśruta Samhitā, Uttara, 39-174.

नेत्ररोगे

क. तिमिरे

शतावरीपायस एव केवलस्तथा कृतो वामलकेषु पायसः ।

प्रभूतसर्पिस्त्रिफलोदकोत्तरो यवौदनो वा तिमिरं व्यपोहति ॥

ख. रात्र्यान्ध्ये

घृते सिद्धानि जीवन्त्याः पल्लवानि च भक्षयेत् ।

तथातिमुक्तकैरण्डशेफाल्यभीरुजानि च ॥

Aṣṭāṅga Hṛdaya, Uttara, 13-88.

रक्तपित्ते

शतावर्यादिघृतम्

Caraka Samhitā, Cikitsā, 4-95/96.

‘शतावर्या रक्तजित् साधितं पयः ।’

Bhāvaprakāśa, Cikitsā, 9-43.

शतावरीगोक्षुरकैः शृतं वा शृतं पयो वाऽप्यथ पर्णिनिभिः ।

रक्तं निहन्याशु विशेषतस्तु तन्मूत्रामार्गात् सरुजं प्रयाति ॥

Caraka Samhitā, Cikitsā, 4-85.

विषे

स्वरसो बहुपुत्रायाः सघृतः क्षौद्रसंयुतः ।

सोमवल्करसश्चापि सुशीतो हित इष्यते ॥

Suśruta Samhitā, Kalpa, 1-68.

रक्तातिसारे

शतावरी(कल्क)योगः

Caraka Samhitā, Cikitsā, 19-78.

Aṣṭāṅga Hṛdaya, Cikitsā, 9-88.

Vṛndamādhava, 3-42.

वातोत्तरे अतिसारे

‘वातोत्तरस्तु शतावरीघृतं लिह्यात् ।’

Aṣṭāṅga Saṅgraha, Cikitsā, 11-25.

अर्शसि

‘शतावरीमूलकल्कं वा क्षीरेण ।’

Suśruta Samhitā, Cikitsā, 6-93.

पैत्तिकशूले

‘शतावर्याच्च मधुना पित्तशूलहरो रसः ।’

Sārṅgadhara Samhitā, 2-1-15.

स्वरभेदे

लिह्यात् मधुरकाणां वा चूर्णं मधुघृताप्लुतम् ।

शतावरीचूर्णयोगं बलाचूर्णमथापि वा ॥

Suśruta Samhitā, Uttara, 53-14.

वाजीकरणार्थम्

शतावरीघृतम्

Caraka Samhitā, Cikitsā, 2-3-18.

‘भुक्त्वा वरीक्षीरयुतां विलासी भुङ्क्ते शतं सुन्दरि सुन्दरीणाम् ।’

Vaidya Jīvanam, 5-5.

शतवर्युच्चटाचूर्णं पेयमेवं बलार्थिना ।

स्वयङ्गुप्ताफलैर्युक्तं माषसूपं पिबेन्नरः ॥

Suśruta Samhitā, Cikitsā, 26-34.

अपस्मारे

‘प्रयुञ्ज्यात्तैललशुनं पयसा वा शतावरीम् ।’

Caraka Samhitā, Cikitsā, 10-64.

ŚATĪ

Botanical name : *Hedychium spicatum* Buch-Ham.

Family : Zingiberaceae

Classical name : Śaṭī

Sanskrit names

Śaṭī, Somadā, Pṛthupalāśikā, Śaḍagranthā, Śaṭhī, Palāśī, Gandhavadhū, Sugandhamūlā, Gandhārikā, Gandhamūlikā, Suvratā.

Regional names

Kapurakachari (Hindi); Kapurakachari (Beng.); Kapurakachari (Mar., Guj.); Sheduri (Punj.); Shimai-Kich-chilik-kishangu (Tam.); Gandhashati (Kan.); Spiked Ginger Lily (Eng.).

Description

Perennial glabrous, rhizomatous herbs, c. 3 ft.

high., plant as a whole appears like Haridrā or Haldi (turmeric) herb.

Leaves reaching 30 cm. or more, very variable in breadth, glabrous, sometimes (or often) about 1 foot long, smooth.

Spikes sometimes 30 cm., bracts oblong, obtuse, green $2.5-3.75 \times 2$ cm. broad. Flowers ascending and closely imbricate; corolla tube $4.5-5.75$ cm.; segments 2.5 cm. linear; staminodium 2.5 cm., lanceolate; lip $1.25-2$ cm. broad, not at all clawed, lobes 2; rounded filaments; pale red; anther linear $0.60-0.8$ cm. Fls. tender, hairy and white in colour (with pale red filaments). on about one foot long spikes.

Capsule glabrous, globose. Seeds many, arillate.

Rhizome drug : Rich sliced transverse section of the rhizome shows presence of a thick rind with fleshy yellowish coloured interior which is marked with several dots, each representing vascular strands. Outer most layer is thick and suberized. Cortex is wide 30-40 cells thick, cortex consists of several layers of thin walled parenchymatous cells with wide intercellular spaces. Oil cells containing green yellow oil lie scattered in cortex. Starch grains abundant, grains simple often flattened, sometimes irregular in outlines; hilum escentric or projecting in a beak. Oil cells also abundant in ground parenchyma; isodiametric structures possessing a yellow refractive body. Crystals of calcium oxalate are present.

Rhizomatous roots are long, strong camphoraceous odour, bitter and pungent aromatic taste. Cut-pieces in dried state are available and sold in raw drug market in the name 'Kapurkachari' as article of commerce; generally in the form of slices (0.5 inch or less in diam. and upto 0.25 inch. in thickness) and they are white and starchy within, covered by rough, reddish brown bark, with rootlets attached here and there.

The source plant (*Hedychium spicatum* Buch-Ham.) of drug Śaṭī is closely resembling with *Hedychium coronarium* Koenig., but the leaves are glabrous beneath

and the white ascending flowers are borne in dense terminal spikes.

Flowering and fruiting time

Plant bears flowers and fruits during rainy season.

Distribution

Plant occurs in the parts of Western and Central Himalayas at altitudes of 3,500-7,500 feet. or generally 5,000-7,000 feet. (2000 m.) in Western Himalayas and Kumaon. It is found in Himachal Pradesh and hilly areas of Uttar Pradesh. Plants grow in Nepal, Bhutan and Sikkim and other regions.

Chemical composition

The dried rhizomes of commerce (on steam-distillation) yield C. 4% of an essential oil with the characteristic odour and pungent taste of the rhizome. It contains starch (52%), carbonic acid, a glycoside and ash 46 per cent. The principle constituent of oil is the ethyl ester of P-methoxy cinnamic acid.

Pharmacodynamics

Rasa : Kaṭu, tikta, kaṣāya

Guṇa : Laghu, tikṣṇa

Vīrya : Uṣṇa

Vipāka : Kaṭu

Doṣakarma : Kaphavātaśāma

Properties and action

Karma : Śvāsahara
Kāsaghna
Hikkānigrahaṇa
Tvagdoṣahara
Jvaraghna
Uttejaka-raktaśodhaka
Rocana-dīpana
Śūlapraśamana
Grāhī
Śothara-vedanāsthāpana
Durgandhanāśana
Keśya

Roga : Śvāsa-tamakaśvāsa (eosinophilia)
Kāsa-hikkā

Ārucī-vamana-agnimāndya-
 udaraśūla
 Atisāra
 Arśa
 Hrddourbalya
 Raktavikāra
 Tvagdoṣa
 Jvara
 Sandhiśoṭha-āmavāta
 Dantaśūla
 Mukhadaurgandhyahara
 Khālitya-keśaroga
 Śīroroga
 Vraṇa-granthi
 Tvagvikāra.

Therapeutic uses

The drug Śaṭī is expectorant, emmenagogue, carminative, stimulant, stomachic and tonic. It is used in anasarca, bad taste in mouth, colic, fever, enteric fever and respiratory disorders.

The rhizomes, forming drug Śaṭī, are stomachic, carminative, stimulant and tonic, and are used in dyspepsia in the form of powder or decoction. They enter into the preparation of cosmetic powders used for promoting hair growth. They are (particularly in Bengal) used after frying and mixing with other ingredients, as dhars or perfumed baits for fish. They are much used in veterinary medicine.

The dried fruits are reported to be added to soften meat and pulses during cooking. Leaves and flowers are also reported to be useful in other purposes, and leaves are specially medicinal as useful in piles.

The rhizome of Śaṭī are employed in the preparation of Abir, a fragrant coloured powder used during the Holi festival and in religious ceremonies. The rhizomes are also considered to have insect-repelling properties and are used for preserving clothes. They may be employed as an auxillary in dyeing to impart a pleasant smell to fabrics. They are also used with henna to produce perfumed cloth,

locally known as malagiri cloth. The pounded rhizomes are reported to be used also for performing tobacco.

Parts used : Rhizome.

Dose : Powder 1-3 gm.

Formulations : Śatyādi cūrṇa, Śatyādi kvātha.

Groups (gaṇa)

Śvāsahara, Hikkānigrahaṇa (Caraka Samhitā).

ŚATĪ (शटी)

गन्धपलाशी (सुगन्धिद्रव्यं शटीनाम्ना प्रसिद्धम्)

शटी पलाशी षड्ग्रन्था सुव्रता गन्धमूलिका ।
गन्धारिका गन्धवधूर्वधूः पृथुपलाशिका ॥
भवेद्गन्धपलाशी तु कषाया ग्राहिणी लघुः ।
तिक्ता तीक्ष्णा च कटुकाऽनुष्णाऽऽस्यमलनाशिनी ।
शोथकासव्रणश्वासशूलसिध्मग्रहापहा ॥

Bhāvaprakāśa Nighaṇṭu, Karpūrādi varga, 99-100.

क. गन्धारिका गन्धवधूर्वधूः पृथुपलाशिका ।
शटी सुगन्धबाला स्यात् सोमदा सोमसम्भवा ॥
सुगन्धमूला षड्ग्रन्था सुव्रता सुगृहीतिका ।
ख. शटी तिक्तकटुस्तीक्ष्णा कषाया ग्राहिणी लघुः ।
अनुष्णा मुखवैरस्यमूलदौर्गन्ध्यनाशिनी ।
दोषकासव्रणश्वासशूलहिध्माज्वरापहा ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1391-1393.

शटी

शटी शटी पलाशश्च षड्ग्रन्था सुव्रता वधूः ।
सुगन्धमूला गन्धाली शटिका च पलाशिका ॥
सुभद्रा च तृणी दूर्वा गन्धा पृथुपलाशिका ।
सौम्या हिमोद्धवा गन्ध-वधूर्नागेन्दुसम्मिता ।

शटीगुणाः

शटी सतिक्ताऽम्लरसा लघुष्णा रुचिप्रदा च ज्वरहारिणी च ।
कफास्रकण्डूव्रणदोषहन्त्री वक्त्रामयध्वंसकरी च सोक्ता ॥

Rāja Nighaṇṭu, Pippalyādi varga, 226-228.

शटीविशेषगुणाः

- क. अन्या तु गन्धपत्रा स्यात् स्थूलास्या तित्तकन्दका ।
 वनजा शटिका वन्या स्तवक्षीर्येकपत्रिका ॥
 गन्धपीता पलाशान्ता गन्धाढ्या गन्धपत्रिका ।
 दीर्घपत्रा गन्धनिशा शरमूह्या सुपाकिनी ॥
- ख. गन्धपत्रा कटुः स्वादुस्तीक्ष्णोष्णा कफवातजित् ।
 कासच्छर्दिज्वरान् हन्ति पित्तकोपं करोति च ॥

Rāja Nighaṇṭu, Pippalyādi varga, 229-231.

आमवाते शट्यादिकाथः

- शटी शुण्ठ्याभया चोग्रा देवाह्वातिविषाऽमृता ।
 कषायामामवातस्य पाचनं रूक्षभोजनम् ॥

Cakradatta, Āmavāta cikitsā, 25-3.

आमवाते शटी सपुनर्नवाकषायः

- शटी विश्वौषधीकल्कं वर्षाभूक्काथसंयुतम् ।
 सप्तरात्रं पिबेज्जन्तुरामवातविनाशनम् (विपाचनम्) ॥

Cakradatta, Āmavāta cikitsā, 24-4.

Vṛndamādhava, 25-3.

Bhāvaprakāśa, Cikitsā, 26-42.

ग्रन्थिभूतशुके

- ‘ग्रन्थिभूते शटीसिद्धं पालाशे वापि भस्मनि ।’

Suśruta Samhitā, Śārīra, 2-8.

अतिसारे

- ‘शट्यामूलकपोतायाः पाठायाः स्वस्तिकस्या वा ।
 मूषायवानीकर्करुक्षीरिणीचिर्भटस्य वा ॥
 उपोदिकाया.....लोणिकाया रसैरपि ॥’

Aṣṭāṅga Hṛdaya, Cikitsā, 9-20/21.

अर्शसि

- शटीपलाशसिद्धां वा पिप्पल्या नागरेण वा ।
 दद्याद् यूवागूं तक्राम्लां मरिचैरवचूर्णिताम् ॥

Caraka Samhitā, Cikitsā, 14-92.

श्वासे

शट्यादिचूर्णम्

Caraka Samhitā, Cikitsā, 17-123/124.

शटीपुष्करमूलानां चूर्णमामलकस्य च ।
मधुना संयुक्तं लेह्यं चूर्णं वा काललोहजम् ॥

Caraka Samhitā, Cikitsā, 17-121.

शटीपुष्करधात्रीर्वा पौष्करं वा कणान्विताम् ।
गैरिकाञ्जनकृष्णां वा स्वरसं वा कपित्थजम् ॥
रसेन वा कपित्थस्य धात्रीसैन्धवपिप्पलीः ॥

Aṣṭāṅga Hṛdaya, Cikitsā, 4-39/40.

SĪTĀPHALA

Botanical name : *Anona squamosa* Linn.

Family : Anonaceae

Classical name : Sītāphala

Sanskrit names

Sītāphala, Jānakīphala.

Regional names

Sharifa, Sitaphal (Hindi).

Description

A small, robust shrub more or less evergreen tree, 15-20 tall; Bark grey bearing yellowish-green, fruits 3-4 in diam. Flesh of fruit juicy, cream-yellow or white, delicately flavoured, and tastes sweet. The seeds are many, brownish-black smooth, and oblong.

Leaves, short-petiolet, oblong-lanceolate 8-15 × 2-3 cm., pallucid, thin dotted, glabrous. Flowers greenish-yellow, drooping, solitary or more, on short, leaf opposed peduncles.

Fruit a fleshy syncarp, globular, cordate-ovoid or conical, yellowish-green, pulp sweet. Seeds large, black. ft. tubercled with prominent scales. Berry tubercled with prominent scales.

Flowering and fruiting time

Plant flowers May-June and fruits July-September.

Distribution

The tree occurs wild and is also cultivated all over India for delicious and edible fruits. Commonly grown in Indian gardens, fruits yards and house premises.

Kinds and varieties

Another species *Annona muricata* Linn. is known as Ramphal, Nona and Laxamanphal (Bullocks Heart). Both species of *Annona* differ morphologically : Flowers supra-axillary, solitary, 2 cm. across and berry heart-shaped in *Annona muricata* Linn., while flowers, axillary, solitary or fascicled, under 1 cm. across and berry globose in *Annona squamosa* Linn.

Annona reticulata Linn. Small deciduous trees. Leaves 10-20 cm., acuminate, glabrous. Flowers 2-3 together; innermost tepals narrow-oblong. Fruits areolate, heart-shaped. Tree becomes leafless when fruits mature.

Main distinction of characteristics is of fruits of two species as fruits are late and heart shaped in *Annona reticulata* when fruits tubercled and globose in *Annona squamosa*.

Chemical composition

Oven-dried kernels of seeds have been found to contain 30% of oil. Anonaine, previously obtained from that of *Annona reticulata* Linn. Hydrocyanic acid in the leaves, bark, root and traces of it in the wood and seeds.

The fruit-pulp contains moisture 73.2, glucose 14.5, sacchrose 1.7 and proteins 0.8 per cent.

Pharmacodynamics

Rasa	: Madhura, kaṣāya
Guṇa	: Snigdha, guru
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Vātapittahara

Properties and action

Karma	: Kṛmighna Garbhasrāvaka Śītajvarahara Recana
Roga	: Kṛmiroga Śītajvara Koṣṭhabaddhatā

Therapeutic uses

The unripe fruit, seed, leaf and root are considered

medicinal and are used for destroying insects. The seeds are abortifacient. The root is a drastic purgative.

The fruit has a pleasant flavour. It can be made into drinks, and fermented liquor. Fruit is considered to be rich in vitamin C.

The fruit of Ramphal or Nona, known as Bullock's Heart (*Annona reticulata* Linn.) is edible and white pulp has the consistency of tallow and is somewhat inspid (moisture 72.3, glucose 12.5 and proteins 2 per cent). The unripe fruit is considered anthelmintic; the bark, a powerful astringent, and the leaves and seeds, insecticidal. Bark has 0.03% of an alkaloid anonaine.

Parts used : Fruit, seeds, leaves.

Dose : Fruit edible.

SĪTĀPHALA (सीताफल)

बलासवीर्यपात्राणि दात्राणि दवसम्पदाम् ।

प्रायशः स्वादुमात्राणि गण्डमात्राणि मन्महे ॥

Siddha Bhaisajya Maṇimālā.

शीतज्वरे

अध्यर्थत्रीणि पत्राणि जानकीफलशाखिनः ।

पटुना कलितान्याशु निघ्नन्ति शिशिरज्वरम् ॥

Siddha Bhaisajya Maṇimālā, 4-96.

ŚIGRU

Botanical name : *Moringa oleifera* Lam.

Family : Moringaceae

Classical name : Śigru

Sanskrit names

Śigru, Śobhāñjana, Tīkṣṇagandhā, Mocaka.

Regional names

Sahijan, Munaga (Hindi); Shajina (Beng.); Sohanjana (Punj.); Shevaga (Mar.); Shegata (Maharashtra); Saragavo, Sekato (Guj.); Suhanjido (Simh.); Sahajano

(Ma.); Murugai, Murungai (Tam.); Munaga (Tel.); Horse-raddish tree, Drum-stick plant (Eng.)

Description

Fairly large tree; bark corky; wood soft; white spongy.

Leaves 30-76 cm. long, three pinnate; petiole sheathing at base, pinnate 4-6 pairs, opposite the upper most pair, foliate, hairy gland present between each pair of pinnac and pinnulae, ultimate leaflets opposite 0.85-1.7 cm. long, obovate or elliptic entire, membranous, pale beneath.

Flowers 2.5 cm. diam., strongly honey scented; sepals reflexed, linear lanceolate; petals 1.7-2.5 cm. linear spathulate, white with yellow dot near base; filament villous at base; ovary hairy.

Capsule $23 \times 50.8 \times 1.3$ -1.7 cm. trigonous; linear peduncles, longitudinally ribbed with slight constrictions between seeds. Seeds three cornered, winged, about 2 cm. long and corky testa; non-endospermic, having straight embryo, convex cotyledons; superior radicle and many leaved plumule.

Root-bark : Greyish brown reticulated marked with tumid projections of discontinuous transverse rows of transversely extended lenticles 2-8 mm. long. Dents may show tears of reddish of reddish gum. Slightly succulent. Outer skin is corky and papery. Tissue inside is cream or rose. Portion nearest to wood is whitish. Wood is very soft porous and yellow in colour.

Flowering and fruiting time

Plant flowers from January to March and fruiting in April-June.

Distribution

Plant is indigenous in sub-Himalayan tract. It is commonly cultivated throughout the country. Plant is found in Assam, Gujarat and Uttar Pradesh. It grows almost throughout India (upto lower elevation in hilly regions).

Kinds and varieties

There are two kinds of Śigru in classical texts of

medicine on the basis of flower colour viz. white (Śveta) and red (Rakta) which are bitter and sweet (kaṭu-madhura) in taste and they are specifically known as kaṭuśīgru and Madhuśīgru respectively.

Kaṭu śīgru, botanical identified as *Moringa oleifera* Lam., is occurring almost throughout country and available commonly, but Madhuśīgru, botanically identified as *Moringa concanensis* Nimmo., is comparatively scarce in occurrence with restricted distribution, for the instance, in Bengal, Rajputana, Sindha and certain other areas including dry hills of Konkan, Andhra Pradesh and Coimbatore. Leaves bi-pinnate somewhat longer than those of *Moringa oleifera* Lam. and flowers pinkish yellow in colour in case of former species (*M. concanensis* Nimmo). Various parts of the plant are considered useful as those of *M. oleifera* Lam. Practically the tree of *Moringa concanensis* Nimmo resembles with *M. oleifera* Lam. Another (or third) kind of Śīgru is Nīlaśīgru (blue variety) in texts of materia medica (Nighaṇṭu). The medicinal properties of these kinds of Śīgru or Śobhāñjana are also specified in textual sources of medicine.

Chemical composition

The root-bark of Śīgru contains moringine alkaloids and the roots contain an antibiotic principle pterygosperrin. Seeds yield fixed oil 36.6%. Bark yields a gum-resin.

The pods of Śīgru contains moisture 86.9, protein 2.5, fat 4.8 and mineral matter 2.0%, calcium 30, phosphorous 1.10, and iron 5.3 mg./100 g., copper (3.1 ug./g.) iodine (18 ug./kg.) and oxalic acid (0.01). Pods also contain carotene (as vitamin) 184 I.U., nicotinic acid 0.2 mg. and ascorbic acid 120 mg./100 g.. Pressed juice of the pods contains ascorbic acid oxidase. Pods contain a globulin (N 15.6 and sulphur 1.58%) and a prolamin (N 14.02, sulphur 1.43%). The pods are remarkably rich in free leucine.

The leaves of Śīgru are rich in carotene and ascorbic acid. Analysis gave the following values : moisture 75.0, protein 6.7, fat (ether ext.) 1.7, carbohydrates 13.4, fibre 0.9 and mineral matter 2.3, calcium 440, phosphorous 70 and

iron 700 mg./100 g.; copper (1.1 ug./g.) and iodine 51 ug./kg.).

Pharmacodynamics

Rasa	: Kaṭu (Kṣāriya), tikta
Guṇa	: Laghu, rūkṣa, tikṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma

Properties and action

Karma	: Svedopaga Nāḍyuttejaka Dīpana-pācana-rocana-vidāhi Grāhi Plīhāhara Śūlapraśamana Kṛmighna Hṛdayottejaka Kaphaghna Vṛkkottejaka Ārtavajanana Viśaghna Svedajanana-kuṣthaghna Jvaraghna Lekhana Cakṣuṣya Vidāhi-śothahara-vidradhipācana Śirovirecana Vedanāsthāpana-śothahara
Roga	: Nāḍidourbalya Pakṣāghāta-ardita Agnimāndya-aruci-śūla Udararoga-gulma-plīhodara Kṛmiroga Hṛddourbalya-śotha Kāsa Mūtrakṛcchra-mūtragata amlādhikya Kaṣṭārtava-rajorodha Vātarakta

Medoroga-snāyukaroga
 Viṣa
 Sadyovraṇa
 Carmaroga
 Vidradhi-antarvidradhi-apaci
 Śitajvara
 Aṅgamarda
 Atinidrā
 Masūrikā
 Netraroga
 Karṇaśūla.

Therapeutic uses

The drug Śigru or Śobhāñjana is antihistaminic, abortifacient, anthelmintic, antiseptic, aphrodisiac, astringent, cardiogenic, carminative, stomachic and tonic. It is used in general anasarca, cancerous growth, glandular diseases, intermittent fever, obesity, paralysis of different organs, rheumatism, splenic disorders and wounds.

The drug is used for internal abscess and wound. It is externally applied for alleviating spasms of legs. An antibiotic substance pterygospermin has been isolated from the roots; it exhibits high activity against gram positive and gram negative bacteria including Mycobacterium tuberculosis var. hominis, pathogenic moulds and fungi.

Parts used : Root bark, seeds.

Dose : Root bark juice 10-20 ml., Seeds powder 1-3 gm.

Formulations (yoga)

Śobhāñjanādi lepa, Śyāmādi cūrṇa.

Groups (gaṇa)

Svedopaga, Kṛmighna, Śirovirecanopaga
 Kaṭukaskandha, Haritakavarga (Caraka Saṁhitā),
 Varuṇādi, Śirovirecana (Suśruta Saṁhitā).

ŚIGRU (शिग्रु)

शिग्रुः

शिग्रुः कटुः कटुः पाके तीक्ष्णोष्णो मधुरो लघुः ।

दीपनो रोचनो रूक्षः क्षारस्तिको विदाहकृत् ॥

सङ्ग्राह्य शुक्रलो हृद्यः रक्तपित्तास्रकोपनः ।
चक्षुष्यः कफवातघ्नो हन्ति श्वयथुविद्रधीन् ॥
मेदोऽपचीविषप्लीहगुल्मगण्डव्रणकुमीन् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 744-745.

मधुशिग्रुः

‘मधुशिग्रुः कटुस्तिक्तः शोफघ्नो दीपनः सरः ।’

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 746.

शिग्रुपत्रम्

तत्पत्रं वातपित्तघ्नं चक्षुष्यं स्वादुशीतलम् ।
बृंहणं शुक्रहृत् स्निग्धं मेदःकृमिहरं गुरु ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 747.

मधुशिग्रुपुष्पम्

शिग्रुजं कुसुमं जन्तुकफपित्तहरं परम् ।
सकषायं गुरु ग्राहि चक्षुष्यं कृमिनाशनम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 748.

शिग्रुपुष्पम्

तथा मुरङ्ग्याः पुष्पं तु श्लेष्मलं कृमिनाशनम् ।
पित्तहृद् दृष्टिपथ्यं स्याद्रक्तपित्तप्रसादनम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 749.

शिग्रुबीजम्

चक्षुष्यं शिग्रुजं बीजं तीक्ष्णोष्णं विषनाशनम् ।
अवृष्यं कफवातघ्नं तन्नस्येन शिरोऽर्तिनुत् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 751.

शोभाञ्जनभेदाः तद्गुणाश्च

क. शोभाञ्जनः शिग्रुतीक्ष्णगन्धकाक्षीवमोचकाः ।

तद्बीजं श्वेतमरिचं मधुशिग्रुः सलोहितः ॥

Bhāvaprakāśa Nighaṇṭu, Harītakṛyādi varga, 105.

ख. शिग्रुः कटुः कटुः पाके तीक्ष्णोष्णो मधुरो लघुः ।

चक्षुष्यः कफवातघ्नो विद्रधिश्चयथुक्रिमीन् ॥

दीपनो रोचनो रूक्षः क्षारस्तिको विदाहकृत् ।

सङ्ग्राही शुक्रलो हृद्यः पित्तरक्तप्रकोपणः ॥

मेदोऽपचीविषप्लीहगुल्मगण्डव्रणान्दरेत् ।

Bhāvaprakāśa Nighaṇṭu, Harītakṛyādi varga, 106-107.

ग. श्वेतः प्रोक्तगुणो ज्ञेयो विशेषाद्वाहकृद्भवेत् ।

प्लीहानं विद्रधिं हन्ति व्रणघ्नः पित्तरक्तहृत् ॥

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 108.

घ. 'मधुशिशुः प्रोक्तगुणो विशेषाद्दीपनः सरः ।'

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 108.

शिशुवल्कलपत्रस्वरसगुणाः

'शिशुवल्कलपत्राणां स्वरसः परमार्तिहृत् ।'

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 109.

शिशुबीजगुणाः

चक्षुष्यं शिशुजं बीजं तीक्ष्णोष्णं विषनाशनम् ।

अवृष्यं कफवातघ्नं तन्नस्येन शिरोऽर्तिनुत् ॥

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 117.

शिशुभेदाः तद्गुणाश्च

क. शिशुश्च कटुतिक्तोष्णस्तीक्ष्णोवातकफापहः ।

मुखजाड्यहरो रुच्यो दीपनो व्रणदोषनुत् ॥

Rāja Nighaṇṭu, Mūlakādi varga, 27.

ख. शोभाञ्जन(नीलशिशु)स्तीक्ष्णकटुः स्वादूष्णः पिच्छिलस्तथा ।

जन्तुवातार्तिशूलघ्नश्चक्षुष्यो रोचनः परः ॥

Rāja Nighaṇṭu, Mūlakādi varga, 29.

ग. श्वेतशिशुः कटुस्तीक्ष्णः शोफानिलनिकृन्तनः ।

अङ्गव्यथाहरो रुच्यो दीपनी मुखजाड्यनुत् ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 31.

घ. रक्तशिशुर्महावीर्यो मधुरश्च रसायनः ।

शोफाध्मानसमीरार्ति-पित्तश्लेष्मापसारकः ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 33.

अन्तर्विद्रधी

पुनर्नवावरुणयोः क्वाथोऽन्तर्विद्रधिञ्जयेत् ।

तथा शिशूभवक्वाथो हिङ्गुसैन्धवसंयुतः ॥

Śāraṅgadharā Saṁhitā.

अतिनिद्रायाम्

नीलोत्पलं शिशुबीजं नागकेसरकं तथा ।

एतत्कल्कैः कृता वर्तिरतिनिद्रां निवारयेत् ॥

Śāraṅgadharā Saṁhitā, 3-13-81.

श्लेष्मजनेत्राभिष्यन्दे

‘शिग्रुपत्रकृतापिण्डौ श्लेष्माभिष्यन्दनाशिनी ।’

Sārāṅgadhara Saṁhitā, 3-13-27.

सद्योन्नपेषु

सद्योन्नपेषु सहसा विदधीत धीमान् ॥

अक्षीवपत्रतिलककल्कमथाज्यमिश्रम् ॥

Vaidya Manoramā, 16-117.

मसूरिकायाम्

‘शिग्रु पत्ररसे सर्जरसं पिष्ट्वा मसूरिकाम् ।

उत्पन्नमात्रामालिप्सेत् सा तदेव विनश्यति ॥’

Vaidya Manoramā, 11-20.

वातकफोत्त्वणे शिग्रुबीजप्रयोगः

मधुशिग्रोर्हितं तद्वद्बीजं धान्याम्लसंयुतम् ।

मुहूर्तं लिप्तमम्लैश्च सिञ्चेद्वातकफोत्तरम् ॥

Caraka Saṁhitā Cikitsā, 9-151.

नेत्रविकारे शिग्रुपत्रस्वरसप्रयोगः

शिग्रुपल्लवनिर्वासः सुघृष्टस्ताम्रसम्पुटे ।

घृतेन धूपितो हन्ति शोथहर्षाश्रुवेदनाः ॥

Aṣṭāṅga Hṛdaya, Uttara, 16-37.

Vṛndamādhava, 61-40.

Cakradatta, Netraroga cikitsā, 59-34.

प्लीहारोगे

‘शोभाञ्जनकनिर्यूहं सैन्धवाग्निकणाऽन्वितम् ।’

Cakradatta, Plīhayakṛccikitsā, 38-8.

स्नायुकरोगे

शोभाञ्जनमूलदलैः काञ्जिकलवणसंयुतैर्लेपः ।

स्नायुकरोगं हन्यात् जयेद्वा मोचकत्वचा लेपः ॥

Śodhala, Gadanigraha.

प्रतिश्याये

घृततैलसमायुक्तं शिग्रुमूलं पिबेन्नरः ।

प्रतिश्यायहरं प्रोक्तं कासहिक्कानिवारणम् ॥

Śodhala.

सर्वनेत्ररोगे

शिशुपल्लवनिर्वासः सुभृष्टं ताप्रसम्पुटे ।
घृतेन धूपितो हन्ति शोफहर्षाश्रुवेदनाः ॥

Sodhala.

Cakradatta, Netraroga cikitsā, 59-34.

उरोग्रहे

‘पुत्रजीवकशिशूत्था.... ।

रसाः एकैकशः कोष्ठा द्विशो वा रामठान्विता ॥’

Baṅgasena, Urograha, 5.

स्नायुकरोगचिकित्सायां शोभाञ्जनादिलेपः

Cakradatta, 53-42.

दद्रौ

‘दद्रुघ्नं लेपनं कुर्याच्छिशुमूलत्वचोऽथवा ।’

Baṅgasena, Kuṣṭha, 66.

कृमिषु

‘सक्षौद्रः कृमिभिद्भिः पीतः कृमिहरः शिशूजश्च क्वाथः ।’

Baṅgasena, Krimiroga, 22.

नेत्रविकारे

‘शिशुपत्ररसैः सेकः सर्वनेत्ररुजापहः ।’

Vṛndamādhava, 61-40.

वातरक्ते

‘शिशुवरुणस्य कल्कौ धान्याम्लेनानिलार्त्तिजिल्लेपात् ।

भवति न वेति विकल्पते न विधेयः सिद्धयोगेऽस्मिन् ॥’

Baṅgasena, Vātarakta, 68.

नवदृक्कोपे

‘नवदृक्कोपशमनः क्षौद्रयुतः शिशुमूलरससेकः ।’

Baṅgasena.

अन्तर्विद्रधिनाशाय शोभाञ्जनक्वाथः

शोभाञ्जनकनिर्यूहो हिङ्गुसैन्धवसंयुतः ।

हन्त्यन्तर्विद्रधिं शीघ्रं प्रातः प्रातर्विशेषतः ॥

Bhāvaprakāśa, Madhyakhaṇḍa, 46-36.

स्नायुकरोगे शिशुमूललेपः

शिशुमूलदलैः पिष्टैः काञ्जिकेन ससैन्धवैः ।

लेपनं स्नायुकव्याधेः शमनं परमं मतम् ॥

Bhāvaprakāśa, Snāyukarogādhikāra, 57-30.

अपचीरोगे शोभाञ्जनादिलेपः

‘शोभञ्जनं देवदारु काञ्जिकेन तु पेषितम् ।

कोष्णं प्रलेपतो हन्यादपचीमतिदुस्तराम् ॥’

Cakradatta, 41-29.

शुष्कार्शःसु

‘....शिग्रोश्च पत्राण्यश्मन्तकस्य च ।

जलेनोत्काथ्य शूलार्तं स्वभ्यक्तमवगाहयेत् ।’

Caraka Samhitā, Cikitsā, 14-45.

कुष्ठक्षते

‘कारञ्जं वा सार्षपं वा क्षतेषु क्षेप्यं तैलं शिग्रुकोशाप्रयोर्वा ।’

Suśruta Samhitā, Cikitsā, 9-53.

प्लीहोदरे

‘शोभाञ्जनकषायं वा पिप्पलीसैन्धवचित्रकयुक्तम् ।’

Suśruta Samhitā, Cikitsā, 14-13.

अपच्याम्

‘....हितोऽवपीडे फलानि शिग्रोः ।’

Suśruta Samhitā, Cikitsā, 18-23.

नेत्रव्यथायाम्

वातपित्तकफसन्निपातजां नेत्रयोः बहुविधामपि व्यथाम् ।

शीघ्रमेव जयति प्रयोजितः शिग्रुपल्लवरसः समाक्षिकः ॥

Aṣṭāṅga Hṛdaya, Uttara, 16-1.

अपक्वे विद्रधौ

पानभोजनलेपेषु मधुशिग्रुः प्रयोजितः ।

दत्तावापो यथादोषं अपक्वं हन्ति विद्रधिम् ॥

Aṣṭāṅga Hṛdaya, Cikitsā, 13.

पुष्पशाकम्, शिग्रोः मधुशिग्रोश्च पुष्पम् (पुष्पगुणाः)

शिग्रोः पुष्पं तु कटुकं तीक्ष्णोष्णं स्नायुशोधनुत् ।

कृमिहृत्कफवातघ्नं विद्रधिप्लीहगुल्मजित् ।

मधुशिग्रोरत्वक्षिहितं रक्तपित्तप्रसादनम् ॥

Bhāvaprakāśa Nighaṇṭu, Śāka varga, 50.

वातकफोत्त्वणवातशोणिते शिगुप्रयोगः

मधुशिग्रोर्हितं तद्वद्बीजं धान्याम्लसंयुतम् ।

मुहूर्तं लिप्तमम्लैश्च सिञ्चेद्वातकफोत्तरम् ॥

Caraka Samhitā, Cikitsā, 29-151.

प्लीहोदरे शिगुक्काथः

पीतः प्लीहोदरं हन्यात् पिप्पलीमरिचान्वितः ।

अम्लवेतससंयुक्तः शिगुक्काथः ससैन्धवः ॥

Cakradatta, Udara cikitsā, 37-44.

कर्णशूले शोभाञ्जननिर्यासप्रयोगः

शोभाञ्जनकनिर्यासस्तिलतैलेन संयुक्तः ।

व्यक्तोष्णः पूरणः कर्णे कर्णशूलोपशान्तये ॥

Vṛndamādhava, 59-6.

Cakradatta, Kārṇaroga cikitsā, 57-5

विद्रधिरोगे शोभाञ्जनक्काथः

शोभाञ्जननिर्यूहो हिङ्गुसैन्धवसंयुतः ।

अचिराद्विद्रधीन् हन्ति प्रातः प्रातर्निषेवितः ॥

Cakradatta, 42-12.

अन्तर्विद्रधौ

शिगुमूलं जले पीतं धौतं दरपिष्टं प्रगालयेत् ।

तद्रसं मधुना पीत्वा हन्त्यन्तर्विद्रधिनरः ॥

Cakradatta, Vidradhi cikitsā, 43-13.

कर्णशूले

सूर्यावर्तशोभाञ्जनमूलकस्वरसः ।

मधुतैलसैन्धवयुताः पृथगुक्ता कर्णशूलहराः ॥

Cakradatta, Kārṇaroga cikitsā, 57-5.

नासारोगे शिगुतैलम्

शिगुसिंहीनिकुम्भानां बीजैः सव्योषसैन्धवैः ।

बिल्वपत्ररसैः सिद्धं तैलं स्यात्पूतिनस्यनुत् ॥

Bhāvaprakāśa, Nāsārogādhikāra, 65-41.

विद्रधिशोथहरलेपः

‘स्वेदोपनाहः कर्तव्यः शिगुमूलसमन्वितः ।’

Cakradatta, 43-3.

शिरःशूले

गुडशोभाञ्जनरसैः नस्ययोगात् पृथक्-पृथक् ।
'....शिरोऽर्तिश्चोपशाम्यति ॥'

Harīta Samhitā, 3-40-21.

श्लेष्मशूले

शोभाञ्जनमूलस्य रसञ्च मरिचान्वितः ।
सक्षारमधुनोपेतः श्लेष्मशूलनिवारणः ॥

Harīta Samhitā, Cikitsā, 8.

सन्निपातज्वरिणो बोधनार्थम्

शोभाञ्जनकमूलस्य रास्ना समरिचान्वितम् ।
विसंज्ञितानां नस्यं स्याद्बोधनं चाशु रोगिणाम् ॥

Harīta Samhitā, Cikitsā, 3-2-133.

अश्मरीशर्करयोः

'जलेन शोभाञ्जनमूलकल्कः शृतो हितः ।'

Caraka Samhitā, Cikitsā, 26-27.

हिक्काश्वासयोः

'पत्राणां यूषः शोभाञ्जनस्य च ।
हिक्काश्वासनिवारणः ॥'

Caraka Samhitā, Cikitsā, 21.

ग्रन्थिविसर्पे

'सुखोष्णया प्रदिह्याद्वा पिष्टया कृष्णगन्धया ।'

Caraka Samhitā, Cikitsā, 11.

अश्मरीभेदनार्थं शिग्रुयूषः

बिल्वप्रमाणो घृततैलभृष्टो यूषः कृतः शिग्रुमूलकल्कात् ।
शीतोऽश्मभित् स्याद्दधिमण्डयुतः पेयः प्रकामं लवणेन युतः ॥

Caraka Samhitā, Cikitsā, 26-67.

Aṣṭāṅga Hṛdaya, Cikitsā, 11-31.

विसर्पे

सुखोष्णया प्रदिह्याद् वा पिष्टा वा कृष्णगन्धया ।
नक्तमालत्वचा शुष्कमूलकैः कलिनाऽथवा ॥

Aṣṭāṅga Hṛdaya, Cikitsā, 18-25.

शोथे

कृष्णगन्धा परीसर्पे शोथेष्वर्शःसु चोच्यते ।

दद्रुविद्रधिगण्डेषु कुष्ठेष्वप्यलजेषु च ॥

Caraka Samhitā, Cikitsā, 1-117.

स्नायुकरोगे

‘शोभाञ्जनमूलदलैः काञ्जिकपिष्टैर्लवणयुतैर्लेपः ।
हन्ति स्नायुकरोगे ।’

Vṛndamādhava, 55-19.

विदारिकायाम्

‘जयेद् विदारिकां लेपैः शिग्रुदेवद्रुमोद्भवैः ।’

Vṛndamādhava, 57-4.

दुष्टापचीविकारे

शोभाञ्जनं देवदारु काञ्जिकेन तु पेषितम् ।
कोष्णं प्रलेपनं हन्यादपचीमतिदुस्तरम् ॥

Vṛndamādhava, 41-22.

हिक्काश्वासयोः

कासमर्दकपत्राणां यूषः शोभाञ्जनस्य च ।

शुष्कमूलकयूषश्च हिक्काश्वासविकारनुत् ॥

Caraka Samhitā, Cikitsā, 17-99.

दत्त्वा सलवणं क्षारं शिग्रूणि मरिचानि च ।

युक्त्या संसाधितो यूषो हिक्काश्वासविकारनुत् ॥

Caraka Samhitā, Cikitsā, 17-98.

शिरःपीडायाम्

‘गुडशोभाञ्जनरसैः नस्ययोगात् पृथक् पृथक् ।

.....शिरोऽर्त्तिश्चोपशाम्यति ॥’

Hārīta Samhitā, 3-40-21.

जठरजशूले उदरशूले

शिग्रुरसेन वटी सैन्धवसौभाग्यविश्वानाम् ।

जयति जठरजशूलं योगोऽयं श्यामरामभिषगुक्तः ॥

Siddhabhaiṣajya Maṇimālā, 4-514.

मधुशिग्रुः आमायिकप्रयोगाः

विद्रधौ

पेयोवरुणकादिस्तु मधुशिग्रुद्रुमोऽपि वा ।

शिग्रुमूलजले सिद्धं ससिद्धार्थकमोदनम् ॥

Suśruta Samhitā, Cikitsā, 16-36.

‘पायये मधुशिगुं वा यवागूं तेन वा कृताम् ।’

Aṣṭāṅga Hṛdaya, Cikitsā, 13-23.

पानालेपनभोज्येषु मधुशिगुद्रुमोऽपि वा ।

दत्तावापो यथादोषमपक्वं हन्ति विद्रधिम् ॥

Suśruta Saṁhitā, Cikitsā, 16-31.

Aṣṭāṅga Hṛdaya, Cikitsā, 13-10.

वातरक्ते

मधुशिग्रोर्हितं तद्वद्बीजं धान्याम्लसंयुतम् ।

मुहूर्त्तं लिप्तमम्लैश्च सिञ्चेद् वातकफोत्तरम् ॥

Caraka Saṁhitā, Cikitsā, 29-151.

Aṣṭāṅga Hṛdaya, Cikitsā, 22-37.

SILHAKA-TURUṢKA

Botanical name : Liquidamber orientalis Miller.

Family : Hamamelidaceae

Classical name : Silhaka-Turuṣka

Sanskrit names

Silhaka, Turuṣka, Kapitaila, Śilārasa, Dhūmra-Dhūmravarṇa, Paṇa, Piṇḍita-piṇḍita, Kalka, Yāvaka.

Regional names

Shilarasa (Hi., Mar.); Shelaras (Guj.); Neri-Arishappal (Tam.); Shilarasam (Mal.); Rasamalla (Mal.); Moah-sila (Arabic); Amber Maia (Pers.); Liquid Amber or Asiatic Storax or Oriental Sweet-gum (Eng.).

Description

A medium-sized, much-branched tree growing to a height of 6-12 meters or more, with truncate, palmately 5-lobed leaves and monoecious, yellow flowers, in globular heads.

Balsam Drug : The collection of storax commences when the tree is 3-4 years old. The bark is bruised or injured by beating and the balsam soon exudes into the inner bark. The outerbark is then peeled and discarded.

The inner bark, saturated with balsam, is stripped off and boiled with water which causes the balsam to sepa-

rate and float to the top whence it is removed. Crude storax thus obtained is poured into barrels, casks or cans for shipment.

Silhaka or storax is not a normal secretion of Silhaka vrkṣa, the source tree (*Liquidamber orientalis* Miller.), but a pathological product obtained as a result of wound stimulation, which induces the cambium to produce new wood with schizo-lysigenous ducts and cavities in which the balsam is secreted. The method of extracting storax differs in the two plants i.e. *Liquidamber orientalis* Miller and *Liquidamber styracifolia* Linn. which are sources of oriental sweet gum or storax and American Storax or Red gum respectively.

Kinds and varieties

Turuṣka is synonymous term of Silhaka as given by Bhāvaprakāśa, but Śoḍhala Nighaṇṭu keeps them different. In Dhanvantari Nighaṇṭu, Turuṣka is named as Piṇḍaka which indicates towards its solid form. Actually Turuṣka is Solid Storax whereas Silhaka is liquid Storax. Gradually, both terms i. e. Turuṣka and Silhaka sometimes became synonymous in vogue.

Another plant source of Turuṣka is *styrax officinale* Linn., a tree exudation Turuṣka. American storax is also called Turuṣka. The trees botanically known as *Liquidamber styracifolia* Linn. are also source of Śilārāsa which is American storax.

Asiatic storax is Śilārāsa Pakva Śilārāsa and American storax is Apakva. An inferior quality is also procured from the trees of *Altingia excelsa* Nor. which occurs in India (Assam), Bhūtan, Burma, Pegu, Java and other regions.

Distribution

Plant is a native of Asia Minor; large forest of the plants are found in the country. It occurs in south-western Turkey. It is found in Arab. Cultivation may be suitable to north-west India.

Chemical composition

Purified storax is composed principally of an alcoholic resin, named storesin (33-50%) occurring free and as

cinnamic ester; it contains also free cinnamic acid (5-15%), cinnamyl cinnamate or styracine (5-10%), phenylpropyl cinnamate (c. 10%) and small amounts of ethyl cinnamate, benzyl cinnamate, styrene, a pleasant smelling liquid, probably styrocamphene and traces of vanillin.

Steam-distillation of storax yields a pale yellow to dark brown volatile oil. Oil of storax with pleasant, but peculiar odour.

Pharmacodynamics

Rasa	: Tikta, kaṭu, madhura
Guṇa	: Snigdha, laghu
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma

Properties and action

Karma	: Chhedana-śleşmahara
	Pūti-hara-jantughna-vraṇa-ropana
	Kuṣṭhaghna
	Vedanāsthāpana
	Śleşmahara-uttejaka-pūti-hghna
	Mūtrala
	Vṛṣya-ārtavajanana
	Kuṣṭhaghna
	Jvaraghna
	Balya
Roga	: Kāsa-jīrṇakāsa-śvāsa-kṣaya
	Mūtrakṛcchra-pūyameha
	Rajorodha
	Kāmaśaitya
	Carmavikāra
	Jvara
	Daurbalya.

Therapeutic uses

The drug Silhaka is śleşmahara, uttejaka and pūti-hara which has stimulating expectorant and antiseptic action on respiratory system.

It is applied on ulcers especially Kṣayaja vraṇa. It is

mixed with oil and on organs affected with swelling and pain; it is used in vātavyādhi as local application. Similarly it is externally applied (duly mixed with oil) in kaṇḍu and other carmaroga (scabies, itching, pruritis and other cutaneous affections). The exudate (storax) of Silhaka is applied to eradicate bāhya krimi as germicidal remedy. It is an ingredient of ointment for scabies and other parasitic skin diseases. It is applied in dermatosis.

Silhaka is used internally in different diseases. It is given in chronic cough, bronchitis, bronchial asthma and pulmonary tuberclosis. The drug is dysuria, gonorrhoea, dysmenorrhoea, sexual frigidity, fever and throat affections. It is also useful as a countering measure (drug) against grahavādhā (ill-spirit or demons). The drug is considered benefecial in promoting lusture and complexion of the skin (kānti varṇa prada).

Itorax (silhaka) is an ingredient of Tincturd Benzoni composita. A surup prepared from the bark of Liquidamber styracifolia Linn. is used in dysentery and diarrhoea. Storax resembles balsams of Peru and Tolu (from Myroxylon spp.) in its action as a stimulating expectorant and antiseptic.

It is used for scenting soaps and cosmetics as a fixative for heavy perfumes, in the preparation of adhesive, lacquers and incense and as an ingredient of many pharmaceutical preparations. It is also used for flavouring tobacco. Oil of storax (silhaka taila) is an ingredients of several perfume compounds, particularly those of oriental character.

Parts used : Exudate (oleo-resin).

Dose : 1-2 gm.

Formulation : Pañcaguṇa taila.

Groups : Elādi (Suśruta Saṁhitā).

SILHAKA-TURUṢKA (सिल्हक-तुरुष्क)

क. सिल्हकस्तु तुरुष्कः स्याद्यतो यवनदेशजः ।

कपितैलं च चाख्यातं तथा च कपिनामकः ॥

- ख. सिल्हकः कटुकः स्वादुः स्निग्धोष्णः शुक्रकान्तिकृत् ।
 वृष्यः कण्ठ्यः स्वेदकुष्ठज्वरदाहग्रहापहः ॥
Bhāvaprakāśa Nighaṇṭu.
- अ. तुरुष्कः सिल्हको धूम्रो धूम्रवर्णश्चलः पणः ॥
 पिण्डीतः पिण्डितः कल्कः कपिजः कपिशः कपिः ।
 पिण्याको यावकस्तैलसुगन्धः कोलपिण्डितः ॥
- ब. सिल्हकः कटुकः स्वादुः स्निग्धोष्णः कान्तिवर्णदः ।
 वृष्यो हन्याद् दोषकण्डूस्वेदकुष्ठग्रहज्वरान् ॥
Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1306-1308.

तुरुष्क-सिल्हकः

- तुरुष्को यावनो धूम्रो धूम्रवर्णः सुगन्धिकः ।
 सिल्हकः सिद्धसारश्च पीतसारः कपिस्तथा ॥
 पिण्याकः कपिजः कल्कः पिण्डितः पिण्डितैलकः ।
 करेवरः कृत्रिमको लेपनो मुनिभूह्वयः ॥
Rāja Nighaṇṭu, Candanādi varga, 100-101.

वातव्याधौ

बलातैले

Caraka Samhitā, Cikitsā, 28-153.

श्वासे

‘तुरुष्कशल्लकीनाञ्च गुग्गुलोः पद्मकस्य च (धूमः) ।’

Suśruta Samhitā, Uttara, 51-52.

A. ŚIMŚAPĀ-ŚIMŚIPĀ

Botanical name : Dalbergia sissoo Roxb.

Family : Fabaceae (Papilionaceae)

Classical name : Śimśapā-Śimśipā

Sanskrit names

Śimśapa, Kṛṣṇasārā, Vṛttapatrā, Anupuṣpakā, Simbiphalā, Gucchapuṣpā, Śimśipā.

Regional names

Shisam, Sisam, Shishi (Hindi); Shishu (Beng.); Shishav (Mar.); Sisam (Guj.); Sharai (Punj.); Sisu itti

(Tam.); Shinshupa (Tel.); Biridi (Kann.); Iruvil (Mal.); Sissoo (Eng.).

Description

Fairly large deciduous tree often with crooked trunk; bark thick, grey, somewhat reticulately longitudinally furrowed, exfoliating in narrow strips, young parts grey, downy; wood dark-brown, durable. Tree attains a height of about 100 ft., a girth upto 8 ft. and a clear bole upto 35 feet. Heartwood yellowish-brown.

Leaves alternate, with leaflets. Leaflets 3-5 in number, arranged alternate order; 2.5-7.5 cm. (or 2.5-6.4) cm. diam., broad-ovate or rhomboid, tough, acuminate, glabrescent, rachis 5-10 cm. zigzag, pubescent when young.

Flowers yellowish white or pale-white; racemes 2.5-3.8 cm. long, arranged in short axillary panicles; stamens 9, connate to a sheath, which is slit along top,

Pods (fruits) flat, 5-7.6 cm. $\times$ 0.85-1.3 cm., linear-lanceolate strapshp, pale-brown. Seeds 1-3 light-brown with delicate testa.

Flowering and fruiting time

Plant flowers in March-April and it sheds pods during December-April. Seeds germinate at the commencement of rains, though in riverian regions, flood stimulates earlier germination. New foliage appears in March-April and simultaneously the plant blooms.

Distribution

Plant occurs through the sub-Himalayan tract from Ravi to Assam, ascending up to 5,000 ft.; it grows gregariously in alluvial forests characteristics of the river beds of these regions. It is extensively cultivated in Punjab, Uttar Pradesh, Bengal and Assam. Planted on road sides and as shade tree in tree plantations. No other timber tree, except teak (*Śāka vṛkṣa*), is cultivated to a greater extent.

Śimśapā trees grow well on porous soils containing sand pebbles and boulders. The growth is stunted on clayey soils. In natural state, *Śimśapā* (sissoo) is fairly drought-resistant and frost-hardy. It is strong light demander. Browsed by cattle, it reproduces vegetatively by root-suck-

ers. It coppices vigorously but the age and size of the tree upto which coppicing is successful.

Kinds and varieties

Dalbergia latifolia Roxb. is another species allied to drug plant *Śimśapā*. Its heartwood is of black coloured and source plant is lower height tree bearing whitish and odorous flowers. It is East Indian Rosewood and Bombay Blackwood which is a large, deciduous or nearly ever green with cylindrical, fairly straight bole and full rounded crown found in the sub-Himalayan tract from Oudh eastwards, Orissa, Central-western-southern India.

Chemical composition

Heartwood yields 5.35% of a light brown, highly viscous fixed oil, which on cooling becomes almost solid like vaseline. The oil belongs to non-drying class of oils, stands a comparatively high temperature without decomposition and has been found suitable as a lubricant for heavy machinery. The constants of this oil are on record. The component fatty acids of the oil are myristic 5.56, palmitic 21.79, stearic 24.33, arachidic 19.37, linoleic 10.81 and oleic 9.40 per cent.

Pods contain 2% tannin.

Pharmacodynamics

Rasa	: Kaṣāya, kaṭu, tikta
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarman	: Tridoṣaśāmakā

Properties and action

Karma	: Raktaprasādana-raktaśodhaka Śothahara Nāḍibalya Kuṣṭhaghna-jantughna-kṛmighna Cakṣuṣya-raktastambhana (leaves) Stambhana (root) Dīpana-anulomana- stambhana (leaves) Kṛmighna (heartwood) Kaphaghna

	Garbhāśayasankocaka-ārtavajanana (heartwood)
	Ārtavastambhaka (leaves)
	Mūtrala-mūtramārgasnehana (leaves)
	Kuṣṭhaghna
	Jvaraghna-dāhapraśamana
	Lekhana (heartwood)
	Balya (leaves).
Roga	: Vātavikāra-gr̥dhrasī (bark)
	Pravāhikā-atisāra (root)
	Agnimāndya-śūla-pravāhikā- raktātisāra (leaves)
	Vamana (leaves)
	Raktārśa (leaves)
	Kṛmiroga (heartwood powder)
	Raktavikāra-phiraṅga-upadamśa- kaṇḍū (heartwood)
	Vātarakta (heartwood)
	Vraṇa (heartwood)
	Śoṭha (heartwood)
	Hikkā-śvāsa
	Rajorodha-kaṣṭārtava (heartwood)
	Raktapradara (leaves juice)
	Pūyameha-lālāmeha (leaves juice)
	Vasāmeha (heartwood decoction)
	Dāha (leaves juice)
	Medoroga (heartwood)
	Pāṇḍu (leaves juice).

Therapeutic uses

The drug Śīmśipā or Śīmśapā is abortifacient, anthelmintic, antihistaminic, antiseptic, hypolipidemic and febrifuge. It is used in all types of fever, skin diseases, anasarca, kidney pain, obesity, psoriasis, venereal diseases, vitiligo, vomiting and worms. Śīmśapā is allaying tridoṣa and blood-purifier drug.

The leaves of Śīmśipā are bitter and stimulant. A decoction of the leaves is said to be useful in gonorrhoea. The leaf mucilage mixed with sweet oil is applied in exco-

riations. The roots are astringent and the wood is useful in cutaneous.

The oil is externally applied to worms, kuṣṭha, skin diseases, chronic of foul ulcers (duṣṭavraṇa). Leaf juice is locally applied in eyes diseases and wounds.

The young thin and tender branches give white and yellow and lastly red colour when chewed. Leaves are also mucilaginous on chewing.

Śimśapā is used in various diseases as mentioned in the texts of medicine. (e.g. Hārīta Saṁhitā, Baṅgasena, Bhāvaprakāśa etc. other than Brhatṭrayī). Medicinal properties and utility of Śimśapatraya are also indicated.

The bark is given in sciatica and other vātavikāra. Roots are taken in diarrhoea, dysentery and other gastro-intestinal complaints. Leaves are taken in loss of appetite (gastric powder), abdominal colic, blood dysentery, vomiting, bleeding piles.

Heartwood powder is taken in worms affections. The same is also given in various diseases caused by blood impurities, syphilis, gonorrhoea, scabies, pruritis, gout, swelling. Infusion of heartwood is taken in vasāmeḥa. Leaves juice used in gonorrhoea, pūyameḥa and lālāmeḥa (under group of prameḥa). Juice of leaves is given in raktapradara (meno-metrorrhagia). Heartwood is useful in obesity and leaves juice is given in anaemia.

Parts used : Leaves, heartwood, bark, roots.

Dose : Decoction 50-100 ml. Powder 3-6 gm.

Formulation : Śimśapā kvātha.

Groups (gaṇa)

Āsavayonisāra, Kaṣāyaskandha (Caraka Saṁhitā), Śālasārādi, Muṣkakādi (Suśruta Saṁhitā).

A. ŚIMŚAPĀ-ŚIMŚIPĀ (क. शिंशपा-शिंशिपा)

क. शिंशिपा पिच्छिला श्यामा कृष्णसारा च सा गुरु ।

कपिला सैव मुनिभिर्भस्मगर्भेति किर्तिता ॥

Bhāvaprakāśa Nighaṇṭu, Puṣpa varga, 25.

- ख. शिंशपा कटुका तिक्ता कषाया शोषहारिणी ।
उष्णवीर्या हरेन्मेदःकुष्ठशिवत्रवमिक्रिमीन् ॥
बस्तिरुग्नप्रणदाहास्रबलासान् गर्भपातिनी ॥

Bhāvaprakāśa Nighaṇṭu, Vaṭādi varga, 25.

शिंशपा

- अ. शिंशपा पिच्छिला कृष्णसारा मण्डलपत्रिका ॥
महाश्यामाङ्गमङ्गारा कपिला गुरुसारिका ।
ब. अन्या कुशिंशपा भस्मपिङ्गला वत्सादनी ॥
स. शिंशपा कटुका तिक्ता कषाया गर्भपातनी ।
उष्णवीर्या हरेन् भेदा कफदाहवमिव्रणान् ॥
शोषकुष्ठकृमिश्वित्रबस्तिरूपोनसानपि ।

Kaiyaadeva Nighaṇṭu, Oṣadhi varga, 977-980.

शिंशपा

शिंशपा तु महाश्यामा कृष्णसारा च धूम्रिका ।
तीक्ष्णसारा च धीरा च कपिला कृष्णशिंशपा ॥

शिंशपागुणाः

श्यामादिशिंशपा तिक्ता कटूष्णा कफवातनुत् ।
नष्टाजीर्णहरा दीप्या शोफातीसारहारिणी ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 126-127.

श्वेतशिंशपा

शिंशपाऽन्या श्वेतपत्रा सिताह्लादिश्च शिंशपा ।
श्वेतादिशिंशपा तिक्ता शिशिरा पित्तदाहनुत् ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 128.

कपिलाशिंशपा

कपिला शिंशपा चान्या पीता कपिलशिंशपा ।
सारिणी कपिलाक्षी च भस्मगर्भा कुशिंशपा ॥
कपिला शिंशपा तिक्ता शीतवीर्या श्रमापहा ।
वातपित्तज्वरघ्नी च छर्दिहक्काविनाशिनी ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 129-130.

शिंशपात्रितयसामान्यगुणाः

शिंशपात्रितयं वर्ण्य हिमशोफविसर्पजित् ।
पित्तदाहप्रशमनं बल्यं रुचिकरं परम् ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 131.

शिशपा कृष्णसारा स्यात् वृत्तपत्राऽणुपुष्पका ।
शिम्वीफला गुच्छपुष्पा तद्वत् कपिलशिशपा ॥

Śivadatta.

कटूष्णं कण्डूदोषघ्नं बस्तिरोगविनाशनम् ।
शिशपायुगलं वर्ण्यं हिक्काशोफौ विसर्जयेत् ॥

Dhanvantari Nighaṇṭu.

शिशपा....सारस्नेहाः तिक्तकटुकषायाः ।
दुष्टव्रणशोधनाः कृमिकफकुष्ठानिलापहराश्च ॥

Suśruta Saṁhitā.

गृध्रस्याम्

शिशपात्वक् तुलां क्षुण्णां जलद्रोणद्वये पचेत् ।
अष्टभागावशिष्टञ्च पूतं लेहञ्च कारयेत् ॥
पायसं सहविष्यान्नं तत्कषेण च मिश्रितम् ।
भक्षयेदेकविंशाहं गृध्रसीनाशनं परम् ॥

Baṅgasena, Vātavyādhī, 608-609.

सर्वज्वरे

उदकाद्विगुणं क्षीरं शिशपाक्षारसंयुतम् ।
तत्क्षीरशेषं कृथितं पेयं सर्वज्वरापहम् ॥

Suśruta Saṁhitā, Uttara, 39.

वसामेहे

‘वसामेहिनं....शिशपाकषायम् वा ।’

Suśruta Saṁhitā, Cikitsā, 11-9.

नेत्ररोगे

वातपित्तकफदोषसम्भवां नेत्रयोर्बहुविधामपि व्यथाम् ।
एक एवं हरति प्रयोजितः शिशपापल्लवरसः समाक्षिकः ॥

Harīta Saṁhitā, 3-45-13.

सर्वज्वरहरणार्थम्

उदकाद् द्विगुणं क्षीरं शिशपोशीरमेव च ।
तत्क्षीरशेषं कृथितं पेयं सर्वज्वरापहम् ॥

Bhāvaprakāśa, Jvarādhikāra, 1-112.

अतिसारे

पल्लवान् जर्जरीकृत्य शिशपा-कोविदारयोः ।
पचेद् यवांश्च स क्वाथो घृतक्षीरसमन्वितः ॥

पिच्छासुतौ गुदभ्रंशे प्रवाहणरुजासु च ।

पिच्छाबस्तिः प्रयोक्तव्यः क्षतक्षीणबलावहः ॥

Aṣṭāṅga Hṛdaya, Cikitsā, 9-95/96.

B. GORAKṢA

Botanical name : *Dalbergia lanceolaria* Linn.

Family : Fabaceae (Papilionaceae)

Classical name : Gorakṣa

Sanskrit names

Gorakṣa, Śirīṣapatrā.

Regional names

Gourakh, Takoli, Bithuka (Hindi); Bakemadiya (Beng.); Dadusa, Kourubi (Marwarh); Siyanipati (Uriya); Ainapachchari (Tel.); Airigai (Tam.); Velam (Kann.); Pulari (Mal.); Veluruvai (Ceylon).

Description

Tall deciduous tree with a straight, somewhat buttressed, stem upto 7 ft. in girth and 25 ft. to the first branch. Bark smooth, white or brownish.

Wood yellowish white, turning dark with age, mostly straight-grained and medium coarse-textured. It contains no heartwood, but wood stout.

Leaves about 1 in. long, leaflets 9-12 in numbers, leaflets 2.5 in. long and 1.5 in. broad.

Flowers pink or bluish, 3-5 in. diam., on 2-3 in. spikes.

Pods 2-4 in. long, 0.5-0.75 in. broad, thin on both ends. Seeds 1-3.

Flowering and fruiting time

Plant flowers in April-May and fruits in September-January.

Distribution

It is found scattered practically throughout India but is nowhere common.

Kinds and varieties

Another kind of plant drug is known as Gorakhi

(also Gorakṣi) which is botanically identified as *Dalbergia volubilis* Roxb.

Besides Śimśapā (*Dalbergia sissoo* Roxb.) Gorakṣa (*Dalbergia lanceolaria* Linn.) and Gorakṣī (*Dalbergia volubilis* Roxb.) which are tree species; some woody climbers are of medicinal utility such as *Dalbergia parviflora* Roxb. and *Dalbergia pinnate* (Lour) Prain. *Dalbergia paniculata* Roxb., *D. assamica* Benth., *D. reniformis* Roxb. *D. sympathetica* Nimbus ex Grah., *D. melanoxylon* Guill & Perr. are trees or shrubs having medicinal properties and allied utility more or less, besides economic uses.

Chemical composition

Bark contains 14% tannin. Root bark contains lanciolarin glycoside.

Pharmacodynamics

Rasa	: Kaṣāya, tikta, kaṭu
Guṇa	: Laghu
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma

Properties and action

Karma	: Vedanāsthāpana
	Śothahara
Roga	Dīpana-pācana-anulomana
	Vraṇaśothahara
	Balavardhaka-balya
	Āmadoṣapācana-dhātupoṣaka
	: Vedanā śōtha pradhāna vikāra
	Āmavāta-sandhivāta-vātavyādhi
	Agnimāndya vibandha
	Dourbalya-āmadoṣajanya dourbalya
	Śōṣa.

Therapeutic uses

The drug Gorakṣa is vedanāsthāpana and śothahara as an analgesic as well as anti-inflammatory that alleviates pain and swelling in various ailing conditions. Seeds oil is topically applied on rheumatic disorders (āmavāta, sandhivāta and other diseases under vātavyādhi). Leaves

are pasted (lukewarm) on lesions of swelling and pain in such complaints.

A decoction of bark is used dyspepsia. The seed oil is applied for rheumatic affections.

Besides and effective application of Gorakṣa in vātavyādhi and other conditions of pain (vēdanā) and inflammation (śoṭha), it is also balya and useful in general debility specially caused by āmadoṣa being its action as āmadoṣa pācana. It is useful in agnimāndya (loss of gastric fire or power) and vibandha (constipation) being dipana, pācana and anulomana (stomachic, digestive and carminative).

Another kind of Gorakṣa, Gorakhi (source plant botanically known as *Dalbergia volubilis* Roxb.) has almost similar medicinal properties.

Parts used : Whole plant, seeds oil, leaves.

Dose : 20-30 gm. (decoction or avaleha).

Formulation : Gorakṣa avaleha.

B. GORAKṢA (ख. गोरक्ष)

शिरिषपत्रो गोरक्षः कषायकटुतिक्तकः ।

लघुरुष्णः कटुः पाके कफवातविनाशनः ॥

वेदनास्थापनः शोथहरस्त्वामविपाचनः ।

आमवातेऽग्निमान्द्ये च सदैर्बल्ये प्रलभ्यते ॥

Dravyaguṇa Vijñāna, part II, p. 83.

SIMBITIKĀ-SEVA

Botanical name : *Malus sylvestris* Mill.

Syns. *Pyrus malus* Linn., *Malus pumila* Mill., *M. communis* DC., *M. sylvestris* Hort. non Mill., *M. domestica* Borkh., *Pyrus malus* Linn. (in part).

Family : Rosaceae

Classical name : Simvitikā-Seva

Sanskrit names

Simvitikā, Seva, Sivitikā, Muṣṭipramaṇa badara, Siñcitikā, Simbitikā.

Regional names

Seva, Seba (Hindi), Safarchand (Guj., Mar.); Suph, Soof (Sindh); Tupaphah (Arabic); Apple (Eng.).

Description

A low round-crowned tree, usually upto 5 meters high, with tomentose or heavily pubescent young growth.

Leaves mostly clustered on short shoots or spurs, ovate or elliptic to broad elliptic, 4.5-10 cm. long, soft in texture with margins bluntly serrate.

Flowers white suffused with pink, borne in close clusters.

Fruits in fleshy prone, sub-globose of varying size, shape and colour with a depression at either end.

Flowering and fruiting time

Apple (Orchard) farming season. Picking (of fruits) season generally begins from and around September.

Distribution

Plant is cultivated in the Himalayan regions in North-western and Kashmir. Himalayan regions specially Kashmir, Himachal Pradesh, Kumaon, Garhwal (Uttar Pradesh hills), at the altitudinal range from 2,743 m. to 9,000 m. Apple plant is essentially suited to regions which have a low winter temperature attended by snowfall.

Apple occupies the most important position among the fruits of temperate regions and widely cultivated for delicious and most popular fruits relished very commonly.

Kinds and varieties

There are very large number of horticultural forms, several types, varieties and hybrids alongwith several grades of apple fruits. Nearabout or atleast 15 and many more (new types) are cultivated on commercial scale in different Himalayan regions in India.

Chemical composition

The composition of the apple fruits varies with variety, climatic conditions during the growing season and the stage of maturity.

The analytical values of apple fall within the following ranges : total solids 13.6-26.0, total sugars (as invert.) sugars 9.5-7.4, glucose 2.5-5.6, fructose 6.5-11.8, sucrose 1.5-6.0, acids (as malic acid) 0.3-1.0, and tannin 0.02-0.15 per cent.

Pharmacodynamics

Rasa	: Madhura, kaṣāya
Guṇa	: Guru, snigdha
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittahara

Properties and action

Karma	: Bṛṃhaṇa
	Balya
	Mastiṣkabalya
	Hṛdya
	Śukrajanana
	Rocana-dīpana
	Yakṛdbalya
	Rucivardhana
	Sara-anulomana-mṛdurecana
	Raktaśodhaka
	Jvaraghna
	Varṇya
	Mūtrala
	Aśmarīghna
	Grāhī (lower dose)
Roga	: Hṛdroga
	Mastiṣkaroga
	Daurbalya
	Vibandha
	Āmāśayāmlatā
	Raktadoṣa
	Dāha
	Mūtrakṛchra-mūtrāghāta
	Aśmarī
	Varṇavikāra
	Yakṛdvikāra

Aruci-agnimāndya
Vātapittajanya vikāra.

Therapeutic uses

The drug Simvitikā is very useful in cardiac disorders and mental complaints, being cardi tonic (hr̥dya), nervine tonic and mental promoter (nāḍi-mastiṣka balya). It is laxative, carminative, diuretic, astringent (lower dose), stomachic, blood purifier, febrifuge, complexion promoter and enhancing seminal generation and it is general tonic. Fruits are generally recommended as wholesome (pathya) article in several diseases and also in convulsance.

Prominently the apples reputed as medicinally potent delicious fruits of choice, Simvitikā (apples) health promoter, protective disease-resistant and vitalizer and energetic fruits, and they are considered as antiscorbutic fruits; they are rich in pectin and are useful in diarrhoea. Apple juice, syrup and vinegar reduce curd tension of milk used in infant feeding. Apple murabba, preserve popular in country, is regarded as a stimulant for the heart; it is reported to relieve physical heaviness and mental strain. The rich chemical profile provides vast medicinal potentials of apple fruits. Thus, the fruits have wide utility as popular fruit with medicinal utility and wide utilisation in a number of products of common use, having commercial importance.

Besides the fruits, the bark of apple trees particularly the root-bark is considered anthelmintic, refrigerant and dyspepsia. An infusion of the bark is given in intermittent, remittent and bilious fevers. An anti-bacterial substance phloretin has been isolated from apple leaves (yield 2.4%). It inhibits the growth of a number of Gram-positive and Gram-negative bacteria. Phloridrin is also present in apple shoots, root bark and seeds. Both phloretin and phloridzin produce glycosuria in experimental animals, the biological studies report of studies conducted on apple. The apple fruits as well as other parts of source tree have been proved to be of multifarious uses in health and medicine including dietetics.

Parts used : Fruit (ripe).

Dose

Syrup (pānaka) 100 ml. Murabba sev 25 gm. Ripe fruit edible.

SIMBITIKĀ (SIVITIKĀ-SIŃCITIKĀ) सिम्बितिका (सिवितिका-सिञ्चितिका)

सेवम्

क. मुष्टिप्रमाणं बदरं सेवं सिवितिकाफलम्।

ख. सेवं समीरपित्तघ्नं बृंहणं कफकृद् गुरु।

रसे पाके च मधुरं शिशिरं रुचि-शुक्रकृत्॥

Bhāvaprakāśa Nighaṇṭu, Āmrādīphala varga, 125-126.

ŚIRĪṢA

Botanical name : Albizzia lebbbeck Benth.

Family : Mimoseae

Classical name : Śirīṣa

Sanskrit names

Śirīṣa, Śukapriya

Regional names

Siris, Siras (Hindi); Shirish (Beng.); Shiras (Mar.); Sarsado (Guj.); Sharin (Punj.); Vegiai (Tam.); Dirasana (Tel.); Bagemara (Kann.); Baga (Mal.); Sultatul ashjar (Arabic).

Description

A large deciduous quick growing tree about 50-60 feet tall generally along roadsides; crown spreading; bark brownish grey, lough with numerous short irregular cracks, blaze crimson; sapwood yellowish white, heart wood dark brown with lighter or darker streaks, resembling walnut, hard.

Leaves pubescent, rachis 17.7-23 cm. with a large, oblong gland near base, pinnae 2-3 pairs with one or more

smaller glands between upper pinnae, 12.7-1.52 cm. long; leaflets 6-18 pairs 2.5-4.5 × 1.3-1.9 cm., obliquely-oblong, obtuse.

Spikes forming short, corymbose racemes 2.4 slender pedicels. flowers white, mildly scented; stamens greenish, 3.8 cm. long.

Pods glabrous thin, straw coloured 20-30.5 × 2.5-5 cm.; dehiscence is often tardy and partial and as a rule, after reaching ground; seeds 6-12 (6-10), flat.

Flowering and fruiting time

Plant flowers in April-May or June and fruiting begins and ripens during cold season. Pods are found in well matured state on trees till summer season. Plant becomes leafless during winters.

Distribution

Plant occurs throughout country and it ascends in the Himalayan region upto 4,000 feet (1400 meters). It is found in Andhra Pradesh, Gujarat, Jammu & Kashmir, Maharashtra, Tamilnadu and Uttar Pradesh.

Kinds and varieties

There are various species of *Albizzia* viz. *Albizzia odoratissima* Benth., *Albizzia procera* Benth. and *Albizzia lucida* Benth. Śveta śīriṣa (Kaṭabhī or Kīṇihī), botanically known as *Albizzia procera* Benth., also finds mention in classical compendia (Caraka Saṁhitā, Sūtra, 4-15) alongwith another allied drug Kaṭabhī (as Śīriṣa bheda), a kind of Śīriṣa śveta (Caraka Saṁhitā, Cikitsā, 9-70) which is botanically identified as *Albizzia lucida* Benth. Kṛṣṇa śīriṣa (Kālā śīriṣa or black variety) is another kind of Śīriṣa which is botanically named as *Albizzia odoratissima* Benth. Rakta śīriṣa (lal śīriṣa or red variety) is sometimes referred as *Albizzia amara* Boir. In Travancore-Cochin, another species of *Albizzia* or kind of Śīriṣa is known as *Albizzia marginata* Merr. which is frequently claimed and prevalent (procured) as Śīriṣa. The colour of bark of these species more or less differ in addition to certain other features of source plants in particular.

Chemical composition

Bark contains tannin 7-11% and saponin. Bark also yields gum-resin (resinous substance).

Pharmacodynamics

Rasa	: Kaṣāya, tikta, kaṭu
Guṇa	: Laghu, rūkṣa, tiksṇa
Vīrya	: Iṣad uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣahara

Properties and action

Karma	: Viśaghna Cakṣuṣya Śothahara-vedanāsthāpana Varṇya Śirovirecana Stambhana Vāmaka (higher dose) Raktaśodhaka-śothahara Kaphaghna Vṛṣya Kuṣṭhaghna
Roga	: Viṣa-sthāvara-jāṅgama viṣa-sarpaviṣa- mūṣika viṣa Netraroga-naktāndhya Śotha-gaṇḍamālā Varṇavikāra Carmavikāra Vraṇa Dantavikāra-dantadourbalya Kaṇḍū-kuṣṭha Raktavikāra-visarpa-śotha- gaṇḍamālā Kāsa-śvāsa-pratiśyāya Kaphavikāra Śukradaurbalya-klaibya Śīroroga-ardhāvabhedaka- sūryāvarta Masūrikā

Chemical composition

Bark contains tannin 7-11% and saponin. Bark also yields gum-resin (resinous substance).

Pharmacodynamics

Rasa	: Kaṣāya, tikta, kaṭu
Guṇa	: Laghu, rūkṣa, tiksṇa
Virya	: Iṣad uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣahara

Properties and action

Karma	: Viṣaghna Cakṣuṣya Śothahara-vedanāsthāpana Varṇya Śirovirecana Stambhana Vāmaka (higher dose) Raktaśodhaka-śothahara Kaphaghna Vṛṣya Kuṣṭhaghna
Roga	: Viṣa-sthāvara-jāṅgama viṣa-sarpaviṣa- mūṣika viṣa Netraroga-naktāndhya Śotha-gaṇḍamālā Varṇavikāra Carmavikāra Vraṇa Dantavikāra-dantadourbalya Kaṇḍū-kuṣṭha Raktavikāra-visarpa-śotha- gaṇḍamālā Kāsa-śvāsa-pratiśyāya Kaphavikāra Śukradaurbalya-klaibya Śīroroga-ardhāvabhedaka- sūryāvarta Masūrikā

Viṣamajvara
Medoroga.

Therapeutic uses

The drug Śīrīṣa is viṣaghna that counters poison; it is abortifacient, astringent, restorative and tonic. It is used in consumption, diarrhoea, erysepalas, night blindness, piles, respiratory disorders, skin diseases and antidote against snake-bite. A powerful abortifacient constituent has been isolated from the source plant. The studies conducted with the drug have revealed protection of prolonged duration of illness against histamine bronchospasm.

The decoction of the bark and its powder are used against sthāvara and Jāṅgama viṣa (poisoning effects caused by plant and animal sources). Specially Śīrīṣa is given against snake-bite (sarpa daṁśa). Mahāśrīrīṣa agada and Pañcaśrīrīṣa agada (Caraka Saṁhitā, Cikitsā, 23-218) which comprises all the five parts (pañcāṅga) of Śīrīṣa. Prime classical compendia of Indian medical system appreciate Śīrīṣa as a best drug against poisoning ('Śīrīṣo viṣaghnānām' : Caraka Saṁhitā, Sūtra. 29-40, Aṣṭāṅga Hṛdaya, 40-48). Several recipes and compound formulations consisting Śīrīṣa are incorporated in medical texts and recommended in cases of different kinds of poisoning (vividha viṣa), as a single drug and in combination of other suitable anti-poisoning drugs. which are administered in different modes.

In dūṣiṣa, śīrīṣa kṣāra (alkali) and hiṁsrā is indicated for local application (Aṣṭāṅga Hṛdaya, Uttara, 35-46).

The external application of paste of śīrīṣa and sinduvāra (nirguṇḍī) counteracts poison (Caraka Saṁhitā, Sūtra, 3-28). The seeds of white marica soaked in the juice of śīrīṣa flowers for a week time and the same has been recommended (Caraka Saṁhitā, Ci. 23-193) as a good antidote remedy to be used against snake bite by administering it as snuff, intake and collyrium. In other reference of therapeutic texts (Vṛndamādhava, 68-10), the leaves of śīrīṣa have been indicated for using in this anti-poisoning recipe.

In bheka-garala (frog-poisoning), the śīriṣa seeds impregnated with snuhi-latex are recommended (Cakradatta, viṣaroga cikitsā, 26).

In rat-poisoning (ākhuviṣa), the paste of śīriṣa and Indudī is suggested to orally use with honey (Suśruta Kalpa. 7-12). The bark, fruit and heart-wood of Śīriṣa are used (Ibid, 7-20), and similarly, the seeds and heart-wood of Śīriṣa may be used as snuff for head-evacuation (Ibid, 7-37).

For treatment of insect-bite (kīṭaviṣa), the seeds of śīriṣa are mixed with pippalī powder impregnated thrice with arka kṣīra (calotropis latex) and it is used to eradicate insect poison (Aṣṭāṅga Hr̥daya, Uttara. 37-43).

The leaves, bark, root and fruits of śīriṣa mixed with trikaṭu (śuṇṭhī, marica-pippalī) and added with salt and honey, are taken in case of insect poisoning (Suśruta Samhitā, kalpa, 5-81).

For vomiting in poisoning case particularly in kapha predominance, śīriṣa (leaves, bark, root and fruits) alone or mixed with aṅkola (Alangium lamarckii) root with rice water is given orally (Aṣṭāṅga Hr̥daya, 37-76).

Externally, the drug Śīriṣa is used in erysipelas (visarpa); the flowers (śīriṣa puṣpa) mixed with little ghee has been suggested for applicaiton as a paste Caraka Samhitā, Cikitsā, 21-94). The juice of śīriṣa mixed with honey is prescribed to use as collyrium for alleviating acute conjunctivitis (Gadanigraha, 3-31-150). Leaves juice is applied to eyes in eye-diseases especially night-blindness (rātryandhatva). Śīriṣa is variously indicated in treatment of eye-diseases (netra-roga cikitsā).

A paste of śīriṣa tvak (bark of trunk) is applied in kuṣṭha roga (Caraka and Vāgbhaṭa). The seeds of śīriṣa are applied locally in swelling (śoṭha) cervical adenitis (gaṇḍamālā). Bark paste is applied in skin affection, colour (pigment) disorders, ulcers and eruptive boils. Seeds are also used for local applicaiton wounds (vraṇa) and eruptive boils (visphoṭa). The gargle decoction of bark is suggested in dental ailments and also for strengthening the teeth. The snuff of seeds of śīriṣa and mūlaka (radish) is

prescribed in treatment of śirahśūla (headache) especially sūryāvṛata and hemicrania (ardhāvabhedaka) in therapeutics (Suśruta Saṁhita, Uttara, 86-31, Vṛndamādhava, 62-38).

In medoroga (obesity), the rubbing with the powder of śirīṣa mixed with other suitable drug (e.g. lāmajjaka, nāgakeśara, lodhra) is suggested to check impurities of skin and excess and excessive perspiration (Vṛndamādhava, 36-37). In condition of difficult labour (mūḍhagarbha), a post operative measure in case of con-founded foetus, water processed with śirīṣa and arjuna (Terminalia arjuna) is given orally to woman under labour (Suśruta Saṁhitā, Cikitsā, 15-24).

Internally, the Śirīṣa is used in cough, asthma and coryza. Seeds powder as snuff (nasya) is indicated in kaphaja roga. The juice of flowers mixed with pippali cūrṇa (long pepper powder) and honey is prescribed in hiccough (hikkā) and asthma (śvāsa), particularly in predominance of kapha and pitta doṣa (Caraka Saṁhitā, Cikitsā, 17-11). The avaleha of bark is also taken in asthma and allied problem of respiratory tract.

The decoction of bark or powder of seeds obtained from Śirīṣa are used in blood impurities, erysipelas, oedema (śoṭha) and gaṇḍamālā.

The powder of seeds of śirīṣa with cow's milk (godugdha) is taken as aphrodisiac and seminal disorders. Flowers of śirīṣa are useful as śukrastambhana. The juice of śirīṣa and kiṇihī mixed with honey is given worms (kṛmiroga).

Parts used : Bark, seeds, leaves, flowers.

Dose

Powder 3-6 gm., Expressed juice 10-20 ml., Decoction 50-100 ml.,

Formulations (yoga)

Mahāśirīṣa agada, Śirīṣārīṣa

Groups (gaṇa)

Viśaghna, Vedanāsthāpana, Śirovirecana, Kaṣāyaskandha (Caraka Saṁhitā), Śālasārādi (Suśruta Saṁhitā).

ŚIRĪṢA (शिरीष)

शिरीषो मधुरोऽनुष्णः सतिक्तस्तुवरो लघुः ।

निहन्ति दोषवीसर्पशोफकासविषव्रणान् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 975.

शिरीषो मधुरोऽनुष्णस्तिक्तश्च तुवरो लघुः ।

दोषशोथविसर्पघ्नः कासव्रणविषापहः ॥

Bhāvaṇṭu, Vaṭādi varga, 14.

शिरीषः कटुकः शीतो विषवातहरः परः ।

पामासृक्कुष्ठकण्डूति-त्वग्दोषस्य विनाशनः ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 60.

शिरीषः विषघ्नश्रेष्ठत्वम्

‘शिरीषो विषघ्नानाम् ।’

Aṣṭāṅga Hṛdaya, Uttara, 40-48.

नवनेत्रशोथे नेत्राभिष्यन्दे

‘ताम्बूलशिग्रुकरवीरशिरीषदन्ती.... ।

प्रत्येकशो मधुयुतः स्वरसोऽञ्जनेन

शोथं नवं नयनयोः सहसैव हन्ति ।’

Śodhala, Gadanigraha, 3-3-150.

विषे (सर्पदंष्ट्र) शिरीषस्य पुष्पप्रयोगः

रसे शिरीषपुष्पस्य सप्ताहं मरिचं सितम् ॥

भावितं सर्पदंष्ट्रायां नस्यपानाञ्जने हितम् ।

Caraka Saṁhitā, Cikitsā, 193/194.

सर्पविषे

रसे शिरीषपुष्पस्य सप्ताहं मरिचं सितम् ।

भावितं सर्पदंष्ट्रानां नस्यपानाञ्जने हितम् ॥

Caraka Saṁhitā, Cikitsā, 23-191.

(‘शिरीषपत्रस्वरसे’ पाठान्तरः)

Vṛndamādhava, 68-10.

विसर्प-विस्फोट-विषशमनाय चतुःसमम् (लेपयोगः)

Cakradattu, 53-33.

कुष्ठे

‘शैरिणी त्वचं....पिष्टा चतुर्विधः कुष्ठनुल्लेपः ।’

Caraka Saṁhitā, Cikitsā, 7-96.

Aṣṭāṅga Hṛdaya, Cikitsā, 19-63.

कफपित्तानुगे श्वासे

शिरीषपुष्पस्वरसः सप्तपर्णस्य वा पुनः ।

पिप्पलीमधुसंयुक्तः कफपित्तानुगे मतः ॥

Caraka Samhitā, Cikitsā, 21-111.

कफजे विसर्पे

‘....शिरीषकुसुमानि च ।

....पृथगालेपनं दद्याद् द्वन्द्वशः सर्वशोऽपि वा ।

प्रदेहाः सर्व एतैते देयाः स्वल्पघृताप्लुताः ॥’

Caraka Samhitā, Cikitsā, 21-91.

विसर्पशमनार्थं शिरीषयोगाः

शुकतर्वादिलेपः शिरीषादिकवलग्रहाः

दशाङ्गलेपः शिरीषत्वक्प्रयोगः

Cakradatta, 53/29-32.

मूषिकविषे

‘क्षौद्रोपेताः शिरीषस्य लिह्यात् सारफलत्वचः ।’

Suśruta Samhitā, Kalpa, 7-20.

सर्पविषे कीटविषे

‘समूलपुष्पाङ्कुरबल्कबीजात्, क्वाथः शिरीषात् त्रिकटु प्रगाढः ।

सलावणः क्षौद्रयुतोऽथ पीतः, विशेषतः कीटविषं निहन्ति ॥’

Suśruta Samhitā, Kalpa, 5-81.

दन्तकाष्ठगते विषे

‘शिरीषमाषका वापि सक्षौद्राः प्रतिसारणम् ।’

Suśruta Samhitā, Kalpa, 1-50.

पञ्चशिरीषोऽगदः

शिरीषफलमूलत्वक्पुष्पपत्रैः समैर्घृतैः ।

श्रेष्ठः पञ्चशिरीषोऽयं विषाणां प्रवरो वधे ॥

Caraka Samhitā, (Viṣa) Cikitsā, 23-218.

विषे

मूलत्वक्पत्रपुष्पाणि बीजं चेति शिरीषतः ।

गवां मूत्रेण सम्पिष्टं लेपाद्विषहरं परम् ॥

Bhāvaprakāśa, Madhyakhaṇḍa, 67-79.

सूर्यावर्त्तार्धावभेदकयोः नस्यार्थम्

तथाऽर्धभेदके व्याधौ प्राप्तमन्यच्च यद्भवेत् ।

शिरीषमूलकफलैः अवपीडोऽनयोः हितः ॥

Suśruta Samhitā, Uttara, 26-62.

मसूरिकाचिकित्सायां शिरीषादिप्रलेपः

Cakradatta, 53-17.

कृमिनाशनार्थम्

‘ततः शिरीषकिणहीरसं क्षौद्रयुतं पिबेत् ।’

Suśruta Samhitā, Uttara, 54-24.

किणिही शिरीषपत्रा

क. महाश्वेता श्वेतधामा श्वेतस्यन्दाऽपराजिता ॥

कटभी किणिही ज्ञेया लोहिनी गिरिकर्णिका ।

शिरीषपत्रा कालिन्दी विषघ्नी शतपद्मपि ॥

श्वेतपुष्पा वाजिखुरा श्वेतपाटलिपिण्डिका ।

अपराऽव्यक्तगन्धाह्वा नीलपुष्पी गवादनी ॥

ख. किणिही तुवरा तीक्ष्णा कटुका विनियच्छति ।

दोषत्रयविषश्चित्रव्रणग्रहशिरोगदान् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 867-870.

शिरीषः

शिरीषः कलिमो विप्रो मृदुपुष्पः कपीतनः ॥

भण्डीरो मण्डिलो भण्डी प्लवङ्गः शिखिनीफलः ।

शुकपुष्पः शुकतरुः श्यामवर्णः शुक्रप्रियः ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 973-975.

सर्पदंशप्रतिरक्षणार्थं प्रत्यङ्गिरामूलप्रयोगः

मूलं तण्डुलवारिणा पिबति यः प्रत्यङ्गिरासम्भवं

निष्पिष्टं शुचि भद्रयोगदिवसे तस्याहिभीतिः कुतः ।

दर्पदेव फणी यदा दशति तं मोहान्वितो मूलपं

स्थाने तत्र स एव याति नियतं वक्त्रं यमस्याचिरात् ॥

Cakradatta, Viṣa cikitsā, 2.

मण्डूकविषे शिरीषबीजप्रयोगः

‘लेप इव भेकगरलं शिरीषबीजैः स्नुहीपयःसिक्तैः ।’

Cakradatta, Viṣa roga cikitsā, 26.

सर्पदंशे शिरीषपुष्पाञ्जनम्

शिरीषपुष्पस्वरसे भावितं श्वेतसर्षपम् ।
सप्ताहं सर्पदृष्टानां नस्यपानाञ्जने हितम् ॥

Cakradatta, Viṣa cikitsā, 7.

हिक्काश्वासयोः

शिरीषपुष्पस्वरसः सप्तपर्णस्य वा पुनः ।
पिप्पलीमधुसंयुक्तः कफपित्तानुगे मतः ॥

Caraka Samhitā, Cikitsā, 17-114.

विषमज्वरे

कल्कः शिरीषपुष्पस्य रजनीद्वयसंयुतः ।
नस्ये सर्पिः समायोगाज्ज्वरं चातुर्थिकं जयेत् ॥

Yogarātnākara, p. 98.

मूढगर्भे शस्त्रकर्मोत्तरे

‘शिरीषककुभाभ्यां च तोयमाचमने हितम् ।’

Suśruta Samhitā, Cikitsā, 15-24.

सूर्यावर्त्तार्थावभेदकयोः

तथाऽर्धभेदके व्याधौ प्राप्तमन्यच्च यद् भवेत् ।
शिरीषमूलकफलैरवपीडोऽनयोर्हितः ॥

Suśruta Samhitā, Uttara, 26-31.

Vṛndamādhava, 62-28.

व्रणे

फले शैरीषकारञ्जे धातुचूर्णानि यानि च ।
व्रणेषूत्सन्नमांसेषु प्रशस्तान्यवसादने ॥

Suśruta Samhitā, Sūtra, 37-32.

स्थौल्ये

‘शिरीषलामज्जकहेमरोध्रैस्त्वग्दोषसंस्वेदहरः प्रघर्षः ।’

Vṛndamādhava, 36-17.

क्रिमिरोगे

‘रसं शिरीषकिणिहीरसं क्षौद्रयुतं पिबेत् ।’

Suśruta Samhitā, Uttara, 54-24.

रसं शिरीषकिणिहीपारिभद्रककेबुकात् ।

पलाशबीजपत्तूरपूतिकाद् वा पृथक् पिबेत् ॥

Aṣṭāṅga Hṛdaya, Cikitsā, 20-26.

सर्पदंशे शिरीषपुष्पाञ्जनम्

शिरीषपुष्पस्वरसे भावितं श्वेतसर्षपम् ।

सप्ताहं सर्पदृष्टानां नस्यपानाञ्जने हितम् ॥

Cakradatta, Viṣa cikitsā, 7.

हिक्काश्वासयोः

शिरीषपुष्पस्वरसः सप्तपर्णस्य वा पुनः ।

पिप्पलीमधुसंयुक्तः कफपित्तानुगे मतः ॥

Caraka Samhitā, Cikitsā, 17-114.

विषमज्वरे

कल्कः शिरीषपुष्पस्य रजनीद्वयसंयुतः ।

नस्ये सर्पिः समायोगाज्ज्वरं चातुर्थिकं जयेत् ॥

Yogarātnākara, p. 98.

मूढगर्भे शस्त्रकर्मोत्तरे

‘शिरीषककुभाभ्यां च तोयमाचमने हितम् ।’

Suśruta Samhitā, Cikitsā, 15-24.

सूर्यावर्त्तार्धावभेदकयोः

तथाऽर्धभेदके व्याधौ प्राप्तमन्यच्च यद् भवेत् ।

शिरीषमूलकफलैरवपीडोऽनयोर्हितः ॥

Suśruta Samhitā, Uttara, 26-31.

Vṛndamādhava, 62-28.

व्रणे

फले शैरीषकारञ्जे धातुचूर्णानि यानि च ।

व्रणेषूत्सन्नमांसेषु प्रशस्तान्यवसादने ॥

Suśruta Samhitā, Sūtra, 37-32.

स्थौल्ये

‘शिरीषलामज्जकहेमरोध्रैस्त्वग्दोषसंस्वेदहरः प्रघर्षः ।’

Vṛndamādhava, 36-17.

क्लिमिरोगे

‘रसं शिरीषकिणिहीरसं क्षौद्रयुतं पिबेत् ।’

Suśruta Samhitā, Uttara, 54-24.

रसं शिरीषकिणिहीपारिभद्रककेबुकात् ।

पलाशबीजपतूरपूतिकाद् वा पृथक् पिबेत् ॥

Aṣṭāṅga Hṛdaya, Cikitsā, 20-26.

आखुविषे

‘शिरिषेङ्गदकल्कं तु लिह्यात् तत्र समाक्षिकम्।’

Suśruta Samhitā, Kalpa, 7-12.

कफे श्रेष्ठाम्बुना पीत्वा विषमाशु समुद्गमेत्।

शिरिषपत्रत्वङ्मूलफलं चाङ्गोलमूलवत्॥

Aṣṭāṅga Hṛdaya, Uttara, 37-76.

अर्कस्य दुग्धेन शिरिषबीजं त्रिर्भावितं पिप्पलीचूर्णमिश्रम्।

एषोऽगदो हन्ति विषाणि कीटभुजङ्गलूतोन्दुरुर्वश्चिकानाम्॥

Aṣṭāṅga Hṛdaya, Uttara, 37-43.

ŚIVALINGĪ

Botanical name : Bryonopsis laciniosa (Linn.) Naud.

Classical name : Śivalingī

Sanskrit names

Śvalingī, Liṅginī, Svayambhū, Īśvarī, Bahupatrā, Śaivavallikā, Liṅgasambhūtā, Amṛtā, Liṅgi, Citraphalā, Śivavallī, Stambhinī.

Regional names

Shivalingi (Hindi); Shivlingi, Gargu-maru, Kunwajer (U.P., M.P.).

Description

Annual slender herbs, glabrous, spreading climbers.

Leaves deeply palmately 5-lobed, lvs. 8-12 cm. in diam.; scabrous above, smooth, beneath, margin denticulate, undulate or sub-crenulate.

Peduncle (in male flowers) 5-15 mm. long, calyx-tube 2-4 × 3-6 mm., lobes spreading, Ca 1 mm. long; corolla greenish-yellow, shortly papillose 4-10 mm. broad, lobes ovate, acute; filaments 1-15 mm. long; anthers Ca. 2 mm. long. Female flowers fasciculate, ovary globose.

Flowers monoecious, often male and female clustered together. Calyx campanulate, lobes subulate. Corolla campanulate, 5-partite, segments often reflexed. Pedicels shorter in male flowers.

Fruits berries, spherical yellowish-green or green-white, 6-striped, 12-17 mm. thick, upto 2 cm. across.

Seeds ovoid, with thickened, corrugated, margins; seed Ca. 5 × 3 mm., grey, belted attenuate with raised projections on both sides.

Flowering and fruiting time

Plant flowers and fruits during the period from August to December.

Distribution

Plant occurs in paleotropics. It is common upon bushes, shrubs and wire fences.

Pharmacodynamics

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Pittakaphahara

Properties and action

Karma	: Apatyakara-putrajanana
	Prajāsthāpana
	Rasāyana
	Balya
	Sidhmahara
Roga	: Bandhyātva
	Carmaroga
	Jvara
	Ādhmāna
	Dourbalya

Therapeutic uses

The drug Śivaliṅgī is garbhasthāpana (conception promoting or foetus stabilising) herbal agent promoting fertility (prajā sthāpana). The seeds are orally given for treating sterility (vandhyātva) as well as helping conception and development including stabilisation of foetus in pregnancy.

As a fertility-drug, Śivaliṅgī is appreciably regarded an important medicine for male progeny (putra janana). Medical texts (Bhāvaprakāśa, Cikitsā, 70-31/32 etc.) men-

tions that the seeds of Śivaliṅgī are taken with milk which provide male progeny to pregnant mother. Śivaliṅgī belongs to group of valuable drugs in the area of therapeutics of gynaecological disorders specifically progeny (promoting conception) against sterility attaching classical significance in Indian medicine.

The leaves are pasted over swelling. Leaves, fruits and roots medicinally useful. The drug is useful in fever, flatulence, skin diseases and general debility; it is bitter tonic.

Parts used : Seeds.

Dose : 3-5 gm.

ŚIVALIṄGĪ (शिवलिङ्गी)

- क. लिङ्गिनी बहुपत्रा स्यादीश्वरी शैवमल्लिका ।
स्वयम्भूर्लिङ्गसम्भूता लिङ्गी चित्रफलाऽमृता ॥
पाण्डोली लिङ्गजा देवी चण्डापस्तम्भिनी तथा ।
शिवजा शिववल्ली च विज्ञेया षोडशाह्वयाः ॥

Rāja Nighaṇṭu, Guḍūcyādi varga, 45-46.

- ख. लिङ्गिनी कटुरुष्णा च दुर्गन्धा च रसायनी ।
सर्वसिद्धिकरा दिव्या बल्या रसनियामिनी ॥

Rāja Nighaṇṭu.

लिङ्गिनी कटुका चोष्णा दुर्गन्धा च रसायनी ।
सर्वसिद्धिप्रदा लोहस्तम्भिनी सूतबन्धिनी ॥
सिध्मनाशकरी वक्ष्यकारिणी च प्रकीर्तिता ॥

Nighaṇṭu Ratnākara.

पुत्रजननार्थं शिवलिङ्गी लिङ्गिनी

शूकशिम्बीमूलं मध्यं वा दधिफलस्य सपयस्कम् ।
पीत्वाऽथो भवलिङ्गीबीजं कन्यां न सूते स्त्री ॥

Bhāvaprakāśa, Cikitsā, 70-31.

पुत्रकमञ्जरिमूलं विष्णुक्रान्तेशलिङ्गिनी सहिता ।
एतद् गर्भेऽष्टदिनं पीत्वा कन्यां न सर्वथा सूते ॥

Bhāvaprakāśa, Cikitsā, 70-32.

ŚLEṢMĀTAKA

Botanical name : *Cordia dichotoma* Forst. f.

Syn. *Cordia obliqua* Willd; *C. myxa* Roxb. non Linn.

Family : Boraginaceae

Classical name : Śleṣmātaka

Sanskrit names

Śleṣmātaka, Bahuvāra, Karbudāra, Śākata, Śelu, Uddālaka, Śleṣmahala, Śailuka, Picchila, Bhūtavr̥kṣaka, Śāpita, Mukṭāphala.

Regional names

Lisorha, Lasorha, Labherha (Hindi); Behnari (Beng.); Lasurha (Punj.); Bhonkar (Mar.); Vadaguda (Guj.); Vadgunda (Ma.); Vidi (Tam.); Dilka (Arabic); Sapistan (Pers.); Sebesten (Eng.).

Description

Small or medium-sized deciduous tree, 30-40 feet high, with a short, usually crooked trunk, 2-3 feet in girth. Bark brownish. Wood clear yellow when freshly.

Leaves alternate, 7.5-15 cm. long and 10 cm. broad, roundish or varying in outline or shape, edge crenate or wavy, coriaceous; base roundish or gradually narrower cuneate; veins 4-6 pairs; new or young leaves stellate beneath; petiole 1.25-5 cm. long.

Flowers white, often pentamerous, corymbose cymes; bi-sexual flowers often on same plant; calyx 2.5 mm.-3.75 mm. long, dentate, accrescent in fruit; corolla limb 2.5 mm. long.

Drupe green when young (unripe), yellowish-white when ripen (matured), fruits 0.5-1.0 in. long, yellowish brown, pink or nearly black when ripe, with a viscid, sweetish, almost transparent pulp surrounding a central stony part; single seeded.

Flowering and fruiting time

Plant flowers in spring season and fruits ripen in summer end.

Distribution

Plant occurs widely in India and Sri Lanka, specially

in warmer regions. Plants are found almost all over tropical regions of India in both states wild and planted. It is growing more or less in hot climate, ascending (sometimes) upto 3-5,000 ft. elevation.

Kinds and varieties

Some other species of the genus *Cordia* Linn. (Boraginaceae) are referred in context of Śleṣmātaka. Conventionally, a small variety or type of śleṣmātaka is commonly known as Gondi or Gundi or Gondani and other similar regional names is botanically identified as *Cordia rothia* (Roem) Schult. which is popularly named as Chhoṭā lisorha.

Cordia rothi (Roem.) Schult. is a small tree of 20-40 height. It is occurring in the Punjab, Sind, Rajsthan (Rajputana), Gujarat, Central India, Uttar Pradesh, Deccan and Sri Lanka. The drupe is ovoid, 1-1.3 cm. long, longitudinally striated, yellow or reddish brown when ripe, and contains a gelatinous, edible pulp. The bark is astringent and its decoction is used as a gargle. The inner bark yields a fibre used for rope making and caulking boats.

Another variety is Barha (Bṛhat) lisorha which is known by other regional names. It is botanically identified as *Cordia wallichii* G. Don. The source plant is a moderate-sized tree distributed in Gujarat, North Kanara and Deccan. The fruit is considered to be expectorant, astringent and demulcent.

Thus, two kinds of Śleṣmātaka are known in tradition viz. Bṛhat śleṣmātaka and Laghu śleṣmātaka.

Pharmacodynamics

Rasa	: Madhura
Guṇa	: Snigdha, guru, picchila
Vīrya	: Śīta, kaṣāya, tikta (bark)
Vipāka	: Madhura (fruit), Kaṭu (bark)
Doṣakarma	: Vātapittaśāmaka (fruit) Kaphapittaśāmaka (bark)

Properties and action

Karma	: Snehopaga Kaphaniḥsāraka Raktapittaśāmaka

	Viṣaghna
	Vraṇaśodhana-vraṇaropaṇa
	Grāhī-kṛmighna
	Kuṣṭhaghna
	Snehana-tṛṣṇānigrahaṇa
	Mūtrajanana
	Vṛṣya
	Kaṭupouṣṭika
	Tvagdoṣahara
	Jvaraghna
	Śūlahara
Roga	: Kāsa-vātika kāsa-pratiśyāya
	Grahaṇī-pravāhikā
	Kṛmiroga
	Koṣṭhagata rūkṣatā
	Tṛṣṇā
	Raktapitta
	Mūtrakṛcchra-mūtradāha
	Śukradourbalya
	Viṣa
	Sāmānya daurbalya
	Vraṇa
	Karṇaroga
	Kuṣṭha
	Visarpa-visphoṭa
	Masūrikā
	Upadamśa
	Pālitya.

Therapeutic uses

The drug Śleṣmātaka is demulcent, expectorant, astringent, anthelmintic and diuretic. It is used in diseases of the chest and urinary diseases. The kernels are used in external application for ringworm, and the fruit pulp is used as birdlime. A decoction of the bark is used in dyspepsia and fevers. The leaves are used for covering Burmese cheeroots. A glue is prepared from the mucilaginous pulp.

The fruits (specially *Cordia wallichii* G. Don. syn. *Cordia obliqua* Willd. var. *wallichii*) are useful as

demulcent, astringent and expectorant. The bark (specially obtained from Laghu or kṣudra śleṣmātaka-Cordia rothi Roem. & Schult.) is used as an astringent medicine and its decoction is useful as gargle.

The decoction of bark is suggested for in-take in order to counter poison (viṣa). The same is also useful as bitter tonic (daurbalyahara). Bark is useful in worms, grahaṇī roga and diarrhoeal complaints especially dysentery (pravāhikā). The drug is used in dysuria, burning micturition, (mūtradāha), intrinsic haemorrhage (raktapitta), fever for reducing santāpa), kuṣṭha, visarpa and other skin affections. The bark and fruits are useful as antipyretic.

Externally the bark is ground and applied as poison (stings and bites of poisons insects), ulcers and wounds (vraṇa) and ear diseases (karṇaroga), and decoction of bark is used as washing or dressing lotion (prakṣālaṇa and śodhana drava). There are other external application of the bark and other parts which are recommended in various ailments. The bark of śleṣmātaka (śelu) is applied as paste and sprinkling (pralepāścyotana) in visphoṭaka (eruptive boils). The paste of bark is suggested to be applied to eyes in pox (masūrikā). The vegetable (śāka) of śleṣmātaka is recommended (alongwith specific vegetables as wholesome articles) in raktapitta (intrinsic haemorrhage). In all types of spider-poisoning (lūtā viṣa). The bark paste or juice is indicated for local application. The oil extracted by the sunheat of seed-kernels of śleṣmātaka is pounded in sour-gruel and this recipe is recommended for use as snuff and massage for blackenning hairs (keśa-kṛṣṇa-karaṇa).

The raw or young fruits are pickled and ripe fruits are commonly used as household vegetable (acāra and sāga).

The fine powder of the tender fruits mixed with goat's milk and sugar is used in soft chancre (upadāṃśa).

The syrup (pānaka) prepared from fruits of Śleṣmātaka and the use of fruits as decoction are very useful in cough (vātaja kāsa), coryza and catarrhal affections

(pratiśyāya etc.) and throat complaints, being an active expectorant and demulcent agent (affecting on respiratory tract). Fruits are used as aphrodisiac (vr̥ṣya) in seminal complaints (e.g. śukra daurbalya). Fruits are taken as demulcent for allaying abdominal (intestinal) dryness (koṣṭha raukṣya) and also mixed with purgative drugs for subsidising the intensity of cathartics; the fruits are given in excess thirst (tṛṣṇā).

Parts used : Bark, fruit.

Dose

Bark decoction 50-100 ml. Fruit syrup (phala pānaka) 10-20 ml.

Formulations

Śleṣmātaka Pānakā (Śarbat lisorha), Sharbet Lisorha (pānaka).

Group (gaṇa) : Viṣaghna (Caraka Saṁhitā).

ŚLEṢMĀTAKA (ŚELU) श्लेष्मातक (शेलु)

बहुवारः (श्लेष्मातक) तत्पक्वापक्वफलस्य च गुणाः

क. बहुवारस्तु शीतः स्यादुद्दालो बहुवारकः ।

शेलुः श्लेष्मातकश्चापि पिच्छिलो भूतवृक्षकः ॥

ख. बहुवारः विषविस्फोटव्रणवीसर्पकुष्ठनुत् ।

मधुरस्तुवरतित्तः केश्यश्च कफपित्तहृत् ॥

ग. फलमामन्तु विष्टम्भि रूक्षं पित्तकफाक्षजित् ।

तत्पक्वं मधुरं स्निग्धं श्लेष्मलं शीतलं गुरु ॥

Bhāvaprakāśa Nighaṇṭu, Āmrāphalādi varga, 105-107.

श्लेष्मातकः

अ. श्लेष्मातकः श्लेष्मफलः शापितो द्विजकुत्सितः ॥

कर्बुदारो बाहुदारः शेलुको बहुवारकः ।

मुक्तमुक्ताफलः स्वादुः वासन्तकुसुमः शेलुः ॥

पिच्छिलो लेखसारश्च शैलूषो सूतपादपः ।

ब. शेलुः केश्यः सतिक्तोष्णो मधुरस्तुवरः कटुः ॥

विषवीसर्पविस्फोटव्रणपित्तकफघ्ननुत् ।

श्लेष्मातकफलम्

स. फलं तु मधुरं तिक्तं शीतलं वातलं लघु ॥
कषायं कटुकं पाके ग्राहि पित्तकफास्त्रजित् ।

श्लेष्मातकपक्कफलम्

द. तत् पक्कं मधुरं स्निग्धं श्लेष्मलं शीतलं गुरु ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 612-616.

श्लेष्मातकः

श्लेष्मातको बहुवारः पिच्छलो द्विजकुञ्चितः ।

शेलुः शीतफलः शीतः शाकटः कर्बुदारकः ।

भूतद्रुमो गन्धपुष्पः ख्यात एकादशाह्वयः ॥

श्लेष्मातकगुणाः

श्लेष्मातकः कटुहिमो मधुरः कषायः

स्वादुश्च पाचनकरः क्रिमिशूलहारी ।

आम्रास्रदोषमलरोधबहुव्रणार्ति-

विस्फोटशान्तिकरणः कफकारकश्च ॥

Rāja Nighaṇṭu, Āmrādi varga, 200-201.

मसूरिकाप्रतिरोधार्थं श्लेष्मातकपत्रस्य तान्त्रिकप्रयोगः

यावत्सङ्ख्या मसूर्यङ्गे तावद्भिः शेलुवैर्दलैः ।

छिन्नैरातुरनाम्ना तु गुडी व्येति न वर्धते ॥

Cakradatta, Masūrika cikitsā, 54-10.

मसूरिकायाम्

‘प्रलेपं चक्षुषोः दद्याद् बहुवारस्य वल्कलैः ।’

Baṅgasena, Masūrikā, 90.

विस्फोटे

‘श्लेष्मातकत्वचो वापि प्रलेपाश्च्योतने हिताः ।’

Vṛndamādhava, 55-10.

विसर्पे

....त्वचं श्लेष्मातकस्य च ।

पृथगालेपनं कुर्यात्- ॥’

Caraka Saṃhitā, Cikitsā, 21-89/92.

मसूरिकारोगे दाहशमनार्थं श्लेष्मातकत्वक्कषायः

‘शेलुत्वक् कृतशीताम्भः सेकं वा कायशोषणे ।’

Cakradatta, Masūrikā cikitsā, 54-11.

केशनीलिकरणार्थं शेलुफलतैलम्

काञ्चीपिष्टशेलुफलमज्झि सच्छिद्रलौहगे ।

यदर्कतापात् पतति तैलं तन्नस्यम्रक्षणात् ॥

केशा नीलालितसङ्काशाः सद्यः स्निग्धा भवन्ति च ।

नयनश्रवणग्रीवादन्तरोगांश्च हन्त्यदः ॥

Cakradatta, Kṣudraroga cikitsā, 55-137-138.

रक्तपित्ते

‘पटोलशेलुमुनिषण्ण...हितञ्च शाकं घृतसंस्कृतं सदा ।’

Suśruta Samhitā, Uttara, 45-16/17.

उपदंशे

यदनुत्पन्नास्थिफलं शेलोस्तच्चूर्णमाजदुग्धेन ।

निर्गाल्य पटे ससितं हन्त्युपदंशार्तिमन्तरक्षतजाम् ॥

Siddhabhaiṣajya Maṇimālā, 4-799.

विषे

क. सर्वासामेव युञ्जीत विषे श्लेष्मातकत्वचम् ।

भिषक् सर्वप्रकारेण तथा चाक्षीव पिप्पलम् ॥

Suśruta Samhitā, Kālpa, 8-120.

ख. शेलोर्मूलत्वगग्रणि बादरौदुम्बराणि च ।

कटभ्याश्च पिबेत् रक्तगते मांसगते पिबेत् ।

सक्षौद्रं खदिरारिष्टं कौटजं मूलमम्भसा ।

सर्वेषु च बले द्वे तु मधुकं मधुकं नतम् ॥

Caraka Samhitā, Cikitsā, 23-187/188.

SNUHĪ

Botanical name : Euphorbia neriifolia Linn.

Family : Euphorbiaceae

Classical name : Snuhī

Sanskrit names

Snuhī, Sudhā, Samantadugdhā, Vajrī, Sehuṇḍa.

Regional names

Sehunda, Sehanrha, Danda thuhar, Sija (Hindi);

Thor (Punj., Mar., Guj.); Manasa sija (Beng.); Niyodung

(Mar.), Ilaikalli (Tam.); Akujimudu (Tel.); Malekalli (Kann.); Illakalli (Mal.); Jakum (Arabic); Common milk hedge (Eng.).

Description

Large succulent shrub or a small tree, upto 20 ft. high, with jointed, cylindrical or obscurely 5-angled branches bearing short stippular thorns, more or less confluent in vertical or slightly spiral lines. Trunk covered with reticulate bark.

Leaves fleshy, deciduous, 6-12 in. long, obovate-oblong, terminal on the branches (lvs. crowded at the branch-ends).

Flowers yellowish-green or greenish-yellow, involucre yellowish, 2-7 or often 3 in single spike, minute or very small, fleshy, often on 15 in. long peduncle.

Fruits triloculus, consisting appearing three radiating follicles, 1/5 in. long. Seeds minute, like rape seeds.

Flowering and fruiting time

Plant becomes leafless during winters. Flowers begin to appear in springs and subsequently plant bears fruits.

Distribution

Plant occurs commonly in rocky ground throughout the Deccan, Peninsula and is often cultivated for hedges in villages throughout India.

Kinds and varieties

The plant *Euphorbia neriifolia* Linn. closely resembles *Euphorbia nivulia* Buch-Ham. (particularly leaves and other features) but it can be distinguished from it by the position of the thorns which in this species grow on warty knobs, while in the latter, they are borne on flat corky patches.

There are various kinds of *Sehunda* or *Snuhi*. Some species of *Euphorbia* genus are worth reference, such as *Euphorbia antiquorum*, *Euphorbia royleana* Boiss, *Euphorbia tirucali* Linn., *Euphorbia nivulia* Buch-Ham. etc.

As regards particular kinds of *Sehunda* or *Snuhi*, some of them may be identified as following :

Tridhāra snuhī : *Euphorbia antiquorum* Linn.

Saptadhāra snuhī : *Euphorbia royleana* Boiss.

Chhimiya thuhar : *Euphorbia tirucalii* Linn.

(Katathohar) (Kopalsehund)

(Mahāvṛkṣa snuhī) : *Euphorbia nivulia* Buch.

Ham.

Euphorbia nivulia Buch-Ham. A shrub or small tree, upto 30 ft. high, with green, cylindrical, jointed, often whorled branches, armed with spines. Leaves fleshy, linear-oblongate or spatulate, upto 9 in. long. old plants bearing thick and corky bark. The plant is found in the dry and rocky regions, practically throughout India and often grown for hedges.

Classical texts of medicine (i.e. Caraka Saṁhitā) makes two kinds of Snuhi viz. Alpakaṇṭaka and Bahukaṇṭaka which are characterised by less or more thorny features respectively. Bahukaṇṭaka is appreciated as best quality.

Chemical composition

Plant (*Euphorbia neriifolia* Linn.) contains an active principle euphorbian, resin, gum, rubber, calcium malate and other substances. Latex pungent and irritant to skin due to its specific chemical constituents. Latex contains water and water-solubles 69.4-93.3 and caoutchouc 0.2-2.6 per cent. The latex of Dandathuhar (*Euphorbia royleana* Boiss) contains water and water-solubles 64.1-80.5 and caoutchouc.

The latex of Mahāvṛkṣa snuhī contains water and water-solubles 91.0 and 92.1 and caoutchouc 1.1, 0.7 per cent. The latex of another kind of snuhī, konpal sehunḍa (*Euphorbia tirucalii* Linn., Milk Bush, Indian Tree Spurge) contains water and water solubles 53.8-79.9 and caoutchouc 2.8-3.8 per cent. Fresh latex yields a terpenic alcohol, isoeuphorol, identical with euphol (from *E. resinifera*). Dried latex stored for some months, however, does not contain isoeuphorol, but a ketone, euphorone, which on reduction yields isoeuphorol and euphorol, the latter being the principal reduction product Taraxasterol and tirucallol, isomeric with euphorol have been isolated.

Pharmacodynamics

Rasa	: Kaṭu
Guṇa	: Laghu, tikṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātahara

Properties and action

Karma	: Recana-tikṣṇavirecana Raktaśodhaka-śothahara Tvagdoṣahara Viśaghna Vedanāsthāpana (kāṇḍa, patra : stem, leaves) Lekhana-raktimājanaka (latex-kṣīra) Kaphaniḥsāraka

Roga

(a) Ābhyantara (internal)	: Udararoga-gulma (virecana) Yakṛtplīhavarḍdhi (virecana) Pāṇḍu-kuṣṭha-madhumeha- śotha-unmāda (samśodhana) Āmavāta-vātarakta-vātavyādhī Śotha-upadamśa Kāsa-śvāsa-pratiśyāya Kaphaja-vikāra Carmavikāra-kuṣṭha Jāṅgamaviṣa (mūla : root)
(b) Bāhya (external)	: Śotha-vedanā pradhāna vikāra Carmaroga-vicarcikā Dantaśūla-dantakrimi Dhvajabhaṅga (klaibya) Arśāṅkura (kṣārasūtra bandhana) Galaśuṇḍī Bhagandara-duṣṭavraṇa-nāḍivraṇa- vraṇa Kuṣṭha-śvitra Arbuda.

Therapeutic uses

The drug Snuhī or Sehuṇḍa is cathartic and it is

considered as an important drug among cathartic or drastic purgatives (tikṣṇa virecana). It is blood purifier, anti-inflammatory, expectorent, analgesic, emaciating, vescicent, rubefacient and rash-irritant.

The latex of drug Snuhī (*Euphorbia neriifolia* Linn.) is acrid, rubefacient, purgative and expectorant. It is liable to cause dermatitis. It is used to remove, warts and cutaneous eruptions. The juice is employed in ear-ache, mixed with soot, it is applied in ophathalmia. A success compounded of equal parts of the juice and simple syrup may be used for giving relief in asthma.

The fresh latex of Saptadhāra snuhi or Dandathuhar (*Euphorbia royleana* Boiss) has a rich sweet odour. It is acrid and possesses cathartic and anthelmintic properties. It is liable to cause dermatitis and is reported to be injurious to the eyes.

The juice of leaves obtained from Mahāvṛkṣa snuhī (*Euphorbia nivulia* Buch-Ham.) is given as a purgative and diuretic. It is considered useful for relieving earache. It is mixed with nimba taila (neem taila or margosa oil) and applied externally in rheumatism. The latex is liable to cause dermatitis. The root bark is used in dropsy.

The principal constituent of the dried, latex of a Sehuṇḍa bheda (*Euphorbia tricalii* Linn.) is a brittle, lustrous resin, resambling resin in appearance and melting between 50° and 75°. There is possibility of using the resin in the varnish, linoleum oil skin and other similar purposes.

The juice of plant is used for snearing cuts made by tappers on Kharjūra (*Barassus fabelifer* Linn.) in order to prevent palm from the attack of red weevil.

The drug is useful in rheumatism, gout, swelling and shoft chancre (upadaṁśa). It is used in kuṣṭha and other diseases including allied skin complaints.

In udara roga, a course of pippalī (fruits of *Piper longum* Linn.) impregnated with snuhī latex-upto 1000 fruits-keeping on milk diet, has been recommended in therapeutical texts of medicine. The cakes prepared of rice-flour impregnated with snuhī latex may be given for a

week for treatment of udararoga. Similarly the pippalī powder impregnated with snuhī latex has been prescribed for use in order to relieve from udararoga.

The fomentation with stem-piece of snuhī is recommended in tumour (arbuda). Snuhī latex is indicated to apply on enlargement of uvula (galaśuṇḍī). Root of snuhī plant is suggested for chewing in case of dental carries (danta krimi). The oil is cooked with snuhī latex and rock salt (saindhava lavaṇa) and the recipe is an local application for cracks in feet (pādadaṛi-pādaavidārikā). It has been mentioned in context of different labour (mūḍhgarbha) (Gadanigraha, 6-4-35) that snuhī latex applied on head hastens expulsion of foetus the juice of internal substance of stem (devoid of bark) of snuhī is obtained by heating and this juice is filled in the ear (karṇa pūraṇa). The oil cooked with snuhī latex and bee-wax (madhuchiṣṭa) is applied over dirty wounds (duṣṭavraṇa). The steamed up leaves of snuhī (svinna patra) are prescribed for applying on wounds for about a week or so. The drug is also useful in vitiligo (śvitra) and eczema (vicarcikā).

There are several formulations based on snuhī prescribed in the management of various diseases. For the instance, Snuhīkṣīra ghr̥ta and Snuhī ghr̥ta are used in udararoga. Snuhīkāṇḍa lavaṇa is prescribed in vātavādhī. Vajrakṣāra, Snuhīyādi taila and Snuhīyādi vartī are other preparations which are recommended in treatment of different diseases. Snuhī kalpa has been incorporated with detailed on use of snuhī in classical texts (Caraka Saṁhitā, Kalpa, 10).

Snuhī has been a valued drug in the management of ano-rectal diseases on account of its effectiveness against haemorrhoids (arśa), and anal fistula (bhagandara) and anal fissure (parikartikā) as frequently and specifically recommended in Indian medicine well-supported with classical texts of medicine. Besides the use of snuhī in ano-rectal diseases, presently the kṣāra sūtra therapy has been developed and it is prominent and promising technique for treating these diseases especially fistulā-in-ano and allied

conditions, leading towards a break through in the field of proctology.

Generally the thread impregnated with *snuhī* latex and *haridrā* (turmeric) is prepared as *kṣāra sūtra* and applied in accordance to the technique (as provided in ancient medical texts of Indian medicine) in case of fistula-in-ano and haemorrhoids and anal fissures.

Besides the *ksāra sūtra*, the wick (*varti*) oil and latex are also prescribed for application various formes and Recipes. The threads impregnated with *snuhī* latex and *arka* latex is kied up (around haemorrhoids) in the piles. The latex of *snuhī* is recommended for external application against piles (*arśa*). *Jātyādi varti* is prepared (with *jāti* and others) in combination with the latex of *snuhī*. It is applied in treatment of fistula-in-ano (*bhagandara*), and sinus (*nāḍīvrāṇa*). *Snuhī* is also used for treating *arbuda* (tumour).

The therapeutic uses of *Snuhī* (*Euphorbia neriifolia* Linn.) have been finding an important place in Indian medicine where its various parts particularly latex or milky juice (*snuhī kṣīra* or *dugdha*) are used in different ailments. It is administered externally and internally both.

As regards the collection and use of *snuhī* latex, and adequate precaution and proper method need to be followed while procuring and administering it. The collection of latex from plants is required to be done with due care on account of vesicant and irritant nature of milky juice which may cause redness, itching and other allergic symptoms to eyes, mucous membrane and skin of latex-collector. Generally the stem and branches of *Sehunḍa* are incised in cold months and latex is collected in container (dry or non-humid and airtight). Source plant for collection of latex may be preferred a plant of matured stage (2-3 years age). The thorn of plant (*snuhī kaṇṭaka*) is considered harmful (rather poisonous or *viṣa-kaṇṭaka*) for avoiding penetration.

The latex of drug-plant (*snuhī-kṣīra*) belongs to group of subsidiary or secondary poisons (*upaviṣa*) as

categorised in ancient medicine. The purification (śodhana) is, therefore, suggested normally. Besides the group of upaviṣa (Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga), Snuhīkṣīra also belongs to other groups of latex-yielding plants such as kṣīravarga, kṣīrivṛkṣa and kṣīratraya etc. incorporated in medical and pharmaceutical texts in Indian medicine (Rasa taraṅgiṇi, 62, Caraka Saṁhitā, Sūtra, 1 etc.)

Being a drastic purgative drug, the latex of plant or snuhī kṣīra is administered in lesser or restricted dose and proper mode and manner. Latex is mixed properly in grain flour or powder of turpeth root (caṇaka or trivṛtā mūla cūrṇa) and small pills are prepared for oral use. A gram (Caṇaka) is soaked in snuhī latex and the swollen gram is taken. Similarly the pepper (marica) or Saindhava are mixed in latex for making pills and the some are administered internally. The powder of three myrobalans (triphalā cūrṇa) is mixed properly with snuhī latex (bhāvanā) and the pills are prepared for use. The decoction of daśamūla and snuhī latex, in equal quantity, are well-mixed and boiled to semi-consolidation for enabling the pills. Normally a dose of 125 mg. to 250 mg. may be given (of all these all preparations under special methods or modes of use fo snuhī kṣīra) depending on various factors concerned with disease and patient.

The drug Snuhī has been recommended in treatment of various diseases in Indian medical system, The leaves are little warmed up and applied over lesions of pain and swelling. Juice of leaves is used in earache. The leaves or juice is cooked with oil and it is applied on organs suffering from vātavyādhi, for massage (abhyāṅga). Latex is also applied over skin diseases (with due precaution). It is applied to dentalache. In case of napuṁsakatā or dhvajabhaṅga (impotency), the latex is suggested to be applied over male genital organ for strengthening erectile power (śiṣṇa dhavajotthāna) capable for coitus.

The latex of Snuhī is taken abdominal diseases, gulma, enlargement of liver and spleen and some other ail-

ments for purgation purpose. In strong or capable patients suffering from anaemia, kuṣṭha, diabetes, oedema, insanity and similar other diseases, the snuhi kṣīra (latex) is suggested to be given as saṁśodhana dravya. Latex's oral use causes watery motions (liquid stool) and sometimes vomiting.

The root is used both internally and externally in condition of insect-bite poison (jāṅgama viṣa). The stem piece is heated up for expelling juice which is mixed with honey and borax (madhu and ṭaṅkaṇa) and taken in cough, asthma, coryza and ailments dominated by kapha doṣa.

Parts used : Root, stem, leaves, latex.

Dose

Root powder 500 mg.-1 gm., Stem juice 5-10 ml., Latex 125-250 ml.

Formulations

Vijrakṣāra, Snuihyādi taila, Snuihyādi varti, Snuhi kalpa (Caraka Saṁhitā, Kalpa, 10).

Groups

Virecana, Ṣaṭśodhana vṛkṣa kṣīrāśraya (Caraka Saṁhitā), Adhobhāgahara, Śyāmādi (Suśruta Saṁhitā), Upaviṣa (Bhāvaprakāśa).

SNUHĪ (स्नुही)

सेहुण्डो रेचनस्तीक्ष्णो दीपनः कटुको गुरुः ।

शूलामाष्ठीलिकाऽऽध्मानकफगुल्मोदरानिलान् ॥

उन्मादमेहकुष्ठार्शःशोथमेदोऽश्मपाण्डुताः ।

व्रणशोथज्वरप्लीहविषदूषीविषं हरेत् ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 74-75.

स्नुहीदुग्धम्

उष्णवीर्यं स्नुहीक्षीरं स्निग्धञ्च कटुकं लघु ।

गुल्मिनां कुष्ठिनाञ्चापि तथैवोदररोगिणाम् ॥

हितमेतद्विरेकार्थं ये चान्ये दीर्घरोगिणः ।

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 76-77.

सेहुण्डः

- क. सुधा गुडा वज्रतुण्डो वज्री निखिंशपत्रकः ।
 स्नुही समन्तदुग्धा स्नुग् गण्डीरो वज्रकण्टकः ॥
 महावृक्षो बहुस्त्रावः सेहुण्डः कुलिशद्रुमः ।
- ख. वज्रकण्टः कटुस्तिक्तीक्ष्णोष्णो दीपनो गुरुः ॥
 रेचनोऽनिलशूलामकफगुल्मोदरापहा ।
 उन्मादमेहकुष्ठार्शः शोथमेदोऽश्मपाण्डुताः ॥
 व्रणाध्मानज्वरप्लीहविषं दूषीविषं हरेत् ।

सेहुण्डक्षीरम्

- ग. उष्णवीर्यं स्नुहीक्षीरं स्निग्धं सकटुकं लघु ॥
 गुल्मिनां कुष्ठिनां वापि तथैवोदररोगिणः ।
 श्रेष्ठमेतद् विरेकार्थं ये चान्ये दीर्घरोगिणः ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 917-921.

स्नुहीद्वयम्

- स्नुही सुधा महावृक्षः क्षीरो निखिंशपत्रिका ।
 शाखाकण्टश्च गुण्डाख्यः सेहुण्डो वज्रकण्टकः ॥
 बहुशाखो वज्रवृक्षो वातारिः क्षीरकाण्डकः ।
 भद्रो व्याघ्रनखश्चैव नेत्रारिर्दण्डवृक्षकः ।
 समन्तदुग्धो गण्डीरो ज्ञेयः स्नुक् चेति विंशतिः ॥

स्नुहीगुणाः

- स्नुही चोष्णा पित्तदाहकुष्ठवातप्रमेहनुत् ।
 क्षीरं वातविषाध्मानगुल्मोदरहरं परम् ॥

स्नुहीत्रिधाराऽदयः

- स्नुही चान्या त्रिधारा स्यात्तिस्रो धारान्तु
 पूर्वोक्तगुणवत्येषा विशेषाद्रससिद्धिदा ॥

Rāja Nighaṇṭu, Śālmalyādi varga, 49-52.

सेहुण्डपत्रम्

- सेहुण्डस्य दलं तीक्ष्णं दीपनं रेचनं हरेत् ।
 आध्मानाष्टीलिकाशूलशोथगुल्मोदराणि च ॥

Bhāvaprakāśa Nighaṇṭu, Śāka varga, 37.

Rāja Nighaṇṭu Śālmalyādi varga, 49-52.

जिह्वाजाड्ये स्नुहीक्षीरप्रयोगः

‘ईषत् स्नुक्क्षीराक्तं जम्बीराद्यम्लचर्वणं वाऽपि ।’

Cakradatta, 56-5.

उदररोगे स्नुहीक्षीरघृतम्

क्षीरद्रोणं सुधाक्षीरप्रस्थार्धसहितं दधि ॥

जातं विमथ्य तद्युक्त्या त्रिवृत्सिद्धं पिबेद् घृतम् ।

तथा सिद्धं घृतप्रस्थं पयस्यष्टगुणे पिबेत् ॥

स्नुक् क्षीरपलकल्केन त्रिवृता षट्पलेन च ।

गुल्मानां गरदोषाणामुदराणां च शान्तये ॥

Caraka Samhitā, Cikitsā, 13-138/140.

अन्यस्नुहीक्षीरघृतम्

क. दधिमण्डाढके सिद्धात् स्नुक् क्षीरपलकल्कितात् ।

घृतप्रस्थात् पिबेन्मात्रां तद्वज्जठरशान्तये ॥

एषां चानु पिबेत् पेयां पयो वा स्वादु वा रसम् ।

घृते जीर्णे विरिक्तस्तु कोष्णं नागरकैः शृतम् ॥

ख. पिबेदम्बु ततः पेयां यूषं कौलत्थकं ततः ।

पिबेद्रूक्षस्त्र्यहं त्वेवं भूयो वा प्रतिभोजितः ॥

पुनः पुनः पिबेत् सर्पिरानुपूर्व्या तथैव च ।

घृतान्येतानि सिद्धानि विदध्यात् कुशलो भिषक् ॥

Caraka Samhitā, Cikitsā, 13-141/143.

खालित्ये स्नुह्यादितैलम्

Cakradatta, 55-104-106.

विचर्चिकायां लेपः

स्नुक्काण्डे शुषिरे दग्ध्वा गृहधूमं ससैन्धवम् ।

अन्तर्धूमं तैलयुक्तं लेपाद्भन्ति विचर्चिकाम् ॥

Cakradatta, 50-37.

मसूरिकारोगानागतवाधाप्रतिषेधार्थं रक्तपताकाऽन्वितास्नुहीस्थापनम्

‘चैत्रासितभूतदिने रक्तपताकाऽन्विता स्नुहीभवने ।

धवलितकलसन्वस्ता पापरुजो दूरतो धत्ते ॥

Cakradatta, 54-48.

अर्शनिवारणार्थं क्षारसूत्रम्

भावितं रजनीचूर्णं स्नुहीक्षीरैः पुनः पुनः ।

बन्धनात्सुदृढं सूत्रं छिन्नत्यर्शो भगन्दरम् ॥

Bhāvaprakāśa, Arśādhikāra, 5-144.

नाडीव्रणे सेहुण्डादिवर्तिः प्रयोगराट्

स्नुह्यर्कदुग्धदावीणां वर्ति कृत्वा प्रपूरयेत् ।

एष सर्वशरीरस्यां नाडीं हन्यात्प्रयोगराट् ॥

Bhāvaprakāśa, Nāḍivraṇādhikāra, 49-20.

नाडीव्रणे क्षारसूत्रम्

कृशदुर्बलभीरूणां नाडीं मर्माश्रितामपि ।

क्षारसूत्रेण तां छिन्याच्च शस्त्रेण कदाचन ॥

Bhāvaprakāśa, Madhyakhaṇḍa, 49-33.

अर्बुदरोगे स्नुहीस्वेदप्रयोगः

‘स्नुहीगण्डीरिकास्वेदो नाशयेदर्बुदानि च ।’

Cakradatta, 41-60.

Vṛndamādhava, 41-44.

नाडीव्रणचिकित्सायां क्षारसूत्रप्रयोगः

Cakradatta, Nāḍivraṇa cikitsā, 45/10-13.

अर्बुदादिषु क्षारसूत्रप्रयोगः

Cakradatta, Nāḍivraṇa cikitsā, 45-14.

भगन्दरचिकित्सायां स्नुह्यादिवर्तिका

स्नुह्यर्कदुग्धदावीभिर्वर्तिः कृत्वा विचक्षणः ।

भगन्दरगतिं ज्ञात्वा पूरयेत्तां प्रयत्नतः ॥

एषां सर्वशरीराभ्यां नाडीं हन्यादसंशयम् ।

Cakradatta, Bhagandara cikitsā, 46-8.

कर्णशूले स्नुहीपत्रस्वरसपूरणम्

अर्कपत्रपुटे दग्धस्नुहीपत्रभवो रसः ।

कटूष्णः पूरणादेव कर्णशूलनिवारणः ॥

Cakradatta, 57-9.

भगन्दरे नाडीव्रणे च

स्नुहीदुग्धादिवर्तिः

Cakradatta, 46-8.

जात्यादिवर्तिः

Cakradatta, 45-8.

दुष्टव्रणे

महावृक्षार्कजे दुग्धे मधूच्छिष्टेन साधितम् ।

तैलं सकृत् प्रयोगेण दुष्टव्रणविरोपणम् ॥

Sahasrayoga, 5-115.

व्रणे

द्रुतजातमतिसुकठिनं नाशयति व्रणं चिरन्तनञ्चापि ।
स्विन्नं विसृज्य लिसं स्नुक्पत्रं पञ्चषैर्दिवसैः ॥

Vaidya Manoramā, 16-100.

पादविदारिकायाम्

स्नुक्क्षीरपलसंसिद्धतैलसैन्धवलेपनात् ।
रोहित् सहस्रधा भिन्नमपि पादतलं क्षणात् ॥

Vaidyamanoramā, 11-57.

मूढगर्भे

‘न्यस्तेन मूर्धनि सुधापयसाऽल्पकेन
स्त्रीणामपैति सहसैव हि गर्भशल्यम् ।’

Gadanigraha, 6-4-35.

अर्शसि

स्विन्नं निष्पीडितं स्नुह्याः पत्रं पायौ निधापयेत् ।
दुर्नामक्रिमिकण्डूतिशोफरुक्शान्तिकृत् परम् ॥

Vaidya Manoramā, 5-3.

‘हरिद्राचूर्णसंयुक्तं सुधीक्षीरं प्रलेपनम् ।’

Caraka Samhitā, Cikitsā, 14-52, 53, 57.

‘स्नुहीक्षीरयुक्तं हरिद्राचूर्णमालेपः प्रथमः ।’

Suśruta Samhitā, Cikitsā, 6-12.

दन्तक्रिमौ

‘स्नुही वा घ्नन्ति घुणं दन्तैः सञ्चर्व्यमाणानि ।’

Gadanigraha, 3-5-175.

कर्णशूले

वज्रीकाण्डात्त्वचाहीनादग्नितापनपीडनात् ।
वज्जलं तद्भुते कर्णे शूलं शाम्यति देहिनाम् ॥

Gadanigraha, 4-2-32.

श्वित्रे

रात्रौ गोमूत्रे वासितान् जर्जराङ्गानहिच्छायां शोषयेत् स्फोटहेतून् ।
एवं वारांस्त्रीस्ततः श्लक्ष्णपिष्टैः स्नुह्याः क्षीरेण श्वित्रनाशाय लेपः ॥

Aṣṭāṅga Hṛdaya, Cikitsā, 20-11.

विचर्चिकायाम्

स्नुग्गण्डे सर्षपात् कल्कः कुकूलानपाचितः ।

लेपाद् विचर्चिकां हन्ति रागवेग इव त्रयाम् ॥

Aṣṭāṅga Hṛdaya, Cikitsā, 19-69.

गलशुण्डीरोगे

‘गलशुण्डी क्षयं याति वज्रीक्षीरेण लेपनात् ।’

Vṛndamādhava, 58-49.

उदररोगे

स्नुहीघृतम्

Caraka Samhitā, Cikitsā, 13-141.

Suśruta Samhitā, Cikitsā, 14-10.

वातव्याधौ

‘एवं स्नुहीकाण्डवार्ताकुशिगुलवणानि....

स्नेहलवणमुपदिशन्ति वातरोगेषु ।’ (काण्डलवणम्) ।

Suśruta Samhitā, Cikitsā, 4-31.

उदरामयानामुपचारार्थम्

स्नुहीपयोभावितानां पिप्पलीनां पयोऽशनः ।

सहस्रमुपयुञ्जीत शक्तितो जठरामयी ॥

स्नुहीक्षीरप्रयोगश्च शमयत्युदरामयम् ।

Vṛndamādhava, 37-8-9.

स्नुक्पयसा परिभावितण्डुलचूणैर्विनिर्मितः पूपः ।

उदरमुदारं हिंस्याद्योगेऽयं सप्तरात्रेण ॥

Vṛndamādhava, 37-90.

अर्शप्रतिकारार्थम्

हरति कुलिशवृक्षप्रस्तुतक्षीरसिक्तं प्रमृदितमुपलेपान्नैशमर्शांसि चूर्णम् ।

अथ भवति रजश्चेद् देवदालीफलानां तदपि खलु विधत्ते सैन्धवोपेतमेतत् ॥

Rājāmārtanda, 19-5.

SOMA

Botanical name

Ephedra vulgaris Wall., *Ephedra gerardiana* Wall.

Family : Gnetaceae

Classical name : Soma

Sanskrit names

Truṭigrantha Soma, Śalkapatra Raktaphala.

Regional names

Soma, Somakalpa (Hindi); Asmaniya, Asmania, Budagur (Punj.); Tipat, Trani (Ladakh); Tutagantha (Jaunsar, U.P. Hills).

Description

A small, nearly erect shrub, variable in size, but typically not exceeding a few inches in height. It bears dark green, cylindrical, striated, often curved branches arising in whorls, internodes of branchlets, 1-4 cm. long and 1-2 mm. diam.

Branchlets green, erect, often curved, Leaves reduced to sheaths at nodes of the branches. Sheaths 0.08 in. long, 2-toothed.

Male flowers 4-8 in. bracteate, spikes which are solitary or 2-2 together, bracts round, obtuse, connate, about 0.05-0.1 in. long; anthers 5-8. Female flowers in 1-2-flowered, usually solitary spikes.

Fruit ovoid, red, sweet and edible, containing 1 or 2 seeds, more or less enclosed by succulent bracts, seeds black.

Flowering and fruiting time

Plant flowers in May-July and fruits onwards, from rains to autumn.

Distribution

Plant is found scattered in the drier regions of temperate and alpine Himalayas from Kashmir to Sikkim at altitudes of 7,000-16,000 ft. Usually plant occurs wild along the main Himalaya range between 6,500 to 14,000 feet elevations. Plant is very common on the inner dry ranges bordering Tibet.

The species of *Ephedra* are cultivated in India and other countries under drug farms.

Kinds and varieties

Another plant species is *Ephedra major* Host. syn. *Ephedra nebrodensis* Tineo. Twigs of *E. major* closely resemble those of *Ephedra gerardiana* Wall. It is a good source of ephedrine. Indian *Ephedra* species are main source of Ephedrine.

Chemical composition

Plant contains major alkaloid ephedrine. Total alkaloidal content (from Kashmir plants) is 1.22 per cent which is consisting 55.7% ephedrine.

Alkaloidal contents of Indian Ephedras are varying in different plant material obtained from various areas of occurrence in the Himalayan regions.

Pharmacodynamics

Rasa	: Kaṣāya
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmakā

Properties and action

Karma	: Śvāsaghna (Śvasanakendrottejaka- śvasananalikāvisphāraka Mūtrala Śothahara-vedanāśāmakā Nādyottejaka-saumanasyajanana Netrakanīnikā visphāraka Garbhāśayaśaṅkocaka Jvaraghna
Roga	: Śvāsa roga Hṛddaurbalya Mūtrakṛcchra Kaṣṭhāprasava Jvara-pratiśyāya-kaphajvara Mānasika avasāda-vātika manovikāra Śotha-vedanā-vikāra.

Therapeutic uses

The drug Soma is an effective anti-asthmatic herbal agent. It stimulates organs (respiratory centre) controlling respiratory function and dilates respiratory organs (bronchi). It stimulates heart and increases blood pressure. It is stimulating to nervous system and also dilating pupil. It is diuretic, anti-inflammatory and analgesic. It is antipyretic and garbhāśaya śaṅkocaka.

Soma is used as one of the efficacious drug for asthma and allied disorders. The branches of plant drug are given in powder form in cases of asthma. It is also taken in other respiratory disorders allied to asthma. Similarly it is useful in cardiac problems as heart stimulant.

The drug is useful in dysuria, difficult (or abnormally painful) delivery, catarrhal fever, mental depression and nervous disorders (caused by vāta doṣa).

Externally the powder of drug is considered anti-inflammatory and analgesic when applied to swollen and painful organs.

In general, soma is useful in alleviating disorders caused by aggravated kaphavāta humors (doṣa).

Ephedra (soma) of the B. P. C. (British Pharmaceutical Codex) consists of dried young branches of *Ephedra sinica* Stapf. and *E. equisetina* Bunge (indigenous to China), and of *Ephedra gerardiana* (including *E. major*) indigenous to India, it contains not less than 1.25 per cent. total alkaloids calculated as ephedrine. Ephedra of B. P. L. consists of the dried narrow green, cylindrical twigs of *E. gerardiana* and *E. major*, collected in autumn, and containing not less than 1% total alkaloids calculated as ephedrine. It has a heavy, pine-like aromatic odour and a strong astringent taste. Ephedra in powder (*Pulvis Ephedrae*) complies with the standard for the unground drug.

The therapeutic activity of ephedra is due to the presence in the drug of the alkaloids, ephedrine and pseudo-ephedrine. In pharmacological action ephedrine is almost similar to adrenaline. Its pressor and vaso-constrictor activity is slower and less than that of adrenaline but is more persistent. It is more stable to metabolic conditions and can be given to mouth (unlike adrenaline administered by injection).

Pharmacological studies find that ephedrine when given stimulates the respiratory centre, increasing the depth of respiratory, reinforces heart action and dilates the bronchi, more especially when they are in spasm, hence its use in bronchial asthma. It contracts uterus and dilates the

pupil. It also possesses analeptic action due to central nervous stimulation which is the basis of its use in the treatment of depression by drugs and for the relief of narcolepsy, though for this purpose, its derivating seem to have advantages. Topical application reduces hyperaemia without after dilation. It is used in vasomotor rhinitis, coryza, congestion of the mucous membrane acute, sinusitis and hay fever. Ephedrine exerts a slightly local anaesthetic action. In higher dose and excessive use it is toxic and produces various complications.

Parts used

Branches. Ephedrine (dl-ephedrine, synthetized).

Dose

Powder 1-2 gm. (crude drug of branches).

Formulation : Somakalpa.

SOMA (सोम)

शल्लकपत्रस्तु सोमः स्यात् त्रुटिग्रन्था तथैव च ।

प्रभूतहरितच्छायशाखो रक्तफलः स्मृतः ॥

सोमो रूक्षः कटुः पाके लघुरुष्णः कषायकः ।

कफवातहरो हृद्यः परं श्वासापहो मतः ॥

Dravyaguna Vigyāna, Part II, p. 304.

सोमवल्ली सोमलता सोमक्षीरी द्विजप्रिया ।

सोमवल्ली त्रिदोषघ्नी कटुस्तिका रसायनी ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 257.

SAUVĪRA-SAUVĪRABADARA

Botanical name : *Zizyphus sativa* Gaertn.

Syn. *Zizyphus vulgaris* Linn.

Family : Rhamnaceae

Classical names : Sauvīra, Sauvīrabadara

Sanskrit names

Sauvīra, Sauvīrabadara, Sauvīraka, Rājabadara.

Regional names

Unnao, Unnav, Tilamaver, Kandiari (Hindi); Sanjit (Punj.); Unnao, Khorasani Ber (Bombay); Unnao (Arabic); Silan, Sijad, Jilani, Sijad Khorasani (Pers.); Jujuba (Eng.).

Description

Thorny erect shrub or small tree which almost looks like small trees of *Zizyphus jujuba* Linn. (Badara) but the leaves are larger, thick and hairy (tomentose) one side. Wood, bark and fruits.

Flowers leaf-axillary, peduncled, umbelled. Calyx 5-lobed; petals 5; stamens, style branched.

Fruits drupe, red in colour, 1-15 × 3/4 in.

Distribution

Plant occurs in Himalayan region (from Punjab to Bengal), Kashmir, West Pakistan, Afghanistan, Baluchistan, Persia and China.

It is imported in India from Persia and China.

Kinds and varieties

Fruits contain mucilage and sugar. Bark and leaves contain tannin. An aqueous extractive of contains a crystalline substance Zizyphostanic acid and little amount of sugar.

Pharmacodynamics

Rasa	: Madhura
Guṇa	: Snigdha
Vīrya	: Śīta
Vipāka	: Madhura
Doṣākarma	: Pitta-kaphaśāma-kaphaniḥsāraka

Properties and action

Karma	: Kaphaniḥsāraka Uromārdava Tṛṣāhara Raktadoṣaśāma Ikṣumehahara Āmāśayāhitakara-ānāhakara- viṣṭambhakara Kāmāvasādaka (excess use)

Roga	: Kāsa Śvāsapathavikāra Urovikāra Kaṇṭhasvaravikāra Raktavikāra Trṣādhikyātā.

Therapeutic uses

The drug Sauvīrabadara is expectorant and emollient; it is blood purifier and countering overthirst.

Leaves powder is given in glycosuria (ikṣumeha). Fruits are chiefly used in cough, asthma, catarrhal affections and other similar disorders of respiratory tract. It is an ingredient in expectorant and cough syrups and formulations indicated in diseases of respiratory system. It is useful in blood impurities and ailments.

Parts used : Fruits, leaves.

Dose : Leaves powder 1-3 gm., 5-7 fruits.

Formulations

Sharbat Unnao (Sauvīra pānaka), Sat Unnao.

SPRKKĀ

Botanical name : Delphinium zalil Aitch & Hemsl.

Family : Ranunculaceae

Classical name : Sprkkā

Sanskrit names

Sprkkā, Devalatā, Śacī, Śubhā, Laṅkoṣā, Lāṭī, Devapatrī, Sukumāra, Kuṭilā, Nirmālyā, Paṅkamusṭi, Mālatī, Kotivarṣā, Sprk, Marumālā, Nakhapuṣpī, Brāhmaṇī (Kā), Piśunā, Vadhū, Paṅcagupti.

Description

Annual plant of Delphinium zalil Aitch. Hemsl. (Zalil Larkspur) occurs in Persia and Afghanistan.

The flowers mixed with the fragments of the flowering axes and stalks are imported and sold in Indian bazzars as the yellow Asbarg Dye [used along with alkabir (Datisca cannabina) and alum, in silk dyeing and calico printing].

Delphinium denudatum Wall.

A perennial herb with bright yellow flowers.

Delphinium zalil Aitch.

An annual herb.

Distribution

Another plant (*Delphinium denudatum* Wall) commonly occurs in the western Himalaya from Kumaon to Kashmir at altitudes of 8,000-12,000 ft. especially on grassy slopes. *D. zalil* Aitch occurs in west Asia.

Chemical composition

The flowers and the flowering stems contain isorhamnetin, quercetin and probably kaempferol.

Pharmacodynamics

Rasa	: Tikta, kaṭu, kaṣāya
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣaghna-kaphapittahara- pittasamśodhaka

Properties and action

Karma	: Kaṇḍūghna
	Kuṣthaghna
	Viṣaghna
	Dāhapraśamana
	Raktadoṣahara
	Pittasamśodhaka-pittasāraka
	Sleṣmaghna-kāsaghna
	Svedajanana-jvaraghna
	Vātaghna
	Śophahara
	Vṛṣya
Roga	: Kaṇḍu
	Tvagvikāra
	Raktaduṣṭi janyavikāra
	Raktavikāra
	Dāha
	Pittajanya vikāra
	Kāsa
	Jvara

Viṣa
Prameha
Aśmarī
Mūtrakṛcchra
Śoṭha-śopha
Vātavyādhi.

Therapeutic uses

The drug Sprkkā is considered diuretic, detergent and anodyne and it is useful in jaundice, dropsy and troubles of the spleen. It is also employed as a poultice for swellings.

Sprkkā is used in preparation of oil and paste useful in oedema caused by vāta (Caraka Saṁhitā, Cikitsā, 12-66). It is one of the ingredient in balātaila and amṛtādyā taila (Caraka Saṁhitā, Cikitsā, 28/152-162). It enters into combination of mṛtasañjivana agada and mahāgandhahastī agada (Caraka Saṁhitā, Cikitsā, 23/54-77).

Parts used : Flowers.

Dose : Powder 1-3 gm.

Formulations

Balā taila, Amṛtādyā taila, Mṛtasañjivana agada, Mahāgandhahastī agada.

SPRKKĀ (स्पृक्का)

स्पृक्का स्वाद्वी हिमा वृष्या तित्का निखिलदोषनुत् ।

कुष्ठकण्डूविषस्वेददाहघ्नी ज्वररक्तहृत् ॥

Bhāvaprakāśa Nighaṇṭu, Karpūradī varga, 126.

- क. स्पृक्का देवलता लङ्कोषा लाटी कुटिला लघुः ।
निर्माल्या कोटिवर्षा स्पृक् ब्राह्मणी पिशुनाशची ॥
देवपत्री पङ्कमुष्टिर्मरुमाला वधूशुभा ।
- ख. स्पृक्का तित्का हिमा स्वाद्वी वृष्या दोषत्रयापहा ॥
कुष्ठकण्डूविषस्वेददाहास्रज्वरनाशिनी ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1396-98.

स्पृक्का

अ. स्पृक्का च देवी पिशुना वधूश्च कोटिर्मनुब्राह्मणिका सुगन्धा ।
समुद्रकान्ता कुटिला तथा च मालालिका भूतलिका च लघ्वी ॥

निर्माल्या सुकुमारा च मालाली देवपुत्रिका ।

पञ्चगुप्तिरसृक्प्रोक्ता नक्तपुष्पी च विंशतिः ॥

ब. स्पृक्का कटुकषाया च तिक्ता श्लेष्मार्त्तिकासजित् ।

श्लेष्ममेहाश्मरीकृच्छ्र-नाशनी च सुगन्धदा ॥

Rāja Nighaṇṭu, Candanādi varga, 126-128.

वातव्याधौ

बलातैले

Caraka Samhitā, Cikitsā, 28-152.

अमृताद्यतैले

Caraka Samhitā, Cikitsā, 28-162.

शोफे वातिके

तैलप्रदेहयोः

Caraka Samhitā, Cikitsā, 12-66.

विषे

मृतसञ्जीवन अगदे

Caraka Samhitā, Cikitsā, 23-54.

महागन्धहस्तीनामि अगदे

Caraka Samhitā, Cikitsā, 23-77.

SRĀVIKĀ-ANNĀMAYA

Botanical name : Claviceps purpurea Fr. Tul. (Fungus)

Family : Hypocreaceae (Fungi)

Classical names : Srāvikā, Annāmaya

Sanskrit names

Annāmaya, Srāvikā, Pāṭali, Raudrī, Dhanvaja, Sarṣapī, Mūḍhaprakarṣiṇī, Rajahpravartanī.

Regional names

Argat-Ergot (Common, Hindi); Tamb (Ma.); Geravon (Guj.); Ergot (Eng.).

Description

A fungus parasitic on grasses and cereal crops, especially on rye (*Secale Cereale* Linn.). Its occurrence in India on *Brachypodium sylvaticum* occurrence Beauv., *Andropogon* sp., *Cynodon dactylon* Pers. and sugar cane has been recorded. Among ten cosmopolitan species of which *Claviceps purpurea* is the source of ergot. It is also a pest of cereal crops and grasses; noteworthy on account of the effects on stock fed on grains and grass crops infected by it.

Medicinal ergot is the sclerotium of the fungus developed in the ovary of the rye. The fungus infects the plants when they are in bloom, enters to ovary and develops, at one stage in the life history, a compact body or sclerotium composed of pseudo-parenchymatous mycelial tissue. The sclerotium is a reddish, violet or nearly black curved rod, 10-40 mm. long and 2-7 mm. diam., concave-convex in section, tapering both ends, and bearing a longitudinal furrow on the concave side. The interior is white or pinkish. The taste is characteristic and the odour disagreeable.

Ergotism is a disease of animals caused by their feeding on infected grain or hay. Ergotism in man is not so common now as in the past centuries (but it is still known among peasant classes in a few European countries).

Rye ergot is medicinal ergot which is sown in the field in April and it comes to appearing early in July. Conidial spores of the fungus are sprayed in mid-July and the spraying repeated in mid-August. Six to eight sprayings may be necessary for maximum infection. Sclerotia are observed 15 days after the spraying. The yield is about 95 lb. per acre.

Distribution

It is chiefly imported from central Europe, Spain and Portugal. In India, it is Jammu & Kashmir and Nilgiri, Shillong and other regions.

Chemical composition

The alkaloidal contents of the ergot depends on the host, and medicinal ergot is derived only from the rye plant (*Secale cereale* Linn.).

The average alkaloid content of ergot (Nilgiri), calculated as ergotoxine, is 0.4%, the British Pharmacopoeial requirement being 0.19%.

Analysis of the drug gave the following values : moisture 7.9, ash 3.0, fat (petroleum ether extract) 27.3, total alkaloids as anhydrous ergotoxine 0.425, water alkaloids as ergometrine 0.654%.

The presence of ergosterol, fungisterol, clavisepsin, sclererythrin, ergochrysin, ergoflavin, inorganic salts and complex proteinous substances has been reported. A large number of simple bases and amino acids has been isolated.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarman	: Kaphapittasāma

Properties and action

Karma	: Garbhāśayasāṅkocaka- raktasrāvarodhaka Raktastambhaka Vājikaraṇa
Roga	: Prasavottara raktasrāva-kaṣṭhāprasava Raktapradara Napuṁsakatā Svapnadoṣa-dhātukṣaya-śīghra (vīrya) patana

Therapeutic uses

The drug Annāmaya is ecboic or garbhāśayasāṅkocaka; so it is quite effective in difficult or delayed delivery due to under or weak labour pain, and in puerperal bleeding; it pacifies pain as well as helps uterus to restore normalcy during puerperal stage without complications. Thus its use is advised for about 5-6 days particularly in mothers of poly-deliveries.

Ergot is of considerable medicinal interest, being the only oxytocic recognised in the official pharmacopoeia for administration by oral route.

Although a few of simple bases and amino acids are known to be physiologically active and to exert some influence on the total activity of the crude drug and its galenical preparations, the specific effects of ergot are due to the alkaloids present in it.

Poisonous properties of barley, wheat and specially millets which may appear normal, but contain a fungus, most probably ergot, have been reported in India. Acute poisoning is rare, but may occur in certain instantness when a fairly heavy dose is ingasted. Nausea, vomiting and diarrhoea may occur sometimes leading to unconsciousness and collapse. Taken in smaller doses over a long period, as by eating bread made of infected rye, it produces gangrenous ergotism and convulsive ergotism. Experiments on rats have shown that one of the symptoms of chronic toxicity is retardation of growth in the early stages, the effect being increased with diets low in protein.

Ergot is occasionally employed as an oxytocic in veterinary practice.

Out of dozen alkaloids, three are of therapeutic importance. viz. ergotoxine, ergotamine and ergometrine, and there is vast amount of literature on them. The alkaloids of the ergotoxine group exert pressor action, produce gangrene of the cockscombs reverse the action of adrenaline on plain, especially uterine muscle and induce contraction of puerperal uterus. It is for the last purpose that ergotoxine and ergotamine are chiefly used in medicine.

Considerable use is also made of ergotamine for its central for its central action in migraine. It is less toxic than ergotoxine to mice and its symptoms sympathicolytic and hyperpyretic activities are also less.

Ergometrine has less marked effect on the sympathetic nery exerts a pressor action much less marked and is less toxic than ergotoxine. Its most characteristic action is in producing a long persistent rhythm of powerful contractions in puerperal uterus, when administered orally, intramuscularly or intravenously. Its use involves no risk of puerperal gangrene.

Parts used : Whole (Rye Fingus).

Dose : Infusion 1-2 gm., Purified Ergot 0.15-0.5 gm.

Formulation : Ergot Tablet (vaṭi).

ŚRŔGĀṬAKA

Botanical name

Trapa natans Linn. var. *bispinosa* (Roxb.) Makino.

Syns. *Trapa bispinosa* Roxb., *Trapa quadrispinosa*

Wall.

Family : Trapaceae

Classical name : Śrṅgāṭaka

Sanskrit names

Śrṅgāṭaka, Pāṇiyaphala, Jalaphala, Trikoṇaphala, Trikaṇṭa, Śrṅgāṭa, Jalavallī, Śrṅgakanda-mūla.

Regional names

Singharha (Hindi); Paniphala (Bengla); Shingada (Mar.); Shinghodan (Guj.); Singeda (Tam.); Parigadda (Tel.); Karimpolam (Mal.); Gar (Kann.); Water chestnut, Caltrops, Singhara Nut (Eng.).

Description

Most variable handsome, rooted and aquatic herb. Stems long, flexuose, ascending in the water, submerged portions possessing pairs of green, pectinate, spreading organs ('organs' differently interpreted as leaves, pair of stipules or adventitious roots) at intervals below the margins of leafscars.

Leaves floating crowded at the upper part of stems appearing in as rosettes rhomboidal 5 cm. × 48 cm., often somewhat 3-lobed, lower surface reddish purple to green, upper green and often variegated, with long swollen petioles.

Flowers white, opening above the surface of water in the afternoon, after pollination the pedicels bend down submerging the flowers.

Fruits bony, turbinate, 2-4 cm. long and broad, 4-angled, 2 opposite angles each with a scabrous spine, 3

other spines sometimes obsolete, indehiscent, 1-seeded; seeds white, starchy.

Flowering and fruiting time

Plant flowers and fruits in September. Warm-season crop, planting in February-March. Fruits (nuts) generally begin to come in market from September and onwards.

Distribution

Cultivation of Śṛṅgāṭaka for edible fruits or nuts in tanks, lakes and ponds throughout India, particularly in Northern and Central India and also in Orissa and Southern India.

Kinds and varieties

Several types of water chest nut (singhara) exist in cultivation. There are various types under farming in different provinces in country as Basmati, Kangur, Dagru, Kota Sudhar, Buriya-ke-tul-ke-singare (a popular type in Agra, U.P.), Nagra etc. which are adopted for local farming pockets or belts having suitable aquatic, climate, soils and suitable environs and conditions for Śṛṅgāṭaka production.

Chemical composition

The analysis of kernels gave the following values : moisture 70.0, protein 4.7, fat 0.3, fibre 0.6, other carbohydrates 23.3 and mineral matter 1.1 per cent, calcium 20, phosphorous 150 and iron 0.8 mg./100 g. other minerals reported are : copper 1.27, manganese 5.7, magnesium 38, sodium 49 and potassium 650 mg./100 g. Iodine is also present.

The vitamins contents of the kernels are : thiamine 0.05, riboflavin 0.07, nicotinic acid 0.6 and vitamin C 9 mg./100 g. and vitamin A 20 I.U./100 g. The kernels contain 15.8 mg./100 g. oxalate on dry basis the presence of B-amylase and a considerable amount of phosphorylase has been reported. The fruit shells contain 10 per cent tannin.

The nutritive value of flour prepared from dried kernels is as follows : moisture 10.6, protein 8.0, fat 0.6 and minerals 2.6 per cent; calcium 69, phosphorous 343, iron 2.8 and thiamine 0.44 mg./100 g. The partial substitution of rice, ragi or jwar in the diets of rats to an extent of 25 per cent by flour of water. Chestnut is reported to have shown a

significantly larger gains in the body-weight of rats as compared with the corresponding unsubstantial diets.

The biological value of the proteins of water chestnut was also found to be higher than of proteins in wheat (protein efficiency ratio at 7% level : Śṛṅgāṭaka 1.8, Godhūma 1.1, respectively of water chest nut and wheat.

The starch, isolated from the flour of Śṛṅgāṭaka nuts, consists of 15 per cent amylose and rest amylopectin. The granules exhibit various shapes, such as round oval and also irregular, with hilum and concentric rings well marked. The starch is a good substitute for corn-starch in a -cream preparation.

Pharmacodynamics

Rasa	: Madhura, kaṣāya
Guṇa	: Guru, rūkṣa
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Pittaśāmaka

Properties and action

Karma	: Śukrastambhana
	Dāhapraśamana-pittaśāmaka
	Raktapittaśāmaka
	Vṛṣya-prajāsthāpana
	Mūtrala
	Dāhapraśamana
	Balya
	Stanyajanana
Roga	: Śukradaurbalya
	Garbhasrāva-calagarbha
	Santāpa-dāha-tṛṣṇā-śrama
	Daurbalya
	Raktapitta
	Grahaṇī
	Paittaika vikāra
	Asthibhagna
	Prameha
	Visarpa
	Prameha
	Vātavyādhi-vātarakta

Pittaja kāsa
 Śoṣa-daurbalya-kṣataksīṇa
 Dantaroga
 Śīroroga
 Aruci.

Therapeutic uses

The fruits can be canned in a number of ways. Canning in brins containing 28.5 per cent salt, citric acid 0.2%, sugar 5% gave a product with good texture and flavour. To prevent the occurrence of pink colour in the canned product caused by leucoanthocyanins in the membrane below the pericarp and surrounding the cotyledons, it is necessary to hand-peel, lye-peel, and trim the nuts before canning.

The green and fresh fruits with tender, white and sweet kernels (after peeling off that fruit-shells) are delicious and farinaceous, and the flavour resembles of chestnut which is odorous. The flour of dried chestnut or śṛṅgāṭaka cūrṇa (powder like wheat flour) is an important source of food as it enters into preparations of various recipes (salty and sweetish) of household dietetics, in addition to its rural and tribal use as food in scarcity. An important traditional use of green, dried and flour of nuts (śṛṅgāṭaka) is specifically made during religious fasting (vrata-upavāsa) carrying socio-religious acceptance (among Hindu communities).

The nuts of Śṛṅgāṭaka are quite nutritious and they are eaten raw when tender and fresh or after cooking as vegetable and also after simply boiling or roasting them. The meal, prepared by grinding the dried kernels, is used as a substitute for cereal flour. The kernels are prone to attacks by fungi and insects and such attacks can be avoided by fumigation with methyl bromide.

The drug Śṛṅgāṭaka is prajāsthāpana that helps in stabilisation of foetus during pregnancy; it allays burning sensation (dāhapraśamana), aphrodisiac (vṛṣya-śukrajanana) and tonic (balya). It is diuretic (mūtrala), allaying thirst (tṛṣṇā-nigrahaṇa), stambhana and anti-biliary (pitta śāmakā).

Śṛṅgātaka kernel is given in different forms and modes in intrinsic haemorrhage, miscarriage, debility, dysuria, burning sensation, excess thirst, grahaṇī, seminal and sexual disorders.

Parts used : Fruits.

Dose : 5-10 gm.

Formulations (yoga)

Elādi taila, Mahāmāyūra ghr̥ta, Dvipaṅcamūlādyā (Jivaniya) ghr̥ta, Sukumāraka taila, Amṛtaprāśa ghr̥ta, Sarpirguḍa, Vṛṣya ghr̥ta.

ŚṚṆGĀTAKA (शृङ्गाटक)

‘शृङ्गाटकं ‘सिङ्गाड़ा’ इति लोके ।’

Dalhaṇa, Suśruta Samhitā, Sūtra, 46-304.

क. शृङ्गाटकं जलफलं त्रिकोणफलमित्यपि ।

ख. शृङ्गाटकं हिमं स्वादु गुरु वृष्यं कषायकम् ।

ग्राही शुक्रानिलश्लेष्मप्रदं पित्तास्रदाहनुत् ॥

Bhāvaprakāśa Nighaṇṭu, Āmrāphalādi varga, 92-93.

शृङ्गाटो जलकन्दः स्यात् त्रिकोणास्त्रिकण्टस्त्रिकः ॥

शृङ्गाटकं कषायं तु मधुरं वृष्यवातलम् ।

जीवनं पित्तशमनं कफमेहहरं गुरु ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1620-1621.

शृङ्गाटकः

शृङ्गाटकः शृङ्गरुहो जलवल्ली जलाश्रया ।

शृङ्गकन्दः शृङ्गमूलो वृषाणी सप्तनामकः ॥

शृङ्गाटकगुणाः

शृङ्गाटकशोणितपित्तहारी लघुः सरो वृष्यतमो विशेषात् ।

त्रिदोषतापश्रमशोफहारी रुचिप्रदो मेहनदाढ्यहेतुः ॥

Rāja Nighaṇṭu, Mūlakādi varga, 45-46.

मूत्रकृच्छ्रे पित्तजे

‘पिबेत्कषायं कमलोत्पलानां

शृङ्गाटकानामथवा विदार्याः ।’

Caraka Samhitā, Cikitsā, 26-51.

शृङ्गाटकगुणाः

‘गुरुविष्टम्भि शीतौ च शृङ्गाटककशेरुकौ ।’

Suśruta Samhitā, Sūtra, 43-304.

महावातव्याधौः

‘शुण्ठीशृङ्गाटककसेरुकसिद्धं वा ।’

Suśruta Samhitā, Cikitsā, 5-7.

कफकरद्रव्याणां शृङ्गाटकम्

Suśruta Samhitā, Sūtra, 21-23.

शृङ्गाटकस्तन्यजननद्रव्यम्

Suśruta Samhitā, Śārīra, 10-30.

रक्तस्तम्भनार्थं शृङ्गाटकम्

Suśruta Samhitā, Śārīra, 10-57.

गर्भिण्ये सप्तममासार्थमौषधद्रव्ययोजनायां शृङ्गाटकम्

Suśruta Samhitā, Śārīra, 10-62.

अस्थिभग्ने गन्धतैलम् घटकद्रव्यं शृङ्गाटकम्

Suśruta Samhitā, Śārīra, 3-61.

प्रमेहचिकित्सायामयस्कृतियोजना-घटकद्रव्यम्

Suśruta Samhitā, Cikitsā, 11-9.

विसर्प रोगे लेपद्रव्ययोगः

Suśruta Samhitā, Cikitsā, 11-9.

वातरक्ते

द्विपञ्चमूलाद्यघृते

Caraka Samhitā, Cikitsā, 29-65.

सुकुमारकतैले

Caraka Samhitā, Cikitsā, 29-99.

गर्भस्थापने

‘शृङ्गाटकपुष्करबीजकशेरुकान् भक्षणार्थं (दद्यात्) ।’

Caraka Samhitā, Śārīra, 8-24.

‘शृङ्गाटकं बिसं द्राक्षा कशेरु मधुकं सिता ।’

Suśruta Samhitā, Śārīra, 10-62.

स्तन्यजननार्थम्

‘.....कशेरुकशृङ्गाटकबिसविदारिकन्द....प्रभृतीनि विदध्यात् ।’

Suśruta Samhitā, Śārīra, 10-30.

शिरोरोगे

महामायूरघृते

Caraka Samhitā, Cikitsā, 26-169.

भग्ने

एलादितैले

Suśruta Samhitā, Cikitsā, 3-61.

वाजीकरणे

अपत्यकरस्वरसे

Caraka Samhitā, Cikitsā, 2-2-14.

वृष्यघृते

Caraka Samhitā, Cikitsā, 2-2-22.

रक्तपित्ते

शृङ्गाटकानां लाजानां मुस्तखर्जूरयोरपि ।

लिह्याच्चूर्णानि मधुना पद्मानां केशरस्य च ॥

Caraka Samhitā, Cikitsā, 4-71.

कासे पित्तजे

शृङ्गाटकं पद्मबीजं नीली वारणपिप्पली ।.... ॥

घृतक्षौद्रयुक्ताः लेहाः श्लोकार्थैः पित्तकासिनाम् ॥

Caraka Samhitā, Cikitsā, 18-87/89.

तृष्णायाम्

‘कशेरुकशृङ्गाटकपद्मोचबिसेक्षुसिद्धं क्षतजां निहन्ति ।’

Suśruta Samhitā, Uttara, 48-23.

प्रमेहे

‘शृङ्गाटकबिस.....विकङ्कतेषु वा ।’

Suśruta Samhitā, Cikitsā, 11-10.

विसर्पे

कशेरुकशृङ्गाटकपद्मगुन्द्राः सशैवलाः सोत्पलकर्दमाश्च ।

वस्त्रान्तराः पित्तकृते विसर्पे लेपा विधेयाः सघृताः सुशीताः ॥

Suśruta Samhitā, Cikitsā, 17-6.

.....शृङ्गाटकगुडशर्कराः ।..... ।

.....लिह्यान्ना मधुसर्पिषा ॥

कासश्वासपहान् स्वर्यान् पार्श्वशूलहरास्तथा ।

Caraka Samhitā, Cikitsā, 8-100/102.

दन्तरोगे

ततो विदारीयष्ट्याह्वशृङ्गाटककशेरुकैः ।

तैलदशगुणे क्षीरे सिद्धं हितं भवेत् ॥

Suśruta Samhitā, Cikitsā, 22-40.

शोषे क्षतक्षीणे च

अमृतप्राशघृते

Caraka Samhitā, Cikitsā, 11-37.

द्वितीयसर्पिर्गुडे

Caraka Samhitā, Cikitsā, 11-58.

STHAUṆEYAKA

Botanical name : *Taxus baccata* Linn.

Syn. *Taxus Wallichiana* Zucc.

Family : Taxaceae

Classical name : Sthauṇeyaka

Sanskrit name : Sthauṇeyaka

Regional names

Thuner, Thuno (Hi.); Thuner, Gallu (U.P. hills); Bismi (Kashmiri, Bengla); Common Yew, Himalayan Yew (Eng.).

Description

Dioecious tree, upto 30 metres tall; stem fluted, bark thin, reddish brown.

Leaves linear-flattened, curved, spiny tipped, leathery, dark glossy-green above, paler beneath.

Male strobili in catkins; stamens 10; pollen sac 5-9. Female strobili solitary, axillary.

Fruits red-fleshy, 8 mm. long, surrounded the olive green, single seed.

Flowering and fruiting time

Plant flowers and fruits from March to September.

Distribution

Plant occurs in evergreen and coniferous forests of temperate Himalayas in various states of India.

Chemical composition

Leaves contain taxine A and B, hydrochloric acid (12-39 mg./kg., oil leaves being richer), formic acid, reducing sugars, resins, tannins, ephedrine, a glucoside toxicatin, taxiphylin, ferredoxin, ecdysterone (also present in wood).

An important active principle Taxol is reported from plant in addition to several other taxoids.

Properties and action

Karma	: Kāsaghna Vātaghna Vṛṣya Āvasādaka Garbhasrāvaka Anulomana-dīpana
Roga	: Kāsa-śvāsa-hikkā Apasmāra Agnimāndya Rajorodha Vātavyādhi,

Therapeutic uses

The drug Sthañeyaka is antiseptic, aphrodisiac, emmenagogue and sedative. It is used in asthma, bronchitis, epilepsy and hiccough. The leaves are abortifacient.

The non-poisonous and fleshy aril is eaten by the rural folks and tribals. It is credited with carminative, expectorant and stomachic properties. Extracts of plant may be added in cosmetics, such as hair-lotions, rinses, beauty and shaving creams and dentrifices.

Sthañeyaka is used as processed oil and paste in oedema caused by vāta (Caraka Saṁhitā, Cikitsā, 12-65). It is one of the ingredients of Agurvādyataila prescribed in fever and cold (Caraka Saṁhitā, Cikitsā, 3-267). For treatment of vātavyādhi, the drug Sthañeyaka enters in formulations of mṛtasañjivana agada (Caraka Saṁhitā, Cikitsā, 25-54), Tārksya agad and Mahāsugandha agada (Suśruta Saṁhitā, Kalpa, 5-66, 6-19).

Parts used : Bark, leaves.

Dose : Powder.

SŪCĪ

Botanical name : *Atropa belladonna* Linn.

Family : Solanaceae

Classical name : Sūcī

Sanskrit names

Sūcī, Drākṣāśāka, Karamardaphalā.

Regional names

Sag angur, Angurshafa (Hindi); Suci (Punj.); Ebaruj (Beng.); Girbuti (Bombay); Jhalakphal (Kann.), Indian *Atropa*, Indian *Belladonna* (Eng.); Dedly Nightshade, *Balladonna* (Eng.).

Description

***Atropa acuminata* Royle.**

A tall straight plant is about 3-6 feet high. Leaves are stalked, elliptic-lanceolate, acuminate, 3-6 inches long and 2-6 broad. The aerial shoots die every autumn and new ones arise in the following year, and form a large crown. The plant has a large taproot with many lateral rootlets. They are woody, pale-brown in colour, 6 inches or more in length, 3/8-3/4 inch diameter. They have short transverse scars due to the folding of outer bark. The bell-shaped flowers are solitary, short-stalked, about an inch long and generally yellow in colour. The fruit is purple-black berry of the size of a cherry.

Distribution

Plant occurs wild in Kashmir valley at 8,000 feet elevation. It grows in nature in Baluchistan.

During the collection of leaves, a portion of stem is also removed the rest of the plant is then uprooted and dried.

***Atropa belladonna* Linn.**

A tall branching, perennial herb widely distributed throughout central and southern Europe, also grows wild in southern England; also cultivated in England and Europe, also U.S.A. It is grown in Kashmir in India. The flowers are yellowish-purple.

Herb 4-5 feet tall. Leaves 3-8 inches long, acumi-

nate, shorter or narrower downwards. Fruits resembling with karamarda (*Carissa carandus*), black bright. Root 1 feet long, 1-2 inches thick, fleshy.

Chemical composition

Roots and leaves contain alkaloids atropine, hyoscyamine, hyoscine. Indian kind of Belladonna has higher yield of alkaloids. Indian Belladonna roots and roots contain hyoscyamine 0.81 and 0.5 per cent respectively.

Pharmacodynamics

Rasa	: Tikta, kaṭu
Guṇa	: Laghu, rūkṣa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātahara Pittavardhaka

Properties and action

Karma	: Mādaka Sajñāhara-vedanāsthāpana Uttejaka-pralāpajanana Lālāpraseka śamana Śūlapraśamana Hṛdayāvasādaka (lower dose)- uttejaka (higher dose) Kāśahara-śvāsahara Stambhana-śukraśodhaka Stanyaśoṣaka Kaṇḍūghna Svedāpanayana Dhātuśoṣaṇa
Roga	: Āmavāta-gr̥dhraśī Vraṇaśūla Śothavedanāyukta vikāra Udaraśūla Lālāprasekādhikya Hṛddaurbalya-Hṛdayaśūla- hrddrava-hṛtspandana-hṛdvikāra Kāśa-śvāsa-kukkurakāśa Vṛkkāśmarī-mūtramārgaśūla- śaiyyāmūtra-bastiśoṭha

Prameha-madhumeha
Atisveda-kṣayajanya rātrisveda.

Therapeutic uses

The drug Sūcī is vedanāsthāpana; it is analgesic, stimulant, mādaka and pralāpajanana. It stimulates salivation and pacifies colic since the drug is śulaprasamana or anti-colic. It stimulates heart in higher dose but it is sedative to heart in lower dose. It is anti-cough and anti-asthmatic.

Sūcī is useful against diseases caused by Kaphavāta doṣa. It is quite useful in Vātavyādhi (predominantly characterised by cramp and pain) and abdominal colic. It is useful in various heart troubles (such as irregular palpitation of heart, angina, heart weakness etc.) and respiratory problems like cough, bronchial asthma, whooping cough and other similar complaints caused by vāta-śleṣma doṣa.

The drug is useful in inflammation of urinary bladder, bed-urination (śaiyyāmūtra), urinary tract pain, U.T.I. and renal calculus; the leaves are used in diabetes. Excess sweating is checked by use of this drug especially Kṣayajanya rātrisveda (night sweating in consumption under tubercular stage).

It is antidote to poisoning or toxic effect resulted by opium (ahiphenā), aconite (vatsanābha) and vātādamha.

Externally the drug is applied on lesions affected with various ailments characterised by swelling and pain.

Parts used : Leaves, Roots.

Dose

Powder 30-60 mg., Tincturi Belladonna 5-30 drops, Atropine 11/4-1 mg.

SUDARŚANA

Botanical name : *Crinum latifolium* Linn.

Family : Amaryllidaceae

Classical name : Sudarśana

Sanskrit names

Dadhyālī, Sudarśana, Cakrāṅgī, Madhuparṇikā, Somavallī, Vatsādani, Meṣaka-mecaka.

Regional names

Sudarshan (Hindi); Sukhadarshan (Beng.); Vishapungil (Tam.).

Description

A perennial herb, about 2-6 feet high. Leafy plant.

Leaves many, 2-3 feet long and 3-4 in.; green in colour, looking like radical leaves.

Flowers in the middle of plant, spadix about 1 feet long and 1 in. broad; 8-10 fls. on spadix, flowers white in colour, pink spotted, curved downward.

Fruit round in shape, 2-2.5 in. diam., often 25 longitudinal linings on fruit-skin or outer coat.

Seeds about 12, celled.

Bulb round-shaped, 5-5.5 in. diam., very bitter in taste.

Flowering and fruiting time

Leaves or new foliage in June. Flowers appearing in May-June, sometimes before leaves comes up. Leaves are falling off in winters.

Distribution

Plant grows almost throughout India and specially in Orissa, Chhota Nagpur, Bengal and other regions in country. It is common in India. Planted in gardens.

Kinds and varieties

There are two drug names related to Sudarśana viz. Bṛhat Kandālī (Nāgadamanī) and Kandālī which are botanically known as *Crinum asiaticum* Linn. and *Crinum defixum* Ker-Gawl. Kandālī kanda, the tuber of *Crinum defixum* Ker-Gawl is considered toxic. As regards their habitat, *Crinum defixum* Ker-Gawl. is common on river banks and swampy places in Deccan, Bengal, Central India (Madhya Pradesh) and other regions in wild state. *Crinum asiaticum* Linn. is wild or cultivated almost throughout tropical regions in India.

Crinum defixum Ker-Gawl. syn. *Crinum asiaticum*

Roxb, Stout, leafy herb or undershrub. Leaves erect, linear, concave, large. Flowers white, large, in umbels on a long stout scape. Perianth tube equalling the spreading, linear-lanceolate lobes. Filaments free. Anthers linear. Fruits subglobose.

Chemical composition

Bulb contains lycorin.

Pharmacodynamics

Rasa	: Madhura, tikta
Guṇa	: Laghu, rūkṣa
Virya	: Uṣṇa
Vipāka	: Madhura
Doṣakarman	: Kaphavātaśamana

Properties and action

Karma	: Śothaghna-kuṣṭhaghna Vedanāsthāpana Vidradhipācana Jantughna Kaṇḍūghna Vāmaka-recaka (ubhayatobhāgahara) Vāmaka-recaka Svedajanana-kuṣṭhaghna Jvaraghna.
Roga	: Śoṭha vedanā pradhāna vikāra Sandhivāta Arśa (pīḍā) Vidradhi Jantughna (patra : leaves) Carmavikāra Viṣa (saṁśodhana) Śotharoga Kuṣṭha-rakta vikāra Jvara Kārṇasūla-kārṇasrāva-kārṇaroga Pradara Krimiroga.

Therapeutic uses

The drug Sudarśana is karṇya that cures ear dis-

eases. The juice of the leaves is obtained and it is earache, otorrhoea and similar ailments of the ear.

Sudarśana is useful in fever (jvara), oedema (śoṭha), kuṣṭha, blood impurities (raktavikāra), leucorrhoea (pradara) and other diseases. The plant drug is highly acrid. The crushed and roasted bulbs are used as rubefacient in rheumatism.

The leaves are applied on body-parts affected with swelling and pain in joints e.g. sandhivāta, āmavāta and other similar disorders belonging to vātavyādhi. The leaves are ground and luke warm paste is applied over and fomentation of leaves is also used. Apart from leaves, the bulb is ground and little warmed up, and its paste is applied on organs suffering from sandhivāta, āmavāta and other ailments of same group.

The bulb (kanda) is useful as emetic and purgative (saṁśodhana) drug.

The bulb paste is applied to haemorrhoids for alleviating painful condition. The paste of bulb is externally used on abscess (for vidāraṇa).

The leaves are strong insecticidal or germicidal. The leaves are used for fumigation for insecticidal purposes so the leaves are used as household germicidal. The dried leaves material is used for fumigation (dhūpana) as musquotoes-repellant.

The leaves are cooked in the oil which is applied on skin diseases.

The drug plant is generally useful in the ailments caused by vāta kapha doṣa.

Parts used : Bulb and leaves.

Dose : Leaves juice 5-10 ml., Bulb powder 1-2 gm.

SUDARŚANA (सुदर्शन)

Crinum latifolium Linn.

क. सुदर्शना सोमवल्ली चक्राङ्गी मधुपर्णिका।
वत्सादनी च दध्याली मेषकः मेचकः तथा॥

ख. दध्याली स्वादुतिक्तोष्णा कफशोथशोफास्त्रजित् ।

Kaiyadeva Nighaṇṭu.

सुदर्शना

सुदर्शना सोमवल्ली चक्राह्वा मधुपर्णिका ।

सुदर्शना स्वादुरुष्णा कफशोथास्त्रवातजित् ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 307.

कुष्ठे

चक्रमर्दकबीजानि जीरकञ्च समांशिकम् ।

स्तोकं सुदर्शनामूलं दद्रुकुष्ठविनाशनम् ॥

Cakradatta, 50-23.

प्रदरे

स्त्रीणामजस्त्रं प्रदरामयस्य प्रवृत्तिरुग्रा शममेति सद्यः ।

सुश्लक्ष्णपिष्टेन पयोऽन्वितेन पीतेन मूलेन सुदर्शनायाः ॥

Rāja mārtaṇḍa, 31-1.

KANDALI (कन्दली)

Crinum asiaticum Ker-Gawl.

क्रिमिरोगे

सर्पिर्गुडाभ्यां सह पाचयित्वा यः कन्दलीकन्दं निहन्ति तस्य ।

पतन्ति सद्यः क्रिमयः समग्रा येऽप्युग्रमतोदरकुक्षिरोगाः ॥

Rājamārtaṇḍa, 7-7.

Gadanigraha, 32-140.

SUNIṢAṆṆAKA

Botanical name : Marsilea minuta Linn.

Family : Marsileaceae

Classical name : Suniṣaṇṇaka

Sanskrit names

Suniṣaṇṇaka, Catuspatri

Regional names

Choupatiya, Sunasuniya (Hindi); Susani shak (Beng.); Arai-kirai (Tam.); Mudugo-tamara (Tel.);

Chitigina soppu (Mal.); Papalu (Kann.); Godhi (Punj.); Water clover, Peperwort (Eng.).

Description

Plant is an aquatic leptosporangiate fern (pteridophyte) which is considered to be highly advanced among pteridophytes for as heterospory and specialization of ganteophytes.

Small herbaceous plant with trailing habit shows profuse vegetative growth producing largest nodes in the rhizome.

Leaves long petioled, compound; leaflets 4, entire or crenulate measuring 3-3.5 cm. in length. Leaves arise in bunches from the node of the trailing stem and grow upward. Leaf compound with long petiole and 4 leaflets at the tip. Each leaflet pointed at the base broad and rounded at the top entire or crenulate measuring 25-30 mm. in length. Veins radiating, dichotomously branched and marginally united to form a loose network.

Sporocarps bean-shaped, measuring 8×5 mm. and pedicel 7-11 mm. in length. Sporocarps brown, shortly stalked arise in bunches from the node alongwith the leaves; stalk attached at one end and forming a spiny projection at the tip. Surface hard with circular depressions and hairs.

Flowering and fruiting (sporocarp) time

Plant bears sporocarps during autumn-cold season (November-January months).

Distribution

Plant is common growing in marshy and shady places by the side of tanks and rivers and also in the rice fields of West Bengal. The Genus *Marsilea* species are of wide and almost cosmopolitan distribution except for limited occurrence in some areas.

Kinds and varieties

Another species *Marsilea quadrifolia* Linn. is found in Kashmir region. *Marsilea rajasthanensis* Gupta is said to be also medicinal.

The plant *Marsilea minuta* Linn. is naturally available as wild herb and it is propagated vegetatively by rhi-

zomes and by spores. It can be cultivated in the aquatic, subaquatic and terrestrial conditions. It can also be grown in muddy soil in large earthenware pots.

Chemical composition

Some nonprotoplasmic cell contents like alkaloid, tannin, sugar, starch, fat, protein and mucilage are present in both the leaf and sporocarp. Saponin and cutin are present in the sporocarp and lignin is present in the leaf only. All these substances present in the crude drug react positively with different concentrations of acids, alkalies, salts and dyes.

The chloroform extract of the leaves of *Marsilea minuta* Linn. and *Marsilea rajasthanensis* Gupta. have been reported to yield marsilin, which was later/obtained from the leaves of *Ipomoea fistulosa* Mart ex Choisy also and shown to be 1-triacontanol extract.

The roots and stems of *Marsilea minuta* Linn. and *M. rajasthanensis* Gupta were also found to contain marsilin but it is reported to be in small quantity.

The leaves of *Marsilea minuta* Linn. (*Suniṣaṇṇaka*) was successively extracted with petroleum ether, chloroform and ethanol. The petroleum ether fraction yielded an asymmetrical hydroxyketone substance identified as 3-hydroxy-triacontan-11-one, and a mixture of secondary alcohol with kentriacontane-16-01 as the major component. The chloroform extract of the plant drug *Suniṣaṇṇaka* (*Marsilea minuta* Linn.) has yielded *B-sitosterol*, and the alcoholic extract a saponin which was found to be a mixture of sapogenols on hydrolysis. *Marsileagenin A*, the major sapogenol was found to be olean-12-ente-2a, 3B, 16B, 21a, 22a, 28-hexol whereas the other two sapogenols viz. *marsileagenins B and C* were present in small quantities.

The contents of calcium and phosphorous in medicinal plant *suniṣaṇṇaka* (*Marsilea minuta* Linn.) were found to be 53 and 91 mg. 100 g. respectively.

Pharmacodynamics

Rasa	: Kaṣāya, madhura
Guṇa	: Laghu, snigdha
Vīrya	: Śīta

Vipāka : Kaṭu
Doṣakarma : Tridoṣaghna

Properties and action

Karma : Arśoghna
Dīpana-grāhī
Raktaśodhana
Kāśahara
Vṛṣya
Viśaghna
Medhya-nidrājanana-vedanāhara
Cakṣuṣya

Roga : Arśa
Vātarakta-urustambha
Kāsa
Agnimāndya-grahaṇī-arśa
Raktavikāra
Vātaja kāsa-śvāsa
Śukrakṣaya
Viṣa
Timiraroga
Mānasaroga-nidrānāśa

Therapeutic uses

The plant drug is used as nervine tonic in treatment of epilepsy and insomnia. The leaves are used as a remedy in carbuncle in thigh. Leaves roasted in ghee are used in bilious affections and also in insomnia. The mature spores with buttar milk recovers urinary troubles. The plant also acts as antivenom drug.

The whole plant of drug Suniṣaṇṇaka is ground and pasted over wounds. Drug is suggested to be wholesome to protect and promote eye-sight. The vegetable of herb (Suniṣaṇṇaka śāka) is fried in ghee (butter) and given in intrinsic haemorrhage (raktapitta) as Suniṣaṇṇaka belongs to a group of vegetables wholesome (pathyaśaka) in Raktapitta diseases. In condition of Urustambha, the vegetable of drug plant Suniṣaṇṇaka is cooked in water and oil, without salt, and same is prescribed in diet. Medicated vegetables in diet (pathyāhāra śāka) are suggested to be given in certain ailments and the vegetable of this medi-

nal herb (Sunīṣaṇṇaka śāka) has classically been recommended specially in cough (vātaja kāsa), eye diseases (netraroga), poisoning (viṣa), intrinsic haemorrhage (rāktapitta), gout (vātarakta) and some other diseases. The drug plant is a major ingredient drug in Sunīṣaṇṇaka-cāṅgerī ghṛta prescribed in management of piles or haemorrhoids (arśa). Drug is suggested to be used in ailments caused by blood impurities being a blood purifier medicine (raktaśodhana). In mental ailments, the drug is used orally and useful in insomnia. It is useful as anodyne, brain tonic, stomachic, astringent, aphrodisiac and antidote to poison. Drug plant is useful in spermatorrhoea, cough, asthma, eye diseases (timira roga) and some other diseases (agnimāndya, grahaṇī and śukrakṣaya).

The pharmacological activity of drug Sunīṣaṇṇaka (*Marsilea minuta* Linn.) has been investigated and the studies on some allied species of *Marsilea* have also been conducted for examining and proving their medicinal potentiality and therapeutic utility.

Ethanollic extract of *Marsilea minuta* Linn. (whole plant) produced CNS-depressant effects and hypothermia in mice. It had no anthelmintic, hypoglycaemic, CVS, anti-cancer or diuretic activities and effects on isolated guineapig ileum. The LD₅₀ of the extract was found to be 70 mg/kg i.p. in mice.

The aqueous and alcoholic extracts of defatted and fresh leaves *Marsilea minuta* Linn. and *M. rajasthanensis* Gupta. as well as marsilin, isolated from the two species, were studied for their anti-convulsant and sedative activities. Marsilin (400 mg./kg.) also significantly increased the mouse brain serotonin content, the activity being maximum after 60 minutes of its administration. At the dose level, it inhibited acetyl-cholinesterase in cerebral tissue in mice initially, followed activation and inhibition alternately. Marsilin decreased the content of gamma aminobutyric acid (GABA) and increased glutamine and glutamic acid level in mice.

The microbiological studies on *Marsilea* (*Sunīṣaṇṇaka*) have been carried out. *Marsilea* leaves (ex-

tract) showed a mild degree of antifungal activity against *Alternaria alpandi*, *Fusarium nivale*, *Gleocladium*, *Phomopsis* and *Gibberella* spp. Optimum antibacterial activity was reported against *Bacillus anthracis*, *B. pumilus*, *B. subtilis*, *Salmonella paratyphi*, *Vibrio cholerae*, *Xanth. Campestris* and *Xanth. malvacearum*.

The studies conducted on *Marsilea quadrifolia* Linn. showed that the alcoholic extract of *Marsilea quadrifolia* Linn. leaves did not reveal any narcotic activity even at a dose of 100 mg./kg. (oral) in mice although it led to potentiation of pentobarbital induced hypnosis at a dose of 5-10 mg./kg. Higher doses did not enhance this potentiation. An alkaloid from the whole plant of *Marsilea quadrifolia* Linn. is reported to have a CNS-depressant effect in rats. The alkaloid isolated from *M. quadrifolia* has showed cholinergic effects. The plant drug *Marsilea quadrifolia* Linn., another source of *Suniṣaṇṇaka* (a Himalayan species) is medicinally active and useful due to its chemical potential.

Medicinal efficacy and pharmacological activity of the drug *Suniṣaṇṇaka* have closely related with ecological conditions of source plant *Marsilea minuta* Linn. A physioecological study on the physiological variaties in *Marsilea minuta* grown under different ecological conditions had been carried out for observing various changes of growth habitation and chemical contents. Different observations would indicate that the dry matter total acidity, nitrogen and protein content are much higher in the terrestrial types than in the aquatic and semi-aquatic forms. The chlorophyll and crude alkaloid content, on the other hand, are found to be higher in the sami-aquatic types than in the aquatic and semi-aquatic forms. The chlorophyll and crude alkaloid content, on the other hand, are found to be higher in the semi-aquatic types. The data on growth parameters wound indicate the fact that the number of leaves and sporocarps, the area of sporocarps and the length of pedicel are higher in the terrestrial type, but the average leaf area and the length of petiole and internode are more in the aquatic type.

Parts used : Whole plant.

Dose : Juice 10-20 ml.

Formulation : Suniṣaṇṇakacāṅgerī ghr̥ta.

SUNIṢAṆṆAKA (सुनिषण्णक)

स्वादु कषाय सङ्ग्राही मेध्यस्तु सुनिषण्णकः ।

शीतो वृष्यो ज्वरभ्रान्तिमनोदोषापहारकः ॥

Dravyaguṇa Vijñāna.

- क. सुनिषण्णकः सूचिपत्रः चतुष्पत्रो वितुन्नकः ।
श्रीवारकः शितिवारः स्वास्तिकः कुक्कुटशिम्बी ॥
चाङ्गेरी पत्रसदृश पत्रः सूच्या च वाहितः ।
- ख. सुनिषण्णो हिमः स्वादुः कषायो दीपनो लघुः ॥
अविदाही त्रिदोषघ्नो रूक्षो हृद्यो वृषत्वकृत् ।
ग्राही हन्ति ज्वरश्वासकुष्ठमेहारुचिभ्रमान् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 685-687.

अर्शचिकित्सायां सुनिषण्णकचाङ्गेरीघृते

क. विधिः

‘अवाक् पुष्पी बला....प्रस्थोऽत्र विज्ञेयो द्विपलाधिकः ।’

सुनिषण्णकचाङ्गेर्योः प्रस्थौ द्वौ स्वरसस्य च ।

सर्वैरेतैर्योद्विष्टैर्घृतप्रस्थं विपाचयेत् ॥

ख. गुणाः

एतदर्शःस्वतीसारे रक्तस्त्रावे त्रिदोषजे ।

प्रवाहणे गुदभ्रंशे पिच्छासु विविधासु च ॥

उत्थाने चातिबहुलः शोधशूले गुदाश्रये ।

मूत्रग्रहे मूढवाते मन्देऽग्नावरुचावपि ॥

प्रयोज्यं विधिवत् सपिर्बलवर्णाग्निवर्धनम् ।

विविधेष्वन्नपानेषु केवलं वा निरन्त्ययम् ॥

Caraka Samhitā, Cikitsā, 14-239/242.

रक्तपित्ते

‘पटोलशेलूसुनिषण्णयूथिका हितञ्च शाकं घृतसंस्कृतं सदा ।’

Suśruta Samhitā, Uttara, 45-16.

चक्षुष्यप्रयोगे

....सुनिषण्णकशाकञ्च.... ।

....च दृष्टेर्हितं शाकुनजाङ्गलञ्च ॥

Suśruta Samhitā, Uttara, 17-50.

वातजकासे शाकार्थम्

....सुनिषण्णकम् ।....

शस्यते वातकासे तु स्वाद्वम्ललवणानि च ॥

Caraka Samhitā, Cikitsā, 18-81/82.

विषे

....सुनिषण्णकाः ।

....च शाकञ्च कुलकं हितम् ॥

Caraka Samhitā, Cikitsā, 23-225.

वातरक्ते

सुनिषण्णक..... ।

....शाकं सौवर्चलं तथा ॥

घृतमांसरसैर्भृष्टं शाकसात्म्याय दापयेत् ।

व्यञ्जनार्थे — ।

Caraka Samhitā, Cikitsā, 29-52/53.

उरुस्तम्भे

.... । सुनिषण्णक.... ।

वायसीवास्तुकैरन्यैस्तिकैश्च कुलकादिभिः ॥

Caraka Samhitā, Cikitsā, 27-26/27.

SURAÑJANA-SURIÑJANA

Botanical name : Colchicum luteum Baker.**Family :** Liliaceae**Classical name :** Surañjana**Common names :** Surañjana, Suriñjana**Sanskrit name :** Surañjana**Regional names**

Suranjana, Surinjan (Hindi, Mar., Guj.); Surinjan (Pers.); Colchicum (Eng., Latin); Hermodactyl (Eng.).

Bitter Hermodactyl - Kashmir Hermodactyl (Bitter Colchicum) : Suranjan Karhuva-Kadua suranjan (Hindi, Indian trade); Surinjane talkh (Pers.); Surinjan (Kash.).

Sweet Hermodactyl - Sweet colchicum : Suranjan, Meetha suranjan (Hindi, Indian trade); Surinjane shiri (Pers.).

Description

An annual herbaceous small plant. Leaves few in number, linear-oblong tapering, oblanceolate, lvs. arising with inflorescence, shorter in beginning (or when young) but gradually increasing with fruiting, attaining length 15 cm. to 30 cm.

Flowers 1 or 2, fl. 2.5-3.75 cm. in diam. when fully developed, perianth golden-yellow in colour; tube 7.5-10 cm., stamens 6, shorter than perianth in length; anthers yellow in colour, larger than stigma, style thread-like, longer than perianth.

Capsule 2.5 to 3.7 cm.. Seeds 2-3 mm. diam. greyish-white, small or minute, many, packed in fruit.

Flowering and fruiting time

Plant flowers during spring season and fruits afterwards.

Distribution

Plant occurs in western Himalayas at altitudes of 2,000-9,000 ft. or in the outskirts of forests or growing in open pasture lands, extending from the Murree hills to Kashmir and Chamba in Himachal Pradesh.

Kinds and varieties

There are mainly two kinds of colchicum viz. bitter and sweet colchicum. In Unani medicine, the colour and taste of corms make three kinds viz. white, yellow and black. White (śveta) suranjan is sweet colchicum and yellow (pīta) suranjan is bitter colchicum. Black (Kṛṣṇa) suranjan is toxic. Bitter colchicum is used in medicine. Indigenous system of medicine make use of both kinds of Suranjan i.e. sweet for internal use and bitter for external application. Liquid extract is known as 'Harantutiya', dark grey in colour Bitter colchicum (tikta suraṅjāna) is considered chemically potent.

Chemical composition

Corms contain colchicine 0.21-0.25% and high amount of starch.

Seeds (specially seed-coat) contain higher amount (than corms) 0.30%-0.43 per cent. Seeds also yield some sugar and fixed oil.

Pharmacodynamics

Rasa	: Tikta, kaṭu
Guṇa	: Laghu, rūkṣa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmakā

Properties and action

Karma	: Śothahara (śvayathuvilayana)
	Vedanāsthāpana
	Vraṇaśodhana-vraṇaropana
	Dīpana
	Pittasāraka
	Vāmaka
	Recaka (higher dose)
	Avasādaka-māḍaka
	Raktaśodhaka
	Mūtrala
	Kuṣthaghna
	Balya-vājikaraṇa
Roga	: Śoṭha-vedanā
	Vraṇa
	Āmavāta-vātarakta-gr̥dhrasī
	Napūṃsakatā
	Arśa
	Pittavikāra
	Vātaroga
	Dourbalya.

Therapeutic uses

The drug Surāñjana (Suranjan) is raktaprasādana that purifies blood; it is a good medicine for vātarakta and other raktavikāra (diseases caused by vitiation of rakta and pitta). It is very useful in gout, rheumatism and other ailments of joints characterised mainly by pain and swelling.

It is anti-inflammatory and analgesic drug. The drug is also useful in liver and spleen complaints. It is carminative, laxative, aphrodisiac, alterative and aperient. External application is lessening inflammation and pain. The corms of the plant are chiefly known and used as Suranjana in medicine. The seeds are also useful in medicine, and they are used in the form of extract and tincture for the same purposes as the corms.

Parts used

Corms, Extract-colchicine (source : corms and seeds).

Dose

Bitter-corm 125-375 mg., Sweet corm 1-3 gm., Extract (colchicin) 7-3 mg. (normal minimum-maximum doses).

Formulations

(a) Khulasa suranjan shiri, Majune surinjan, Saphuph suranjan, Habb suranjan.

(b) Dry extract of colchicum, Liquid Tincture of colchicine, Tincture of colchicine.

SŪRAṆA

Botanical name : *Amorphophallus campanulatus* Blume.

Family : Araceae

Classical name : Sūraṇa

Sanskrit names

Arśoghna(i), Kandanāyaka, Sūraṇa, Vātāri, Ola-olea-ulla, Kandaḷa, Kandaśūraṇa, Sukanda-kandi, Sthūlakanda, Kandaśūraṇa, Rucyakanda, Śūrakanda, Kandvardhana, Bahukanda, Tīvrakanda.

Regional names

Suran, ola, jamikand, jimikand (Hindi); Bol (Beng.); Surana (Mar., Guj.); Karanai-Kilangu (Tam.); Kand (Tel.); Suvarnagadde (Kann.); Chena (Mal.).

Description

Stout herbaceous plant, with an underground

corm. Tuber depressed, bulbiliferous sphere 20-25 cm. (8-10 in.) diameter, dull-brown colour.

Leaves 1-2, 30-90 cm., broad, segments simple or forked; large solitary mottled leaf on a long petiole; leaflets oblong, acute; petiole dark green with pale blotches.

Peduncle elongating in fruit, sheathes linear oblong, spathe 15-23 cm. across, the orbicular, ovate, obtuse limb, coriaceous or fleshy, variable in colour, green usually with white spots below, greenish purple above, rough and dark purple within, towards the base; spadix very stout female inflorescence cylindric; Male sub-turbinate, appendage dark purple, sometimes 15 cm. in diam.

Berries obovoid.

Flowering and fruiting time

Post-rains, autumn and onwards.

Distribution

Plant is cultivated throughout the plains of country. It is cultivated in India and Sri Lanka. Plants are also found in wild state.

The tuberous outgrowth from the fully developed corms are planted during May-June. They can be dug out for use, usually after 12 months and they weight 4-8 lb. each. Corms weighing 10-20 lb. are reported from Maharastra. They keep well for a long period if stored dry in a well-ventilated room.

Kinds and varieties

There are several wild and cultivated varieties of Śūraṇa. Besides Śūraṇa and Vanya sūraṇa, two kinds viz. Sita and Śveta sūraṇa are also mentioned in indigenous materia medica.

The tubers of *Amorphophallus campanulatus* var. *blumei* Prain are known as ol and commonly used in Maharastra (Mumbai).

Chemical composition

The corm contains moisture 78.7, protein 1.2, fat 0.1, carbohydrate 18.4, mineral matter 0.8, calcium 0.05, phosphorous 0.02, iron 0.4 mg., vitamin A 434 I.U., Vitamin B₁ 20 I.U./100 g.

Corms have calcium oxalate abundantly which are more in wild corms.

Pharmacodynamics

Rasa	: Kaṭu, kaṣāya
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma

Properties and action

Karma	: Arśoghna Dīpana-rucivardhaka-pācana- anulomana Śūlapraśamana Yakṛduttejaka Kṛmighna Viṣṭambhakara Kaphaghna Vṛṣya-ārttavajanana Balya Rasāyana Śothahara-vedanāsthāpana.
Roga	: Arśa-kaphavātajārśa Agnimāndya-aruci-udaraśūla-gulma Vibandha Yakṛtpliha vikāra Kṛmiroga Kāsa-śvāsa Śukradourbalya Rajorodha Daurbalya Medaja granthi-medoroga-granthi Valmika-ślīpada Arbuda Gudakīla.

Therapeutic uses

The drug Sūraṇa is anthelmintic, aromatic and carminative. It is used in abdominal diseases, liver and spleen diseases and piles. It is highly recommended as a diet for piles and also in haemophilic conditions and diseases.

Sūraṇa is anti-haemorrhoidal (arśoghna) drug. Tubers and specifically given in piles (arśa) caused by kaphavāta doṣa. Tubers are used in dyspepsia, loss of gastric power (agnimāndya), abdominal colic (udaraśūla), gulma, liver and splenic disorders (yakṛtplīha vikāra) and dysentery. It is useful in āmavāta. Tubers are used to allay kaphavāta provocation. Corms are useful in seminal and menstrual complaints (śukradaurbalya and rajorodha). It is used in cough, asthma and general debility.

Sūraṇa is contra-indicated in pittaja vikāra and raktapitta and also other conditions where usṇa, tikṣṇa, vidāhi and kṣobhaka diet or food are restricted. Surāṇa is wholesome vegetable (pathya-śāka) specially to the patients of piles. In general, the tubers of Sūraṇa are considered best among tubers-vegetables or kandaśāka.

The tender petioles are also edible. The pigs are also fed on boiled corms and older shoots.

The corms of wild plant or vanya sūraṇa are highly irritant on account of the presence of crystals of calcium oxalate. These are less abundant in the corms of cultivated plants or grāmya sūraṇa.

The corms of Sūraṇa are commonly used for edible purposes like vegetable, curries and pickles; they are usable only after long (aroper) washing and prolonged cooking. The corms have acrid and irritating taste in raw state.

Parts used : Tuber.

Dose : 3-5 gm.

Formulation : Sūraṇamodaka (dvaya).

SŪRAṆA (सूरण)

- क. सूरणः कन्द ओ(बो)लश्च कन्दलोऽर्शोघ्न इत्यपि ।
 ख. सूरणो दीपनो रूक्षः कषायः कण्डुकृत् कटुः ॥
 विष्टम्भी विशदो रुच्यः कफार्शःकृन्तनो लघुः ।
 विशेषादर्शसे पथ्यः प्लीहगुल्मविनाशनः ॥
 ग. सर्वेषां कन्दशाकानां सूरणः श्रेष्ठ उच्यते ।
 दद्रुणां कुष्ठिनां रक्तपित्तिनां न हितो हि सः ॥

घ. सन्धानयोगी सम्प्राप्तः सूरणो गुणवत्तरः ।

Bhāvaprakāśa Nighaṇṭu, Śāka varga, 91-93.

सूरणः

अशोघ्नः सूरणः कन्दो कण्डूलश्चित्रदण्डकः ।

समष्टीलोलोऽपरश्चौल्ल उल्ल ओल्लो वनोद्भवः ॥

सूरणो विशदो रूक्षः कषायः कटुको लघुः ।

विष्टम्भो दीपनो रुच्यो बलासगुदकीलहत् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1588-1589.

वनसूरणः

अ. वनसूरणकन्दस्तु विशेषादर्शसां हितः ।

गुल्मे स्थौल्ये तथा वाते श्लेष्मवाते हितः परम् ॥

सूरणशाकम्

ब. रक्तपित्तप्रकोपि स्याच्छाकं सूरणसम्भवम् ।

सूरणनालम्

स. नालं सूरणजं रुच्यं कफवातहरं लघु ।

वन्यसूरणनालम्

द. वनसूरणजं रूक्षं नालं कटुविपाकि च ।

दीपनं स्तंसनं गुल्मकृमिशूलनिषूदनम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1590-1593.

शूरणः-सूरणः

क. कण्डूलः शूरणः कन्दी सुकन्दी स्थूलकन्दकः ।

दुर्नामारिः सुवृत्तयः वातारिः कन्दशूरणः ॥

अशोघ्नीस्तीव्रकन्दश्च कन्दार्हः कन्दवर्द्धनः ।

बहुकन्दो रुच्यकन्दः शूरकन्दस्तु षोडशः ॥

ख. शूरणः कटुकरुच्यदीपनः पाचनः क्रिमिकफानिलापहः ।

श्वासकासवमनार्शसां हरः शूलगुल्मशमनोऽस्त्रदोषकृत् ॥

Rāja Nighaṇṭu, Mūlakādi varga, 62-64.

सितशूरणः

अ. सितशूरणस्तु वन्यो वनकन्दोऽरण्यशूरणो वनजः ।

स श्वेतशूरणाख्यो वनकन्दः कण्डूलश्च सप्ताख्यः ॥

ब. श्वेतशूरणको रुच्यः कटूष्णः क्रिमिनाशनः ।

गुल्मशूलादिदोषघ्नः स चारीचकहारकः ॥

Rāja Nighaṇṭu, Mūlakādi varga, 65-66.

अर्शचिकित्सायां लघुशूरणमोदकं बृहच्छूरणमोदकञ्च

Bhāvaprakāśa, Arśorogādhikāra, 5-71/80.

अर्शे शूरणपुटपाकः

मृल्लितं शौरणं कन्दं पक्त्वाऽग्नौ ।

अद्यात् सतैललवणं दुर्नामविनिवृत्तये ॥

Cakradatta, Arśa cikitsā, 5-20.

Aṣṭāṅga Hṛdaya, Cikitsā, 8-156.

Vṛndamādhava, 5-12.

Śārṅgadhara Saṁhitā, 2-1-41.

अर्बुदे

शौरणं कन्दकं दग्ध्वा घृतेन च गुडेन च ।

लेपनञ्चार्बुदानाञ्च नाशनञ्च भिषग्वरः ॥

Hārīta Saṁhitā, 3-37-6.

मेदोग्रन्थौ

परिणतसूरणकन्दं सनागरं तोयसम्पिष्टम् ।

मेदोग्रन्थिहरार्थं लिम्पेद् बहुशश्च सप्ताहम् ॥

Vaidya Manoramā, 16-139.

वल्मीकश्लीपदयोः

पिष्ट्वा सूरणकन्दञ्च मधुना च घृतेन च ।

लेपनञ्च हितं तस्य वल्मीकश्लीपदापहम् ॥

Hārīta Saṁhitā, 3-36-7.

अर्शसि

मासमेकमन्नाशी सूरणं भक्षयेत् सुखम् ।

तक्रानुपानमाश्वर्शोनिर्मूलोन्मूलनोत्सुकः ॥

Vaidya Manoramā, 5-2.

अर्शासि नाशयति सूरणचूर्णमिश्रं तक्रं नृणां कुटजवल्कयुतं निपीतम् ।

यत्नेन वर्त्तिरथवा गमिता गुदेन वा जालिनी फलरजोगुडसम्प्रयुक्ता ॥

Rāja Mātaṇḍa, 19-1.

‘सूरणो गुदकीलहा ।’

Suśruta Saṁhitā, Sūtra, 46.

SŪRYAKĀNTĀ-SŪRYAMUKHĪ

Botanical name : Helianthus annuus Linn.

Classical names : Sūryakāntā, Sūryamukhī.

Sanskrit names

Sūryakāntā, Suryamukhī.

Regional names

Suryamukhi, Surajmukhi (Hindi); Common Sunflower (English).

Description

An annual herb with erect, rough, hairy stem, 2-15 ft. high.

Leaves 4-12 in. long, alternate, long-stalked, broadly ovate to cordate, coarsely toothed, roughly pubescent on both sides.

Flower heads usually 3-6 in. wide, but attaining 12-24 in. width under cultivation. Flowers single or double, terminal on the main axis and branches.

Receptacles flat, more frequently dilated and convex; ray florets yellow, surrounding a brown purple centre of disc florets.

Seeds (achenes) cylindrical, obovoid-compressed, 3/8 in. long and 1/4 in. broad, white, black or striped grey and black; pappus falling early.

Sunflower is self-sterile and fertilisation is normally effected by insects.

Flowering and fruiting time

Farming season of commercial crop of sun flower.

Distribution

Plant is largely cultivated on commercial scale. Though cultivated mainly as a garden plant for ornamental purpose, sunflower owes its economic value to its. Utility as an oil-seed as well as fodder-crop. Plant is not known in the wild state.

Kinds and varieties

Sunflower is grown in India mainly as ornamental plant. A large number of horticulture types including many hybrids and cultivars.

A number of forms with single or double flowers, in yellow, golden and red shades developed by intensive plant breeding. Some well-known horticultural forms are : var. Californicus Hort., var. Citritius Hort., var. globosus-

fistulosus Hort., var. *variegatus* Hort. Selections have also been obtained from *H. debilis* Nutt., an annual, and short-statured species with shining foliage and strongly bi-coloured rays, quite different from those of *H. annuus*. A collarette form resembling collarette *Dallia* has been obtained from a culture of red sunflower. There are also on record hybrids obtained by crossing annual and perennial species of *Helianthus*.

Chemical composition

The analytical values for seeds are the following moisture : 3.3-12.8, protein 13.5-19.1, fatty oil 22.2-36.5, N-free extr. 13.3-21.3, fibre 23.5-32.3 and ash 2.6-4.1 per cent.

The ash contains potassium 24.9, calcium 8.9, phosphorous 24.0, magnesium 10.5 and sulphur 9.9%; sodium, silica, iron, aluminium, chlorine, iodine, manganese, copper and zinc are present.

The seed contains monosaccharides 3.91% sacchrose and other disaccharides 3.91 and trisaccharides 0.73%; no starch or dextrins are reported. Seeds also contain (dry basis) lecithin, 0.23%, nuclein 0.31%, organic acids (including citric, tartaric and chlorogenic acids) 0.59%, cholesterol 0.15% and phytin.

The seed kernel contains albumin 51-32% globulin (46-48%), glutelin (8-19%) and insoluble protein. Distribution of total nitrogen and approximate amino acid composition of the total protein are screened and data recorded.

The oil content of the seed ranges from 22 to 36% (av. 28%); the kernel contains 45-55 per cent. Detailed chemical screening of the oil have recorded data and values. Besides various components and fatty acids, the seed oil contains appreciable quantities of vitamins A and D, sterols, squalene and other aliphatic hydrocarbons, terpene and methyl ketones (chiefly methyl nonyl ketone).

Therapeutic uses

The *Sūryamukhī puṣpa* (sunflowers) are diuretic and expectorant. They have been used in bronchial, laryngeal and pulmonary affections, cough and cold, Medicinal properties similar to those of the oil are attributed to them.

Seeds are used in dysentery. A tincture of flowers and leaves is recommended in combination with balsams, for bronchiectasis. Leaves are reported to be employed in the treatment of malarial fevers.

The plant contains a saponin. Ascorbic acid (92.2-156.3 mg./100 g. fresh wt.), carotene (0.111%), citric acid and malic acids (1.0 mg./fresh weight) and small amount of malonic, lactic, succinic, aconitic and fumaric acid present in the leaves. Leaf extracts show anti-bacterial properties.

The sunflowers are good source of honey. They furnish a yellow dye.

Sūryakāntā is useful in burning sensation of vagina (yonidāha). In case of burning sensation in vagina, āmalaka (*Embllica officinalis*) with sugar or Sūryakāntā (*Helianthus annuus* Linn.) root with rice-water (taṇḍulodaka) have been suggested in therapeutic texts (Bhāva-prakāśa, Cikitsā, 70-41) as oral use for alleviating this kind of vaginal complaint.

The seed oil or Sūryakāntā (sūryamukhī) taila is expressed oil obtained from the plant drug. It is a light amber colour with a mild taste and a pleasant flavour. Refined oil is pale yellow. Refining losses are low and the oil has good keeping qualities with little tendency for flavour reversion. The oil is used as a cooking and salad oil. It is considered equal to olive oil in nutritive value and is sometimes used as an adulterant.

The utilisation of sunflower as a fodder or silage crop has proved somewhat successful; it yields a large bulk of green fodder when cut the flowering stage.

Parts used : Seeds, root.

Dose : Paste 5-10 gm.

SŪRYAKĀNTĀ-SŪRYAMUKHĪ

(सूर्यकान्ता-सूर्यमुखी)

योनिदाहे सूर्यकान्ता (सूर्यमुखी)

धात्रीरसं सितायुक्तं योनिदाहे पिबेत् सदा।

सूर्यकान्ताभवं मूलं पिबेद् वा तण्डुलाम्बुना ॥

Bhāvaprakāśa, Cikitsā, 70-41.

SŪRYĀVARTTA-TILAPARNĪ- SUVARCALĀ

Botanical name

Gynandropsis gynandra (Linn.) Priquet. :
Śvetapuṣpā,

Syn. *Cleome viscosa* Linn., *Cleome icosandra* Linn :
Pītapuṣpā

Family : Capparidaceae

Classical name : Tilaparnī, Śūryāvartta

Sanskrit names

Śūryāvartta, Uragagandhā, Tilaparnī, Varvaraka,
Pūtigandhā.

Regional names

Hulhul, Hurhur (Hindi); Hudahudiya (Beng.);
Tilavan, Tilavarh (Mar.); Talavani (Guj.); Vigara (Punj.);
Vagari (Mal.); Maivelai (Tam.); Kukkavamint (Tel.); Dog
mustard (Eng.).

Description

A. *Gynandropsis gynandra* (L.) Brq. syns. *Cleome gynandra* L., *G. pentaphylla* (L.) Dc.

Erect or ascending, viscid-pubescent, foetid herbs,
upto 1 meter tall, branching from the base.

Leaves digitately 5-foliolate, very variable in size,
apex and margin. Leaflets 5-6.5 × 2-3 cm.

Flowers white, cream-coloured or pinkish, bi-sexual
to polygamous, on leafy corymbose racemes. Sepals viscid-
pubescent. Petals clawed. Stamens about 10, androphotic
upto 2.5 cm. long. Gynophore accrescent upto 2 cm. long.

Capsules 4-8 × 0.3-0.5 cm., obliquely striate. Seeds
with longitudinal striations and slightly cristate transverse
ridges.

Flowering and fruiting time

Plant flowers and fruits in June-September August-April.

Distribution

Plant occurs in tropical regions. It is occasional on ridges and moist waste places in gardens or near agricultural fields.

B. *Cleome viscosa* Linn.

Viscid-pubescent herbs, very variable in size from 10 cm. to as tall as 1.75 m., branching glandular and sticky herb, with strong penetrating odour.

Leaves 3 to 5-foliolate, variable in shape and size; 3-5-foliolate, the middle lobe being largest.

Flowers yellow a whitish-yellow solitary, axillary or in leaf-bearing, terminal racemes, viscid pubescent. Stamens 17-20 or 12-more, not exceeding petals.

Capsules 1.5-7.5 cm. long, style tipped. Sticky-pubescent, erect, straight or subarched, short-peaked.

Seeds dark brown, glabrous, with longitudinal striations and transverse ridges, reniform.

Flowering and fruiting time

Plant flowers and fruits from July to October.

Distribution

Plant occurs in paleotropics. It is very common in gardens, fallow up fields and waste places.

Plants come up soon after the first monsoon showers and is found on drying up sandy soils. A common weed in field and waste places.

Chemical composition

Analysis of edible portion of Pītapuṣpā Tilaparṇi (*Cleome icosandra* Linn.); after discarding the flowers and pods, gave the following values : moisture 80.41, protein 5.64, ether extractives 1.85, ash 3.75, Ca 0.881, P. 0.073 and Fe 24.45 mg./100 g. and vit. C. 203.6 mg./100 g. Seeds contains fixed oil 36.6% and viscosin active principle.

Analysis of seeds of Śvetapuṣpā Tilaparṇi (*Gynandropsis gynandra* Linn. Briq.) finds oil content (fixed oil) 22 per cent, with a light green colour and a faint odour of mustard; it is semi-drying oil. It contains cleomin

and the medicinal properties of the seeds are attributed to the presence of cleomin. The unsaponifiable matter contains a phytosterol. The component fatty acids of oil are : palmitic 9.57, stearic 9.53, arachidic 0.44, oleic 22.02 and linoleic 38.9) per cent.

Tannins (1%), reducing sugars and a volatile oil similar to that found in the leaves are present.

From the benzene extract of the dried seeds, a fixed oil (yield 36.6%) has been obtained, which on standing deposits palmitic and myristic acids, and a new acid called viscosic acid.

Pharmacodynamics

Rasa	: Kaṭu
Guṇa	: Tikṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma

Properties and action

Karma	: Vidāhi Vedanāsthāpana Pūtiḥara Uttejaka Ākṣepaśāma-vātaḥara Dīpana-pācana-anulomana- śūlahara Kṛmighna Svedajanana Jvaraghna.
Roga	: Sandhivāta Jirṇa ślīpada Jirṇa vraṇa kṛmi Vidradhi Ślīpada Galagaṇḍa Karnaśūla Viṣa-sarpadaṁśa-vṛścikadaṁśa Bāla ākṣepakaroga Agnimāndya-ajirṇa-udaraśūla Gulma

Kṛmiroga-gaṇḍūpada kṛmi
Tvagvikāra
Jvara.

Therapeutic uses

The drug Tilaparnī or Suvarcalā is stomachic, digestive, carminative, anti-colic and anthelmintic. It is diaphoretic, antipyretic, anti-convulscent, analgesic, vidāhī, stimulant and pūtiḥara.

The alcohol extractive of the whole plant of Śvetapuṣpā suvarcalā (gynandropsis gynandra (Linn.) Priquet.) is reported to possess anti-cancer activity. The leaves are used in medicine. Leaves are taken internally in certain bilious disorders. The bruised leaves are rubefacient and vesicant and used as counter irritant in headache, neuralgia, rheumatism and other local pains, being merely rubbed on the part or applied as a poultice, with care being taken to remove the application before it causes blisters.

The leaves are also applied to boils to prevent the formation of pus. The juice of the leaves alone is mixed with oil, is dropped into the ear in earache. It produces a burning sensation, so a care should be taken in use of them.

The leaves are eaten as a pot-herb and as flavouring in sauces, they are also pickled. The leaves are bitter but cooking removes the bitterness. The flavour is due to the presence of an acrid volatile oil as similar to that present in garlic (rasana) or mustard (sarṣapa). The plant is included among cattle feeds but poisonous to rams and poultry (in other countries).

The leaves and seeds are used in indigenous medicine (in the same way as mustard). The seeds are anthelmintic and rubefacient, given internally for the expulsion of round worms and applied externally as a counter irritant. They are applied as a poultice to sore with maggots; they may be mixed with oil and applied to the head to kill lice. They are given to horses in stomachache and also used as fish poison. An infusion of the seeds is

given for coughs. The seeds are reported to be used as birds feed.

The plant of *pītapuṣpā* *Suvarcalā* (*Cleome icosandra* Linn.) is reported to be used as vegetable by folk and tribals. The leaves are rubefacient, vesicant and sudorific. The juice of the leaves mixed with ghee is used in treatment of inflammations of the middle ear. The leaves are used also in external application for wounds and ulcers.

The seeds are small, dark brown or black and granular. They are rubefacient, visicant and anthelmintic. They resemble mustard seeds in action and a poultice made from them is efficacious as a counter irritant in chronic painful joints.

Tilaparnī is indicated in therapeusis of *krimikārṇa*, *galagaṇḍa* (goitre), *vṛścikadaṁśa* (scorpionsting), *masūrikā* (measles) and *ślipada* (filariasis) and some other ailments in medical texts.

The drug is used in dyspepsia, abdominal colic, loss of gastric power, gūlm (lump in abdomen) and worms.

The seeds powder (1.5-3 gm.), mixed with sugar is given orally twice in a day for two days, followed by purgation through castor oil (*eraṇḍa taila*), for expelling out worms specially round worms (*gaṇḍūpada kṛmi*).

Parts used : Seeds, leaves, roots.

Dose

Seeds powder 1-3 gm. Leaves juice 5-10 ml. Roots 1-3 gm.

SŪRYĀVARTTA-TILAPARNĪ-SUVARCALĀ

(सूर्यावर्तः-तिलपर्णी-सुवर्चला)

- क. सुवर्चला सूर्यभक्ता वरदा बदराऽपि च ।
सूर्यावर्ता रविप्रीताऽपरा ब्रह्मसुदुर्लभा ॥
- ख. सुवर्चला हिमा रूक्षा स्वादुपाका सरा गुरुः ।
अपित्तला कटुः क्षारा विष्टम्भकफवातजित् ॥

ग. अन्या (बह्यसुदुर्लभा) तिक्ता कषायोष्णा सरा रूक्षा लघुः कटुः ।
निहन्ति कफपित्तास्रश्वासकासारुचिज्वरान् ॥
विस्फोटकुष्ठमेहास्रयोनिरुक्कमिपाण्डुताः ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 284-286.

सुवर्चला

अ. अर्ककान्ता दिव्यतेजाः शीतवृद्धा वरौषधिः ।
रविवल्ली तु वरदा मूलपर्णी सुखोद्भवा ॥
सुर्वचला सूर्यभक्ता सूर्यावर्ता रविप्रिया ।
अर्कपुष्पी च पृथ्वीका पार्था ब्रह्मसुवर्चला ॥

सुवर्चलागुणाः

सुवर्चला हिमा रूक्षा स्वादुपाकरसा गुरुः ।
अपित्तला कटुः क्षारा विष्टम्भकफवातजित् ॥

अन्यसुवर्चला

अन्या तिक्ता कषायोष्णा लघू रूक्षा सरा कटुः ।
निहन्ति कफवातास्रश्वासकासारुचिज्वरान् ॥
विस्फोटकुष्ठमेहास्रयोनिहत् कृच्छ्रपाण्डुताः ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 724-728.

मसूरिकायां हिलमोचिका

श्वेतचन्दनकल्कोत्थं हिलमोचोभवं द्रवम् ।
पिबेन्मसूरिकाऽऽरम्भे नैव वा केवलं रसम् ॥

Bhāvaprakāśa, Masūrikādhikāra, 60-35.

वृश्चिकदंशे सूर्यावर्तः

गन्धमाग्राय मृदितं सूर्यावर्तदलस्य तु ।
वृश्चिकेन नरो बिद्धः क्षणाद्भवति निर्विषः ॥

Bhāvaprakāśa, Viṣādhikāra, 67-91.

क्रिमिकर्णे सूर्यावर्तकस्वरसपूरणम्

‘सूर्यावर्तकस्वरसं सिन्धुवाररसं तथा ।’

Cakradatta, Karṇaroga cikitsā, 57-46.

तिलापर्णी-सूर्यावर्तः

क्रिमिकर्णे

सूर्यावर्तकस्वरसं सिन्धुवाररसं तथा ।
लाङ्गलीमूलकरसं त्र्यूषणेनावचूर्णितम् ॥

पूरयेत् क्रिमिकर्णे तु जन्तूनां नाशनं परम् ।

Vṛndamādhava, 59-43.

गलगण्डे

सूर्यावर्तरसोनाभ्यां गलगण्डोपनाहनम् ।

स्फोटोत्सावैः शमं याति गलगण्डो न संशयः ॥

Vṛndamādhava, 41-9.

तिलपर्णी (अजगन्धा)

अजगन्धा कटूष्णा स्याद्वातगुल्मोदरापहा ।

कर्णव्रणार्तिशूलघ्नी कृमिघ्नी च ज्वरापहा ॥

Rāja Nighaṇṭu.

तिलपर्णीरसस्तैलं टङ्कणं निम्बूकद्वयम् ।

कटूष्णं कर्णयोर्द्रवमेतद्वा वेदनापहम् ॥

Śāraṅgadhara Saṁhitā.

तिलपर्णी कटुस्तिक्ता विपाके कटुका लघुः ।

अहिमा ग्राहिणी रुच्या शोफकुष्ठकफापहा ॥

तिलपर्णीबीजम्

बहिष्कृत् बादरं बीजं गुल्मानाहामशूलजित् ।

उष्णवीर्यं कफहरं मारुतज्वरनाशनम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 654-655.

SVARṆAKṢĪRĪ

Botanical name

Argemone mexicana Linn. : *Svarṇakṣīrī* (Śṛgāla-kaṇṭaka),

Euphorbia thomsoniana Boiss. *Svarṇakṣīrī* (Kaṅkuṣṭhaprabhavā).

Family : *Papaveraceae*

Classical name : *Svarṇakṣīrī*

Sanskrit names

Svarṇakṣīrī, *Pitadugdhā*, *Kāñcanakṣīrī*, *Kaṭuparnī*, *Śṛgāla-kaṇṭaka*.

Regional names

Satyanashi, *Bhandabhand*, *Kantaila* (Hindi);

Shiyalkanta (Beng.); Kantedhotra (Mar.); Darudi (Guj.); Kudiyotti (Tam.); Itturi (Tel.); Datturi (Kann.); Pinnummattam (Mal.); Mexican Poppy (Eng.), Choka (root); Prickly Poppy, Mexican Poppy (Eng.).

Description

An annual with prickly leaves, bright yellow flowers, bristly capsules, containing many seeds, resembling black mustard seeds (*Brassica nigra*).

Erect, prickly glaucescent, annual herbs with yellow juice, herb upto 1.5 m. tall, sap yellow and milky.

Leaves sinuate-pinnatifid, spinulose-dentate, prickly on both surfaces, lower ones petioled, upper sessile with semi-amplexicaule base; lvs. in rosette, petiolate, upper ones distant, sessile, with half amplexicaule base, sinuate pinnatifid, spinulose, dentate, white prunose on and oblong the nerves.

Flowers terminal bracts leafy, solitary, shortly padicelled bracts leafy. Sepal 3 (rarely 2) oblong, caducous, oblong, prickly on back apex horned, petals 6 (rarely 4), obovate, bright yellow. Stigma subsessile, 3-6 lobed, dark red.

Capsule oblong-ellipsoid, 3-6 valved, spiny, bristly capsules, prunose on ribs. Seeds many, reticulate-ribbed; seeds resembling black mustard seeds (*Brassica nigra*).

Flowering and fruiting time

Major part of the year. Plant flowers and fruits in January-December.

Distribution

It is pantropic. Plant occurs commonly in lowlands, along roads, near ponds and in gardens or unused fields, and generally in waste places. Plant exotic (American), it runs wild in India and is naturalised as troublesome weed.

Chemical composition

Plant contains berberine and protopine alkaloids. Seeds contain 22-36 per cent nauseous bitter fixed oil. Seeds are often admixture sape and mustard seeds, as a common and harmful market adulterant of mustard oil.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Laghu, rūkṣa
Vīrya	: Sīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittanāśaka

Properties and action

Karma	: Recana (root and seeds oil) Hṛllāsakāraka Kṛmighna Raktaśothaka (root) Śothahara (latex and root) Kuṣthaghna Viṣamajvaraghna (root and latex) Vraṇaśodhana-vraṇaropaṇa- kaṇḍūghna Viṣaghna (root) Vedanāsthāpana (seed).
Roga	: Vibandha-ānāha-udaraśūla Kṛmiroga Śotha Viṣa-vṛścikadaṁśa Sandhivāta Raktavikāra-upadaṁśa-śotha Kuṣṭha Viṣamajvara Dāha.

Therapeutic uses

The drug Svarṇakṣīrī is laxative. The roots and seeds oil are useful in constipation, flatulence, abdominal colic and similar conditions allied to certain disorders. Root powder is given in worms (tape worm specially).

The latex (yellow juice) and roots-juice are given in blood impurities, soft shancres and as blood purifier and anti-inflammatory (latex). The drug is useful in kuṣṭha and other skin diseases. Latex and juice are used in malarial fever and burning sensation.

Externally the juice, latex, seeds oil and root are applied on swelling and poisonous sting (scorpion sting, in-

sect bite etc.). Seeds paste and massage of seeds-oil are suggested in rheumatic joints and other similar complaints.

In general, Svarṇakṣīrī is useful in alleviating provocation of Kaphapitta doṣa and resultant diseases (particularly suited to its medicinal properties).

The seeds oil or argemone oil (Svarṇakṣīrī taila) is causing nausea and non-edible oil which is considered a remedy for skin diseases when applied topically. Orally it is a cathartic in small amounts (10-30 minims); and in larger doses it causes purging and vomiting.

The seeds are found sometimes adulterated with black mustard. Argemone oil in edible mustard oil is reported frequently responsible for outbreaks of epidemic dropsy. The presence of argemone is detected by the rich orange red colour developed, when contrated nitric acid is added to the oil or its mixture.

Argemone oil is also used as an illuminent and lubricant and used in medicines. It has also use in dyeing oil as mixture in linseed oil. The oil cake can be used as fertiliser (but not as cattle fodder because of residual oil).

The seeds are considered medicinally useful; they are reported to be toxic if taken in large quantities leading to poisonous effects to varying effects.

Externally the yellow juicy latex (pīta dugdha or pīta kṣīra-svarṇakṣīra, hence classically named as Svarṇakṣīrī) which exudes when the plant is injured is used externally in scabies, and in ophthalmia.

Parts used : Root, seeds, latex, seeds oil.

Dose

Juce 5-10 ml., Powder 1-3 gm., Latex 5-10 drops, Oil 10-30 drops.

SVARNAKṢĪRĪ (स्वर्णक्षीरी)

स्वर्णक्षीरी हिमा तित्ता कृमिपित्तकफापहा ।

मूत्रकृच्छ्राश्मरीशोफदाहज्वरहरा

परा ॥

Rāja Nighaṇṭu.

हेमाह्वा रेचनी तिक्ता भेदन्युत्त्वलेशकारिणी ।
कृमिकण्डूविषानाहकफपित्तास्रकुष्ठनुत् ॥

Bhāvaprakāśa Nighaṇṭu.

कटुपर्णी

हेमाह्वा रेचनी तिक्ता भेदन्युत्त्वलेशकारिणी ।
कृमिकण्डूविषानाहकफपित्तास्रकुष्ठनुत् ॥

Bhāvaprakāśa Nighaṇṭu, Haritakyādi, varga, 170.

कनकक्षीरीतैलम्

Caraka Samhitā, Cikitsā, 7-111/116.

स्वर्णक्षीर्यादियोगः

स्वर्णक्षीरी त्रिवृच्छ्यामे भद्रदारु सनागरम् ॥
गोमूत्राञ्जलिना पिष्टं मूत्रे वा कथितं पिबेत् ।
क्षीरमेभिः शृतं वाऽपि पिबेद्दोषानुलोमनम् ॥

Caraka Samhitā, Cikitsā, 16-66/67.

स्वर्णक्षीरी (कङ्कुष्ठप्रभवा)

उदरे

नारायणचूर्णे

Caraka Samhitā, Cikitsā, 13-126.

क्षारगुटिकायाम्

Caraka Samhitā, Cikitsā, 13-164.

कुष्ठे

कनकक्षीरीतैलम्

Caraka Samhitā, Cikitsā, 7-111.

व्रणे

गुग्गुल्वतसिगोदन्तस्वर्णक्षीरीकपोतविट् ।
क्षारौषधानि क्षाराश्च पक्वशोफविदारणम् ॥

Aṣṭāṅga Hṛdaya, Uttara, 25-37.

लूताविषे

कुसुम्भपुष्पं गोदन्तः स्वर्णक्षीरी कपोतविट् ।
दन्तीः त्रिवृत् सैन्धवं च कर्णिकापातनं तयोः ॥

Caraka Samhitā, Cikitsā, 23-203.

पाण्डुरोगे

स्वर्णक्षीरी त्रिवृच्छ्यामे भद्रदारु सनागरम् ।

गोमूत्राञ्जलिना पिष्टं मूत्रे वा कथितं पिबेत् ॥

Caraka Samhitā, Cikitsā, 16-66.

स्वर्णक्षीरी (शृगालकण्टकः)

पूयमेहे

स्वर्णक्षीरी-प्रयोगः

Siddha Bhaiṣajya Maṇimālā, 4-806/808.

त्वक्‌रोगे

हेमक्षीरीरसो यद् वा रसोनकलिकोद्भवः ।

क्षोदो वा लौहकिट्टस्य दद्रुद्रावी प्रयत्नतः ॥

Siddha Bhaiṣajya Maṇimālā, 4-864.

अलर्कविषे

सोमस्वर्णक्षीरीमूलं सत्रीय मोदका गुडतः ।

कुकुरदंष्ट्रगरलं हरन्ति मध्याशिभिस्त्र्यहं गौर्णाः ॥

Siddha Bhaiṣajya Maṇimālā, 4-1168.

ŚYONĀKA

Botanical name : *Oroxylum indicum* Vent.

Family : Bignoniaceae

Classical name : Śyonāka

Sanskrit names

Śyonāka, Tuṇṭuka, Tiṇṭuka, Kuṭannaṭa, Bhalluka, Pṛthuśimba.

Regional names

Sonapatha, Saona (Hindi); Talwar phali (fruit-Hindi); Shona (Beng.); Tentu (Mar., Guj.); Addi, Achi (Tam.); Dundilam (Tel.); Tingadu (Kann.) Palagapaimani (Mal.); Phapni (Oriya); Mulin (Punjab); Toguna (Assam).

Description

Small deciduous or medium sized tree upto 12 meters in height; branches few, crown small. Wood (wt. 480 kg./cu. m.) yellowish-white and soft.

Leaves turn coppery brown before falling and the tree is very conspicuous when leafless, from very large leaves scars and gigantic capsule. Bark 0.64 cm., light-

brownish grey soft; blaze yellowish-green. Wood yellowish-white, open grained very light. Leaves large, pinnae, 91-152 cm., triangular in cauline, 3-pinnate near base; 2-pinnate about middle and sharply pinnate towards tip. Leaflets 3-5 on each pinnule, 7.6-17.8 × 5-6.4 cm. ovate, entire, acuminate glabrous.

Flowers large flashy, in lax terminal racemes; peduncle 61-91 cm.; pedicels 2.5-3.8 cm.; corolla campanulate; tube green outside;; limb 5-76 cm., across; lobes 5, dark-red; stamens 5, nearly equal.

Capsule flat, septicial, 45-72 × 6.4-8.9 cm., tapering to both ends; seeds imbricate with broad transverse using on 3 sides, about 7.6 × 3.8 cm. including wing; many, flat, thin with broad silvery wings. Fruit sword-like curved.

Bark Drug :

Bark is leathery, tough fracture short, slightly fibrous inside, surface is longitudinally shrivelled and outer skin adheres closely. Wood is not soft porous. In section cork zone is 36-40 rows of thin walled empty rectangular cells. The fissure cuts upto the cork into truncated pyramidal projects. Mid bark has thin walled polyhedral or oblong cells, various sizes and usually without inclusions like starch. The inner bark shows narrow tangential strips or segments of mechanical tissue alternating with broad bands of thin walled phloem. The wood is composed of vessels of various sizes; xylem parenchyma, small quantity of sclerenchyma and several medullary rays. Medullary rays are mostly 2-4 seriate. The central pith is thick walled nearly spherical cells. Absence of storage starch in any of the parenchymatous elements is noteworthy. Root bark soft, juicy, almost odourless; sweet in taste with slightly bitterness.

Flowering and fruiting time

Plant flowers during rainy season and fruits in the period from cold (or post-autumn) to spring season. Leaves begins falling from December to June and plant becomes almost leafless in spring (or summers) season generally in March-April when trees are practically seen with only sword-like pendulous pods (fruits).

Distribution

Plant occurs throughout the greater part of India upto an altitude of 1,200 meters. It is chiefly met with in ravines and moist places in the forests and is rare in the western drier regions. It is generally found in dry deciduous forests; it grows in Assam, Bihar, Gujarat, Karnataka and Kerala and other provinces (except western drier regions).

The tree reproduces naturally by seeds which germinate in the beginning of the rainy season; moderate shade is necessary in the early stages.

Artificial reproduction may be done by sowing the seeds in the nursery during March-April and transplanting the seedlings in the first or second rainy season. Tree can also be propagated by transplanting root suckers which are produced in great profusion, often forming a dense growth round the parent stem. The rate of growth of the tree is reported to be fast, with a mean annual girth increment of 4-6.4 cm.

Chemical composition

Stem and root bark contain three flavone colouring matters viz. oroxylin A (stem bark 0.65; root bark 0.86%), bioicalcin (stem bark 0.5%) and chrysin (stem bark 0.35%).

As regards the stem and root barks containing three flavone colouring matters oroxylin A is the 6-methyl ether of baicalein and has been synthesized. Bark contains also traces of an alkaloid, tannic acid, sitosterol and galactose.

The seeds (on extraction with petroleum ether) yield C. 20% of a non-drying bright yellow oil which various consonants. The mixed fatty acids contain 80.4% oleic acid, 19.6% saturated acids (palmitic, stearic and probably lignoceric and higher acids). Seeds contain a yellow crystalline principle and haicalein and is glucoside named teluin.

Pharmacodynamics

Rasa	: Madhura, tikta, kaṣāya
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa

Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka

Properties and action

Karma	: Āmahara (upaśoṣaṇa) Dīpana-pācanā-rocana Grāhī Kṛmighna Śothahara Mūtrala Svedajanana Jvaraghna Kaṭupouṣṭika Vraṇaropaṇa Vedanāsthāpana

Roga	: Atisāra-āmātiśāra-pravāhikā Aruci-agnimāndya Kṛmi Śoṭha Kāsa Bastiśoṭha Vātavyādhi Āmavāta-sandhivāta Dourbalya Jvara-sannipātajvara Vraṇa-śoṭha.

Therapeutic uses

The drug Śyonāka is bitter and astringent; it is carminative, diaphoretic, diuretic, purgative and stomachic. It is used in abdominal pain, general anasarca, anorexia, diarrhoea, dysentery, enteric fever, giddiness, piles, respiratory disorders, rheumatism, throat and urinogenital disorders.

The young shoots and unripe fruits are eaten as vegetables; the flowers and bark are also reported to be eaten. Tree is lopped for fodder. Bark and fruits may be used as mordant in dyeing and tanning.

Śyonāka plant drug is reported to possess antiseptic properties. Most of the parts are used in medicine. Root bark is constituent of a well-known group of ten drugs,

named as Daśamūla (Śyonaka belongs to Bṛhatpañcamūla containing five drugs : śyonāka, pāṭalā, bilva, gambhārī and agnimantha; and second sub-group laghu pañcamūla containing other five drugs). Besides Daśamūla, Śyonāka is component of other various groups (gaṇa) assorted for therapeutic uses in medicine (incorporated in classical compendia) for management of different diseases.

The root bark of tree (śyonāka vṛkṣa mūla tvaka) is actually potent in fresh state when prescribed as medicine. It is a cream yellow to grey in colour, soft and juicy, without any characteristic odour it has a sweet taste, later becoming faintly bitter. It has a short fracture, slightly fibrous inside. The stem bark is less juicy and less sweetish but more leathery or tough.

Entire roots are also often used but they may lose their vitality after a few months; hence the fresh roots are to be preferred for medicinal uses. The root bark is tonic and astringent and useful in diarrhoea and dysentery; it is diaphoretic and used in rheumatism. Boiled in sesamum oil it has been recommended for otorrhoea. Tender fruits are refreshing and stomachic and the seeds are purgative. A decoction of leaves is considered to be useful in stomach-ache, and externally they are used for enlarged spleen, headache and ulcers. The bark is used locally and the seeds are given internally in veterinary medicine.

In vātavyādhi (āmavātā, sandhivātā and other diseases) and ailments characterised by pain and swelling, bath with bark-decoction is suggested. Bark is given in fever, rheumatic disorders, indigestion, diarrhoea, worms, cough, oedema, bastiśotha, āmaja vikāra and as bitter tonic.

Parts used : Root bark.

Dose

Powder 3-6 gm., Juice 10-20 ml., Decoction-powder 20-30 gm.

Formulations

Śyonāka puṭapāka, Pañcamūlyādi kvātha, Śyonāka kṣāra taila, Śyonāka taila.

Groups

Śothahara, Śitaprasāmana, Anuvāsanopaga (Caraka Saṁhitā), Bṛhat pañcamūla, Rodhrādi, Vīratarvādi (Suśruta Saṁhitā).

ŚYONĀKA (श्योनाक)

श्योनाकः कटुकः पाके कषायस्तित्तको हिमः ॥

संग्राही दीपनः कासश्लेष्मपित्तमवातजित् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 41-22.

श्योनाकस्य बालफलम्

टिण्डुकस्य फलं बालं रूक्षं वातकफापहम् ॥

हृद्यं कषायं मधुरं रोचनं लघु दीपनम् ।

गुल्मार्शः कृमिहत्... ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 42-43.

प्रौढफलम्

....प्रौढं गुरु वातप्रकोपणम् ।'

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 43.

श्योनाको दीपनः पाके कटुकस्तुवरो हिमः ।

ग्राही तिक्तोऽम्लिश्लेष्मपित्तकासप्रणाशनः ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 26.

बालप्रौढफलयोगुणाः

टिण्डुकस्य फलं बालं रूक्षं वातकफापहम् ॥

हृद्यं कषायं मधुरं रोचनं लघु दीपनम् ।

गुल्मार्शः कृमिहत् प्रौढं गुरु वातप्रकोपणम् ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 27-28.

टिण्डुकः शिशिरस्तित्तो बस्तिरोगहरः परः ।

पित्तश्लेष्मामवातातीसारकासारुचीर्जयेत् ॥

Dhanvantari Nighaṇṭu.

श्योनाकयुगलं तिक्तं शीतलं च त्रिदोषजित् ।

पित्तश्लेष्मातिसारघ्नं सन्निपातज्वरापहम् ॥

Dhanvantari Nighaṇṭu.

उदरे श्योनाक क्षार तैल

तथाऽग्निमन्थश्योनाकपलाशतिलनालजैः ॥
 बलाकदल्यपमार्गक्षारैः प्रत्येकशः सुतैः ।
 तैलं पक्त्वा भिषग्दद्यादुराणां प्रशान्तये ॥
 निवर्तते चोदरिणां हृद्ग्रहश्चानिलोद्भवः ।

Caraka Samhitā, Cikitsā, 13/170/171.

अतिसारे श्योनाक पुटपाकः

त्वक्पिण्डं दीर्घवृन्तस्य काश्मरीपत्रवेष्टितम् ।
 मृदाऽवलिप्तं सुकृतभंगारेष्व कूलयेत् ॥
 स्विन्नमुद्धृत्य निष्पीड्य रसमादाय यत्नतः ।
 शीतीकृतं मधुयुतं पाययेदुरामये ॥

Cakradatta, Atisāra Cikitsā, 3/81-82, (3-84/85).

ग्रन्थौ

हिंसादि योगे

Suśruta Samhitā, Cikitsā, 18-5.

वातव्याधौ

मूलक तैले

Caraka Samhitā, Cikitsā, 28-173.

उरुस्तम्भे

श्योनाकादियोगः

Caraka Samhitā, Cikitsā, 27-56/57.

कर्णरोगे

श्योनाकतैलम्

Baṅgasena, Karmaroga, 45.

नासारोगे

शताह्वात्वग् बलामूलं श्योनाकैरण्डबिल्वजम् ।
 सारग्वधं पिबेद्धूमं वसाज्यमदनान्वितम् ॥

Āṣṭāṅga Hr̥daya, Uttara, 20-7.

ग्रहोपसर्गे

नक्तमालफलं व्योषं मूलं श्योनाक बिल्वयोः ।
 हरिद्रे च कृता वर्त्यः पूर्ववन्नयनाञ्जनम् ॥

Suśruta Samhitā, Uttara, 60-44.

TAGARA

Botanical name

Valeriana jatamansi Jones.

Syn. *Valeriana wallichii* Dc.

Family : Valerianaceae

Classical name : Tagara

Sanskrit names

Vinamra, Śāṭa(ṭhā), Kuñcita, Dadruhasta, Tagara, Wata, Kuṭila, Nahuṣa, Kālānusāryaka, Barhiṣṭha, Vakra, Nṛpam.

Regional names

Tagar (Hindi); Tagaramula (Mar.); Tagaraganthoda (Guj.); Sugandhabala (Punj.); Mushkabala (Kann.); Asarun (Pers.); Indian Valerian (Eng.).

Description

A perennial leafy slightly hairy, tufted herb, up to 45 cm. in height. Rootstocks thick, horizontal, radical leaves persistent, long-petioled, deeply cordate, ovate, usually toothed or sinuate, 2.5-7.5 cm. in diam.; cauline leaves only a few, much smaller, entire or pinnate; often crowded, stipules nil. Flowers often dioecious, white to tinged with pink, in a terminal corymb. Fls. unisexual, male and female in different plants; calyx tubes, adnate to ovary, limb rarely visible at flowering but afterwards unrolling to 12 lobes; corolla funnel shaped, limb 5-lobed, spreading stamens 3, inserted on the corolla-tube, ovary inferior, cells 3, style slender; stigmas terminal fruit oblong, compressed, 1-celled, hairy or glabrous.

Root drug :

Indian valerian have been recognised as raw drug consisting the dried rhizomes and roots of *Valeriana wallichii* DC. in the I.P.C. (Indian pharmaceutical codex).

Rootstocks horizontal with thick descending nodes, Indian valerian occurs in the market in dull yellowish brown pieces of rhizomes, 4-8 cm. long × 5-12 mm. thick, sub-cylindrical, somewhat flattened, usually slightly carved and unbranched; upper surface bearing numerous raised

leaf-scars and the under surface having prominent, circular root-scars, with a few roots attached; fracture short and horny; taste bitter.

Flowering and fruiting time

Spring season and onwards or pre-summer season. April-September.

Distribution

Plant occurs in temperate Hinalayas from Kashmir to Bhutan between an elevation of 1,200 meters and 3,000 meters.

Kinds and varieties

There are two classical varieties of Tagar viz. Tagar and Piṇḍatagara as incorporated in texts of indigenous materia medica (Nighaṇṭu). Another drug Hribera (Bālākā-udicya) is relevant in this context; it is considered to be *V. hardwickii* Wall.

Valeriana hardwickii wall., known as Tagar, Tagger, Shameo, Sora Tagar and other regional and local names (prevalent in the areas of availability and use), is a pubescent herb up to 1.5 meters in height occurring in the temperate Himalayas from Kashmir to Bhutan at altitudes of 1,200-3,600 meters, and in the Khasi and Jaintia hills between 1,500 and 1,800 meters. The root stocks descending fibrous; radical leaves few, long-petioled, ovate, drooping off before fruiting; cauline leaves pinnate or deeply pinnatifid with lanceolate leaflets or segments; flowers white, often unisexual, in cymose clusters, forming axillary, compound corymbs or panicles; fruit ovate-oblong, compressed, 2-3 mm. long, brown, with spreading colycimal hairs.

The drug which is official valerian in the earlier I.P. Indian Pharmacopoeia, 1966) known as Common Valerian or Valerian and its source is botanical identified as *Valeriana officinalis* Linn., with those of *Valeriana jatamansi* Jones. which is only recognised in I.P. as official valerian. *Valeriana officinalis* Linn. is native of Europe and Asian (north, south and west) countries and also growing in European and some other countries; while *Valeriana wallichii* DC. belongs to India.

Chemical composition

Roots contain valerianic acid. Root Drug yielded a new group of iridoid or monoterpene derivatives, known as valepotriates (yield 2.0%) possessing usefulness as tranquillizers and sedatives in formulations, similar to meprobromate. An iridoid ester glycoside designated as valerosidatum (isovalery) glucoside has also been isolated.

The dried rhizomes and roots of the plant (cultivated and forest types both) yield a sweet-smelling essential oil (0.5-0.12 per cent yield). The oil contains sesquiterpenes, valeriatic acid, terpene alcohol, bornyl esters, of formic, acetic, butyric and isovaleric acid, with small amounts of pinene, camphene, terpineol and two unidentified alcohol.

Solvent extraction of indian valerian roots (by benzene, petroleum ether or alcohol) yield semisolid resinoids (useful in blending other perfumes).

Pharmacodynamics

Rasa	: Tikta, Kaṭu, Kaṣāya
Guṇa	: Laghu, snigdha
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma

Properties and action

Karma	: Medya-maṣṭiṣkaśāma
	Vedanāsthāpana-ākṣepahara
	Bhūtaghna
	Dīpana-śūlapraśamana-saraka
	Yakṛduttejaka
	Hṛdayottejaka
	Kaphaghna-śvāsahara
	Mūtrajanana
	Vājīkaraṇa
	Ārttavajanana
	Viśaghna
	Balya
	Kuṣṭha
	Jvaraghna

Roga

Cakṣuṣya
 Vraṇaropana
 : Unmāda-apasmāra
 Mastiṣka (mānasika) vikāra-
 smṛtivibhaṅśa
 Bhūtopasarga
 Śīroroga
 Sandhivāta
 Ardita-pakṣāghāta-ālavāta-
 vātarakta
 Agnimāndya-udaraśūla-ānāha
 Yakṛcchotha-kāmalā-plihodara-
 jalodara
 Hṛddourbalya
 Kukkurakāsa-śvāsaroga
 Mūtrāghāta
 Klaibya
 Kaṣṭārtava
 Viṣa-sarpadaṁśa
 Dourbalya
 Kuṣṭha-visarpa-raktavikāra
 Jirṇajvara-viṣamajvara
 Netraroga-pilla-dṛṣṭidoṣa.

Therapeutic uses

The drug Tagara is an important analgesic or anodyne (vedanāsthāpana) herbal agent; it is an efficacious sedative and carminative drug.

The drug is useful as anodyne, antipyretic, diuretic, emmenagogue, hepatic, nervine tonic and stimulant. It is used in colic, epilepsy, fever, hysteria, liver disorders, skin diseases and weak eye sight.

Tagara (valerian roots) is prescribed as a remedy for hysteria, hypochondriasis, nervous unrest and emotional troubles. It is also used as a carminative and entered into a various medicinal preparations and recipes, in addition to some classical formulation (single and compound drugs).

The powdered drug mixed with sugar, is used in urinary troubles. A decoction of the rhizomes is given to

mothers after parturition as a sedative and medicine with other desired in that period.

The extract of Tagaramūla (valerian roots) has been microbiologically investigated, and the observations find its antibiotic activity against *Micrococcus pyogenes* var. *aurea* and *Entamoeba histolytica*. An extract of leaves has also been found to be analgesic.

The oil of valerian (*Tagara taila*) finds use preparations. In addition, the oil is used as adjunct of certain flavours for tobacco, honey, root-beer types etc. In perfumery, it is suitable for blending in high grade perfumes and as a fixative. Tagar, the Indian Valerian closely resembles the valerian obtained from *Valeriana officinalis*, in its official medicinal properties, and is used for similar purposes. The dried rhizomes are used in used in perfumes and hair preparations and as and incense.

The phytochemical screening of Tagara (valerian) rhizomes and the biochemical investigations have been carried out and the observations are record which help to evaluate its medicinal potentials. Pharmacoclinical studies on Tagara (valerian roots) conducted on drug indicate that a new group of iridoid or monoterpenic derivatives, known as valepotriates (yield 2.0%) are useful as tranquilizers and sedatives in formulations, similar to meprobromate. The use of Tagara as a sedative and tranquillizing herbal agent is widely made in medicine with effective results which carry a base of medicinal properties metioned in classical texts of Indian medicine as well as its frequent clinical use in treatment of various diseases and ailing conditions where sedative (*śāmaka* and *mastiṣka śāmaka*, also *vedanāsthāpana*) and also analgesic remedies are prescribed in Ayurvedic therapy.

On account of *vātahara* (a drug pacifying aggravated *vāta* doṣa) the drug Tagara has pharmacological actions on nervous system as analgesic or anadyne, anti-convulscent, brain tonic and pacifying as well as tranquillizing agent, and the rhizomes are hence, orally given in the ailments of mental unrest, insomnia, insanity and other different mental as well as psychic problems (including

particular psychosomatic disorders) in Ayurvedic system of medicine. It is also useful in hypertension (within limited dose).

Besides the use of Tagara in unmāda, apasmāra, mastiṣka vikāra and nāḍīvikāra, it is quite useful in ardita, pakṣāghāta, sandhivāta, āmavāta and vāta rakta, covered under paralytic, nervous, rheumatic and metabolic disorders.

Tagara is given in abdominal colic (udaraśūla), flatulence (ānāha-ādhmāna), ascites (jalodara), agni-māndya (loss of gastric power), yakṛcchotha (inflammation of liver) liver and splenic enlargement, jaundice (ānāha) and other similar diseases.

The drug is used in whooping cough (Kukkura kāsa) and bronchial asthma (śvāsa). It is given in dysuria and scant or painful micturition (mutrāghāta-mūtrakṛcchra) for enabling smooth micturition normal (urination).

Being a stimulant drug, it is taken in impotency and painful menstruation. In general debility and toxic conditions, it is given in different forms and in certain recipes as an ingredient.

The rhizome is useful in chronic fever (jīrṇa jvara) and malarial fever (viṣamajvara). In kuṣṭha visarpa and other rakta vikāra (blood impurities and their complications), Tagara is given.

Externally, the rhizomes are pasted over organs affected with rheumatism, (āmavāta) joints pain and swelling and fracture (asthibhagna). Infusion of roots, is applied to ulcers (vraṇa) and heart trouble (hrddourbalya).

Parts used : Roots.

Dose : 1-3 gm.

A. TAGARA (क. तगर)

तगरद्वयमुष्णं स्यात्स्वादु स्निग्धं लघु स्मृतम् ।

विषापस्मार शूलाक्षिरोगदोषत्रयापहम् ॥

Bhāvaprakāśa Nighaṇṭu, Harītakṛyādi varga, 29.

- क. तगरं कुटिलं जिह्वं नतं कालानुसार्यकम् ॥
 बर्हिष्ठं वर्दिष्ठं वक्रं शटं च बहुषं नृपम् ।
 अपरं दण्डमातङ्गं कुञ्चितञ्च महोगरम् ॥
 कटुकं पिण्डतगरं हीनं कालानुसारिकम् ।
- ख. तगरं मधुरं तिक्तं कटु पाके रसे लघु ॥
 स्निग्धोष्णं तुवरं भूतपदापस्मार नाशनम् ।
 विषचक्षुः शिरोरोगरक्तदोषत्रयापहम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1273-1276.

तगरम्

तगरं कुटिलं वक्रं विनम्रं कुञ्चितं नतम् ।
 शटञ्च नहुषाख्यञ्च दद्रुहस्तञ्च वर्हणम् ॥
 पिण्डीतगरकं चैव पार्थिवं राजहर्षणम् ।
 कालानुसारकम् क्षत्रं दीनं जिह्वं सुनीन्दुधा ॥

तगरगुणाः

तगरं शीतलं तिक्तं दृष्टिदोष विनाशनम् ।
 विषार्तिं शमनं पथ्यं भूतोन्माद भयापहम् ॥

Rāja Nighaṇṭu, Karavīradī varga, 141-143.

‘तगरं कुष्ठजित्प्रोक्तं दृग् विसर्पव्याधिजिह्वुः ।’

Śoḍhala.

पिल्ले

‘अभयारसपिष्टं वा तगरं पिल्लनाशनम् ।’

Rāja Mārtaṇḍa.

सन्धिवाते

‘तक्रेणपिष्टं तगरस्य मूलम् ।
 आर्द्रं निपीतं विनिहन्ति शीघ्रम् ।
नृणां सन्धिक वातरोगम् ॥’

Rāja Mārtaṇḍa.

वंक्षण सन्धिशूले तगरशिफाकल्कम्

तगरस्य शिफां सार्द्रां पिष्ट्वा तक्रेण यः पिबेत् ।

वङ्क्षणानिलरोगार्तः स क्षणादेव मुच्यते ॥

Cakradatta, Vātavyādhi Cikitsā, 22-55.

सर्पविष-तक्षक दंश-प्रतिकारार्थं नतकुष्ठ योगः

द्विपलं नतकुष्ठाभ्यां घृतक्षौद्रं चतुष्पलम् ।

अपि तक्षक दष्टानां पानमेतत् सुखावहम् ॥

Cakradatta, Viṣa Cikitsā, 8.

B. HRĪBERAM (BĀLAKAM-UDĪCYAM)

ख. ह्रीबेरम् (बालकम्-उदीच्यम्)

मदात्यये तृष्णायाम्

तृष्यते सलिलं चास्मै दद्याद् पिबेध्रीबेरसाधितम् ।

बलया पृश्निपण्यां वा कण्टकार्याऽथवा शृतम् ॥

Caraka Samhitā, Cikitsā, 14-165.

ज्वरे

षडङ्गपानीये ।

Caraka Samhitā, Cikitsā, 3-145.

लूता विषे

ह्रीबेरादि योगः ।

Āṣṭāṅga Hṛdaya, Uttara, 317-42.

अर्शासि

ह्रीबेरादि घृतम् ।

Caraka Samhitā, Cikitsā, 14/230-233.

श्वित्रे

लेपात् पित्तं शैखिनं श्वित्रहारि ह्रीबेरं वा दग्धमेतेन युक्तम् ।

Suśruta Samhitā, Cikitsā, 9-26.

विसर्पे

प्रपौण्डरीकं ह्रीबेरं दार्वीत्वङ्मधुकं बलाम् ।

पृथगालेपनं कुर्याद् द्वन्द्वशः सर्वशोऽपि वा ॥

Caraka Samhitā, Cikitsā, 21-91.

अतिसारे

वचाप्रतिविषाभ्यां वा मुस्तपर्पटकेन च ।

ह्रीबेरशृङ्गद्वेराभ्यां पक्वां वा पाययेज्जलम् ॥

Caraka Samhitā, Cikitsā, 19-22.

बालरोगे

हीबेर शर्कराक्षौद्रं पीतं तण्डुलवारिणा ।

शिशोः सर्वातिसारध्नं तृट् छर्दिज्वरनाशनम् ॥

Baṅgasena, Bālaroga, 47.

रक्तपित्ते

हीबेरमूलानि पटोलपत्रं दुरालभा पर्पटको मृणालम् ।

.....रक्तं सापित्तं शमयन्ति योगाः ॥

Caraka Samhitā, Cikitsā, 4/75-77.

छर्द्याम्

सेव्यं पिबेद् काञ्चनगैरिकं वा सबालकं तण्डुलधावनेन ।

Caraka Samhitā, Cikitsā, 20-32.

TĀLA

Botanical name : *Borassus flabelifer* Linn.

Family : Palmae

Classical name : Tāla

Sanskrit names

Tāla, Lekhyapatra, Mahonnata, Dīrghaskandha, Tāla (phala), Tṛṇarāja, Dhvajavṛkṣa, Dīrghataru, Dīrghadaṇḍa, Mahāphala, Mahāvṛkṣa, Madakṛddruma, Sribīja, Śathaścāla, Durāroha.

Regional names

Tarh, Tal (Hindi).

Description

Tall, stout, dioecious trees, reaching up to 250 meters tall. Stem gradually narrowed upwards, with many rootlets near base.

Leaves flabelliform, upto 1.5 meters across, very rough, charataceous; segments linear-lanceolate, spine-tipped; petiole long, compressed, very stout.

Male flowers very small, clustered in cavities, sunken in the flowering branches, mixed with scaly bracteoles. Female flowers up to 2.5 cm. across, scattered on simple or sparingly branched spadix.

Fruits fibrous drupe, seeds 3, in hollows, pulpy, fleshy, hardening at age.

Flowering and fruiting time

Plant flowers and fruits in March-May.

Distribution

It is planted in gardens and country area. Plant is common along the coastal areas of the Peninsula, Bihar and Bengal.

Chemical composition

The fresh sap of palms, called 'sweet paddy' or 'nira', contains about 12% sucrose, and unless suitably treated, fermentation into toddy starts almost immediately after collection. The nutritive value of nira depends on the small amounts of sugar and yeast present in it.

The nira tapped from the palmyra tree is transparent, pleasant smelling and sweet. Toddy is a pale forthy liquid with a characteristic aroma, and a slightly acid and pungent taste. It is a cheap and refreshing beverage.

The latex is a good source of vitamin B complex. Nira of toddy contains chiefly 12.6% sucrose, carbohydrate 13.5% and little amount of protein, fat, mineral substance and vitamin C.

The pulp of ripe fruit contains good amount of vitamin C, and also carbohydrate, protein, fat, mineral substance and carotene. Tender raw (unripe) fruit contain lesser amount of carbohydrate.

Kinds and varieties

Tāla and Hintāla are described in Indian medicine.

Pharmacodynamics

Rasa	: Madhura
Guṇa	: Guru, snigdha
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittaśāmaka (rasa)

Properties and action

Karma	: Dāhapraśamana Trṣṇāśāmaka Śoumanasyajanana Santāpahara

	Śothahara
	Raktastambhana
	Vraṇaropaṇa
	Kaphaniḥsāraka
	Balya-brmhaṇa
	Mūtrala
	Raktaśodhana
	Tvagdoṣahara
	Mastiṣkabalya
	Hṛdya
	Snehana-mṛdurecana-sāraka
	Vṛṣya
	Viṣṭambhi (ovar dose-excess use).
Roga	: Dāha
	Śotha
	Raktapitta
	Vraṇa
	Kāsa-śvāsa
	Tvagdoṣa
	Mastiṣkavikāra (dourbalya)
	Hṛdroga
	Gulma-plīhodara (kṣāra).

Therapeutic uses

The drug Tāla is refrigerant, expectorant, haemostatic, blood-purifier, tonic, cardiogenic, brain tonic, wound healer, laxative, demulcent, diuretic and antipyretic. It is useful to pacify over-thirst.

There are different kinds of medicinal properties and uses of specific part and product of Tāla in particular. Nira is a refreshing sweet drink and is also credited with medicinal virtues. It is used as a stimulant and antiphlegmatic, and is also considered useful in inflammatory affections and dropsy. Its use as beverage and wide scope counters only difficulty in preserving it.

It has been observed that in areas where the use of toddy is prevalent, vitamin B deficiency diseases are rare. There are mainly five edible products from the palmyra palmviz. Nira, Gur, Tender Seed Pulp, cotyledons, pulp of the ripe fruit and flour (sun-dried).

The palmyra is one of the palms yielding toddy, the country liquor. The spontaneous fermentation of the juice produces about 3% of alcohol and 0.1% of acid during the first 6-8 hours. After this alcohol content increase to nearly 5% and later begins to decrease, while the amount of acids continues to increase, rendering the liquid unsuitable for human consumption. Butyric acid has been detected among the acids and this gives a disagreeable odour to the liquid.

Besides edible utility of Tāla various parts and products of Tāla possess medicinal potentialities and they have been under use as common plant products particular in the areas of their occurrence. They have also nutritive values.

The medicinal properties and uses of various parts of plant drug have been mentioned in Indian materia medica (Nighaṇṭu) and medical texts of therapeutics (Cikitsā śāstra) by incorporating medicinal utility of certain parts of Tala in particular such as fruit (tālaphala), seed (tālabīja), fruit-pulp-kernel (tālapakva phala, phalamajjā and apakva phala), toddy (tālamada), tālamastaka, tālarasa (fresh and preserved juice) and other parts or products. The therapeutic utility of Tāla and its various parts (or products) have been given in different diseases.

Parts used : Flowers, roots, fruit, paddy, juice.

Dose : Roots 10-20 gms.

TĀLA (ताल)

क. तालस्तु लेख्यपत्रः स्यात्तृणराजो महोन्नतः ।

पक्कतालफलम्

ख. पक्कं तालफलं पित्तरक्तश्लेष्मविबर्द्धनम् ।

दुर्जरं बहुमूत्रञ्च तन्द्राऽभिष्यन्द शुक्रदम् ॥

तालमज्जा

ग. तालमज्जा तु तरुणः किञ्चिन्मदकरो लघुः ।

श्लेष्मलो वातपित्तघ्नः सस्नेहो मधुरः सरः ॥

तालरसः (नवीनस्य प्राचीनस्य च गुणाः)

घ. तालजं तरुणं तोयमतीव मदकृन्मतम् ।

अम्लीभूतं तदा तु स्यात्पित्तकृद्वातदोषकृत् ॥

Bhāvaprakāśa Nighaṇṭu, Āmrādiphala varga, 52-55.

तालम्

तालोध्वजो दुरारोहो ध्वजवृक्षः शठश्चालः ॥

दीर्घस्कन्धो दीर्घतरुः दीर्घदण्डो महाफलः ।

तृणराजो महावृक्षः श्रीबीजो मदकृद्द्रुमः ॥

ताल गुणाः

तालस्तु मधुरः शीतो मेदःश्लेष्मबलप्रदः ।

शुक्रलो बृंहणो हन्ति वातपित्तव्रणकृमीन् ॥

तालफलम्

फलं तस्य गुरुस्निग्धं स्वादु बल्यं हिमं सरम् ।

विष्टम्भि बृंहणं वृष्यं तर्पणं कफमांसकृत् ॥

रक्तपित्तानिल श्वासक्षयदाहक्षत व्रणान् ।

तालबीजम्

बीजं स्वादु रसेपाके मूत्रलं वातपित्तजित् ॥

तालपक्वफलम्

पक्वं ताल फलं पित्तश्लेष्मरक्त विवर्धनम् ।

दुर्जरं बहुमूत्रं च तन्द्राऽभिष्यन्दि शुक्रलम् ॥

तालफलमज्जा

तालमज्जा तु तरुणः किञ्चित् मदकरो लघुः ।

श्लेष्मलो वातपित्तघ्नः सस्नेहो मधुरः सरः ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 471-477.

तालजमदम्

तालजं तरुणतोयमतीव प्राणिनां मदविकार करं तत् ।

अम्लभावमुपयति यदा तत् पित्तकृत् पवनदोषहरं च ॥

तालमस्तकम्

श्लेष्मापहं स्याद् विष्टम्भि पित्तकृत् शुक्रलं गुरु ।

तालस्य मस्तकं ज्ञेयं बस्ति शुद्धिकरं परम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 478-479.

तालद्रुमः

तालस्तालद्रुमः पत्री दीर्घस्कन्धो ध्वजद्रुमः ।
 तृणराजो मधुरसो मदाढ्यो दीर्घपादपः ॥
 चिरायुस्ततरराजश्च गजभक्ष्यो दृढच्छदः ।
 दीर्घपत्रो गुच्छपत्रोऽप्यासवद्रुश्च षोडशः ॥
 तालस्य मधुरः शीत पित्तदाहश्रमापहः ।
 सरश्च कफपित्तघ्नी मद्कृदाहशोषनुत् ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 83-85.

श्रीतालः

श्रीतालो मधुतालश्च लक्ष्मीतालो मृदुच्छदः ।
 विशालपत्रो लेखार्हो मसीलेख्यदलस्तथा ।
 शिरालपत्रकश्चैव याम्योहतो नवाङ्गयः ॥

श्रीताल गुणाः

श्रीतालो मधुरोऽत्यन्तमीषच्चैव कषायकः ।
 पित्तजित्कफकारी च वातमौषधप्रकोपयेत् ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 86-87.

हिन्तालः

हिन्तालः स्थूलतालश्च वल्कपत्रो बृहद्दलः ।
 गर्भस्त्रावी लतातालो भीषणो बहुकण्टकः ॥
 स्थिरपत्री द्विधालेख्यः शिरापत्रः स्थिराङ्घ्रिपः ।
 अम्लसारो वृहत्तालः स्याच्चतुर्दशऽभिधः ॥

हिन्ताल गुणाः

हिन्तालो मधुराम्लश्च कफकृत् पित्तदाहनुत् ।
 श्रमतृष्णापहारी च शिशिरो वातदोषनुत् ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 88-90.

प्लीहारोगे तालपुष्पक्षारम्

‘तालपुष्पभवः क्षारः सगुडः प्लीहनाशनः ।’

Cakradatta, Plīhayakṛcchikitsā, 38-4.

नेत्ररोगोपचारार्थं तालक्षाराद्यञ्जनम्

‘तालस्य....कृत्वा क्षारपरिश्रुतम् ।

....एतच्छुक्लेष्वसाध्येषु कृष्णीकरणमुत्तमम् ।

यानि शुक्राणि साध्यानि तेषां परममञ्जनम् ॥’

Cakradatta, Natraroga Cikitsā, 59-79/81.

उन्मादे

‘उन्माद शान्तये पेयो रसो वा ताल शारवजः ।’

Vṛndamādhava, 20-5.

विसूचिकायाम्

तण्डुलोदक पिष्टेन तालमूलेन लेपनम् ।

नाभौ प्रकल्पितं मद्यो जयत्येव विसूचिकायाम् ॥

Vaidya Manoramā, 6-25.

तालशस्यैस्तथा शृतम्

घृतं पयश्च मूत्रस्य वैवर्ण्ये कृच्छ्रं एव च ॥

Caraka Saṁhitā, Cikitsā, 28-154.

मूत्राघाते

पिष्ट्वाथवा सुशीतेन शालितण्डुल वारिणा ।

तालस्य तरुणं मूलं त्रपुसस्य रसं तथा ॥

श्वेतं कर्कोटकं चैवप्रातस्तु पयसा पिबेत् ॥

Suśruta Saṁhitā, Uttara, 58-41/42.

‘.....तालकाशेक्षु बालेक्ष्युकशेरुकाणि ।

पिबेत् सिताक्षौद्रयुतानि,..... ॥’

Caraka Saṁhitā, Cikitsā, 26-73.

TĀLAMŪLĪ

Botanical name : *Curculigo orchioides* Gaertn.

Family : Amaryllidaceae

Classical name : Tālamūlī

Sanskrit names

Tālamūlī, Tālapatrī, Kharjūrī, Khalinī, Muśālī, Kṛṣṇa muśālī, Hiraṇyapuspī, Tālamūlikā, Vṛṣakanda, Mouśālī, Mahāvṛṣā.

Regional names

Kali mushali, Syah mushali (Hindi); Kuakinda (Oriya), Tallaka (Beng.); Tel Tatigadda (Tel.); Nelantatigadde (Kann.).

Description

Perennial herb, with a rosette of leaves and root

stock tuberous or elongate sometimes 2.5 cm. long and stout in proportion.

Leaves 15 × 45 × 1.25-2.5 cm. tip viviparous on reaching the ground; petiole 15 cm. or less, scale 2.5 cm., clavate-flattened, hidden by the leaf sheaths.

Flowers distichous, lowest bisexual, the rest all male; bracts lanceolate, perianth segments 1.25 × 1.6 cm., ovary villous, the stipes the perianth above, epigaeous, stigma 3-cleft; cells 6-8, ovuled. Male flowers with no ovary, style or stigma. Flowers bright yellow.

Capsule 1.25 cm., oblong, hypogeous, 1-4 seeded, beak slender, septa spongy. Seeds 0.35 cm. long, oblong, deeply grooved in wavy lines, black shining.

Flowering and fruiting time

Plant flowers in May-August and fruiting onwards. Leaves appear or new foliage in June and decay in winters.

Distribution

Plant occurs in Andhra Pradesh, Assam, Bihar, Gujarat, Himachal Pradesh, Karnataka, Kerala, Tamilnadu and West Bengal. It grows in Chhota Nagpur and Southern India. Plant is occurring in the Himalayan region, ascending to 6,000 feet elevation.

Chemical composition

Analysis of tubers (of *Curcuma aromatica* Salisb.) gave the following values : ether extract 12.05%, alcoholic extract 1.14%, water extract 6.50%, moisture 13.33, albuminoids 30.63, starch 23.46, crude fibre 8.42 and ash 4.46 per cent.

On steam-distillation, they yield 0.6% of a greenish brown essential oil with a camphoraneous odour, and with various constants (data recorded).

The analysis of the (tubers of *curculigo orichioides* Gaertn.) powdered drug gave : ether extract 0.28, alcohol extract 4.04, water extract 19.92, starch 43.48, crude fibre 14.18, ash 8.60, tannin 4.15 per cent.

Analysis of the powdered drug gave : ether extract 1.28, alcohol extract 4.14, water extract 19.92, starch 43.48, crude fibre 14.18, ash 8.60 and tannin 4.15 per cent.

Pharmacodynamics

Rasa	: Madhura, tikta
Guṇa	: Guru, snigdha, picchīla
Vīrya	: Uṣṇa
Vipāka	: Madhura
Doṣakarma	: Vātapittaśāmaka Kaphavardhaka

Properties and action

Karma	: Śukrajanana Vṛṣya-vājīkaraṇa Rasāyana Mūtrala Balya-Bṛṇhaṇa Tvagdoṣahara Kāśahara-śvāsahara Dīpana-anulomana-yakṛdbalya Kaṇḍūghna
Roga	: Śukrakṣaya-klaibya Mūtrakṛcchra-pūyameha Kāsa-śvāsa Grahaṇī-yakṛdvikṛti Carmavikāra-kaṇḍūghna Dourbalya-śoṣa-kṛśatā.

Therapeutic uses

The drug Tālamūli is aphrodisiac, demulcent, diuretic and tonic. It is used in asthma, impotency, jaundice, skin diseases, urinary diseases and venereal diseases.

The tuberous roots are used in medicine. They are collected when the plants are two years old, washed and freed from rootlets, sliced by a wooden knife and dried in shade. They are slightly bitter and mucilaginous and are considered tonic, alterative, demulcent, diuretic and restorative. They are usually administered in combination with aromatics and bitter in piles, diarrhoea, jaundice and asthma and used as poultice for itch. and skin diseases. In the ailments or ailing conditions i.e. retention and scanty urine and painful micturition related to dysuria (mūtrakṛcchra and mūtrāghāta), the use of Tālamūli has been recommended in Indian medicine, for management

of urinary and venereal diseases e.g. gonorrhoea. The decoction of tālapatrī is prescribed for oral use in treatment of retention of urine (mūtrāghāta : Bhāvaprakāśa, Cikitsā. 12-1; Aṣṭaṅga Hṛdaya, Cikitsā 11-28).

The powder of tuberous roots of Tālamūlī or Kṛṣṇamūśalī mixed with śuddha ghee (śuddha ghr̥ta) has been prescribed for regular use in cases of seminal weakness, and disorders, sexual disorders including impotency and male venereal diseases; it acts especially as a potent aphrodisiac (Vaidya Vallabha, 4-8).

Similarly, the tuberous roots of Kṛṣṇa mūśalī are used orally as an effective rasāyana drug, and some recipes have been formulated in therapeutic texts. Besides the internal use of Tālmūlī or Kali mushali roots mixed with sugar or ghee (or both), certain compounds (yoga) in different forms (containing Muśalī as an ingredient) have variously been suggested in medicine. Majorly the drug Tālamūlī is among a valuable drugs possessing Vājikāraṇa and Rasāyana efficacy in practice of indigenous medical system.

Tālmūlī (kṛṣṇamuśalī) is given in grahaṇī and other ailments of system concerned. It is useful in Kaṇḍū and other skin diseases as external paste of tubers.

Parts used : Tuberous roots

Dose : Powder 3-5 gm.

TĀLAMŪLĪ-TALAPATRĪ (तालमूली-तालपत्री)

तालमूली च विद्वद्भिर्मुशली परिकीर्त्तिता ।

मुशली मधुरा वृष्या वीर्योष्णा बृंहणी गुरुः ॥

तिक्ता रसायनी हन्ति गुदजान्यनिलं तथा ।

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 183.

मुशली

क. हिरण्यपुष्पी खर्जूरी खलिनी तालमूलिका ॥

तालपत्री वृषकन्दा मौशली च महावृषा ।

ख. मुशली मधुरा गुर्वी तिक्ता वृष्या रसायनी ॥

वीर्योष्णा बृंहणी हन्ति दुर्नामानि प्रभञ्जनम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1605-1607.

वाजीकरणे

कृष्णमुशलीकन्दस्य चूर्णं तु गोघृतेन च ।

नरोनित्यं प्रकुर्वाणो गतकामं लभेत् पुनः ॥

Vaidya Vallabha, 4-8.

रसायने

नातावरी मुण्डितिका गुडूची सहस्तिकर्णा सहतालमूली ।

एतानिकृत्वा समभागयुक्तान्याज्येन किंवामधुनाऽवलिह्यात् ॥

जरारुजामृत्यु विमुक्तदेहो भवेन्नरो वीर्यबलादियुक्तः ।

विभाति देवप्रतिमः स नित्यं प्रभामयो भूरिविवृद्धियुक्तः ॥

मूत्राघाते

‘तालपत्री कषायं तु मूत्रघातेषु दापयेत् ।’

Bhala Samhitā, Cikitsā, 12-1.

Āṣṭaṅga Hṛdaya, Cikitsā, 11-28.

TĀLIŚA

Botanical name

Abies webbiana Lindle.

Syn. *Abies spectabilis* (D. Don.) Spach.

Family : Pinaceae

Classical name : Tālīśa

Sanskrit names

Tālīśa, Patrāḍhya, Dhātrīpatra, Tālisa, Tālīśapatraka, Śukodaram, Tāmalakīpatra, Tālīś(ś)aka.

Regional names

Talisapatra (Hindi); Gobra salla (Nepali); Dumshing (Bhotia), Talisapatra (Beng.); Talisapatri (Tam., Tel.); Budul (Kash.); Himalayan Silver Fir, East Himalayan Silver Fir (Eng.).

Description

Large stout evergreen tree, attaining height of 50 meters and a girth of trunk of 75 cm., crown cylindric thick branches horizontal, flat. Young shoots hairy; bark blackish, shallow, fissured.

Leaves spirally arranged, stiff but more or less bifarious, vary variable in length, persisting for 8-10 years, flat, about 2 mm. broad, channelled down the middle, very dark green, shining appearing black on the tree from a distance; tip very variable; mid rib raised beneath; petiole very short. As a whole, leaves needles like.

Male cones sessile, solitary or clustered; female cones 10-15 x 3.5-7.5 cm. diam. ripening in the same year, top and base rounded, outer margins of scales rounded; seeds oblong or obvoid with the wing 1.25-2.5 cm. long, wings larger than the seeds.

Flowering and fruiting time

Plant flowers and fruits during April to November.

Distribution

Plant occurs in Sikkim and Bhutan at 9,000-13,000 ft. elevation and plant population often forms large areas of pure forests above 10,500 feet altitudes.

In grows wild in the temperate and sub-alpine Himalayas. Himalayas between the altitudes of 2,300 to 4,000 meters altitudes. Plant is occurring in Jammu and Kashmir state.

Kinds and varieties

Another species known as Himalayan Silver Fir is almost similar to that of *Abies webbiana* Lindle.

***Abies pindrow* Spach.**

A large evergreen tree attaining 16 feet girth and 140 feet height, with a narrow-crown of horizontal or drooping branches. Bark dark grey or brown, rough, becoming more or less deeply furrowed with maturity, exfoliating irregular woody scales.

Blaze 0.75-1 in., somewhat fibrous, miliform, deep, reddish-brown or purplish-red young shoots glabrous.

Leaves 0.5-4 in. inches long, distichous, those above much smaller than those below, flattened, lower surface with two pleae, glaucous bands on other side of the raised midrib, glossy, dark green above, with appressed midrib, the tip notched.

Flowers monoecious, catkins 0.5-0.7 in. long, clus-

tered, stamens with 2 linear pollens-sacs; connective produced.

Cones solitary of indistant pairs, erect, situated a little below tips of the shoots, dark, blue or purple. Ripe cones erect, cylindric; scale crustaceous. Seed 4-5 in. long; wing longer than the seed. Plant flowers in April-May and cones ripen in September-November.

Plant occurs in central and inner ranges, between 7,000-10,000 ft. altitude in the Himalayas; Western Himalaya.

Chemical composition

Tree yields a white resin. Leaves contain a volatile oil.

Pharmacodynamics

Rasa	: Tikta, madhura
Guṇa	: Laghu, tīkṣṇa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma

Properties and action

Karma	: Chedana-śleṣmahara Śvāsahara-kāśaghna- hikkānigrahaṇa Mūtrajanana Rocana-dīpana- vātānulomana Jvaraghna Dhātuvagnivardhaka Vedanāsthāpana.
Roga	: Kāsa-śvāsa-svarabheda-yakṣmā Aruci-agnimāndya-ādhmāna-gulma Śōtha-mūtrakṛcchra Śirāṣūla Jvara-vātaślaiṣmikajvara Śvāsanalika phuphphusaśōtha Raktapitta Chardi.

Therapeutic uses

The drug Tālīśa is aromatic, appetizer, expectorant and laxative. It is used in cough, bronchitis and asthma.

The drug is used for its specific action on the lungs in a variety of respiratory disorders including consumption. It is useful for infants in cough and cold. It checks anorexia, constipation and nausea. It is much used in traditional medicine for haemorrhagic conditions.

The dried leaves (*Abies webbiana* Lindl.) are regarded as carminative and are used as talisapatra. The leaves are considered useful in cases of cough, pthisis bronchial asthma and allied disorders of respiratory system. A purple or violet dye is said to be extracted from the cones.

The leaves powder is given as an efficacious medicine commonly in the management of kāsa (cough), śwāsa (bronchial asthma) svarabheda (throat hoarseness), hikkā (hiccough), yakṣmā (pulmonary tuberculosis) and other similar diseases of prāṇavaḥasrotas and allied srotas involved). Tālīśa is a major ingredient of Tālīśādyā cūrṇa and also other yoga (formulations) which is (are) widely prescribed in treatment of respiratory, diseases and also in raktapitta (intrinsic haemorrhage) in therapeutic practice of Indian medicine.

Similarly the drug is very useful in Jvara (fever) especially vātaślaishmika jvara uraḥśūla (chestpain) and inflammation of lungs and trachea.

Besides major use of Tālīśa in Kaphavikāra, it is taken in the ailments of digestive system. The drug is recommended to be useful in aruci, agnimāndya, ādhmāna and gulma roga.

Tālīśa is useful in general debility and promoting dhatvagni. It checks vomiting (chardi). Drug is useful in allaying vātakapha vikāra in general.

Parts used : Leaves

Dose : Powder 2-5 gm.

Formulations

Tālīśādyā cūrṇa, Tālīśādi vaṭi, Tālīśādyā guṭikā.

TĀLĪŚA (तालीश)

तालीसकं तु तालीसं पत्रं तालीस पत्रकम्॥

तन्वत्तामलकीपत्रं पत्राढ्यं च शुकोदरम् ।
तालीसं तिक्तकटुकं कृमिवातकफापहम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1381-1382.

तालीसं लघु तीक्ष्णोष्णं श्वासकास कफानिलान् ।
निहन्त्यरुचि गुल्मामवह्निमांघ्र क्षयामयान् ॥

Bhāvaprakāśa Nighaṇṭu, Karpūradi varga, 115.

तालीसपत्रं तिक्तोष्णं मधुरं कफवातनुत् ।
कासहिक्का क्षयश्वासच्छर्दिदोष विनाशकृत् ॥

Rāja Nighaṇṭu, Pippalyādi varga, 184.

राजयक्ष्मा चिकित्सायां तालीशाद्यं चूर्णं गुटिकाश्च

तालीसपत्रं मरिचं नागरं पिप्पली शुभा ।
यथोत्तरं भागवृद्ध्या त्वगेले चार्धभागिके ॥
पिप्पल्यष्टगुणा चात्र प्रदेया सितशर्करा ।
कासश्वासरुचिहरं तच्चूर्णं दीपनं परम् ॥
हृत्पाण्डुग्रहणीदोषशोषप्लीह ज्वरापहम् ।
वम्यतीसार शूलघ्नं मूढवातानुलोमनम् ॥
कल्पयेद् गुटिकां चैतच्चूर्णं पक्त्वा सितोपलाम् ।
गुटिका ह्याग्नि संयोगाच्चूर्णाह्युत्तराः स्मृताः ॥

Caraka Samhitā, Cikitsā, 8-145/148.

कासादिषु

तालीशादि गुटिका (गुडिका) च

Caraka Samhitā, Cikitsā, 8-145/148.

तालीसचूर्णं वृषपत्ररसेन युक्तं पेयं समारभ्य पुनः कफपित्तासे ।

हन्ति भ्रमं श्वासनकासतासंकरोत्थं भंगस्वरे त्वरितमाशुसुखं ददाति ॥

Hārīta Samhitā, 3-10-27.

अरुचौ

तालीश चूर्णवटकाः सकर्पूर सितोपलाः ।

.....रुचिकराः भृशम् ॥

Āṣṭāṅga Hṛdaya, Cikitsā, 5-49.

रक्तपित्तादिषु

तालीश चूर्णयुक्तः पेयः क्षौद्रेणवासकस्वरसः ।

कफपित्तासतमकश्वासस्वरभेदरक्तपित्तहरः ॥

Vṛndamādhava, 9-12.

STHAUNEYAKA (स्थौण्यक)

शोथे-वातिके शोथे

तैल प्रदेहयोः

Caraka Samhitā, Cikitsā, 12-65.

वातव्याधौ

बला तैले

Caraka Samhitā, Cikitsā, 28-154.

विषे

ताक्ष्यागदे

Suśruta Samhitā, Kalpa, 5-66.

महासुगन्ध्यगदे

Suśruta Samhitā, Kalpa, 6-19.

मृतसञ्जीवने अगदे

Caraka Samhitā, Cikitsā, 23-24.

TĀMBŪLA

Botanical name : Piper betle Linn.**Family :** Piperaceae**Classical name :** Tāmbūla**Sanskrit names**

Tāmbūla, Saptasīrā, Tāmbūlavalli, Nāgavalli, Nāginī, Tambūlavallārī.

Regional names

Pan (Hindi); Pan (Beng.); Nagbel (Mar.); Nagarbel (Guj.); Vettilai (Tam.); Tamalapaku (Tel.); Tambul (Arab., Pers.); Betel (Eng.).

Description

A perennial dioecious creeper (probably native of Malaysia and cultivated in India since ancient times) for its leaves for chewing (tāmbūla carvana-bhākṣaṇa belonging to Indian heritage). Stems semi-woody, climbing by short, adventitious roots.

Leaves 5-20 cm. long, broadly ovate, slightly cordate and often unequal at the base, shortly acuminate, acute,

entire with an undulate margin, glabrous, yellowish or bright green, shining on both sides; petiole stout, 2.0-2.5 cm. long.

Flowers : male spikes dense, cylindrical; female spikes 2.5-5.0 cms. long pendulous.

Fruits rarely produced, often sunk in the fleshy spike, forming nodule-like structures.

Flowering and fruiting time

Plant flowers and fruits in spring and summer seasons.

Distribution

Plant is grown in warm and moist regions especially in Bihar, Bengal, Orissa, Southern India and Sri Lanka. It is widely cultivated on commercial scale in different and particular specifically regions under betel-farming.

Kinds and varieties

There are many betel types which are grown in various regions throughout the country under a highly specialised cultivation practices with intensive care for producing betel vine.

A number of betel types having specific characteristics (pertaining to leaves, stem, odour, colour etc.) are grown, produced, supplied and used in different farming regions in country. In general practice there are Kapoori, Desavari-Desi, Mohoba, Kaker, Bilahari, Seunha (particularly in northern parts) pan which are included among more than 35 cultivated types of betel in different zones in India.

In classical texts of Indian medicine, Tāmbūla or Nāgavallī is well described covering different aspect of tām̐būla patra (betel leaves) and its utilisation as medicine as well as masticatory aromatic. As regards, the kinds of betel (tām̐būla bhadāḥ), several classical names of varieties are mentioned e.g. Śrīvāṭī, amlāvāṭī, satsā, saptaśirā, amlasarā, paṭulikā, hresaṇīya, parṇaśirā, śīrṇatām̐būla and kṛṣṇa-śubhra parṇa (Rāja Nighaṇṭu, Amrādivarga, 249-258).

Chemical composition

Analysis of a sample of fresh leaves gave the follow-

ing values : moisture 8.54, protein 3.1, fat 0.8, carbohydrates 6.1, fibre 2.3 and mineral matter 2.3 per cent; calcium 230 mg., phosphorous 40 mg., iron 7 mg., ionisable iron 3.5, carotene (as vitamin A) 9.600 I.U., thiamine 70 mg. and vitamin C .5 mg/100 g.

Betel leaves contain 3.5 ug./100 g. of iodine. They have high content of potassium nitrate (0.26-0.42%), the amount depending upon the position of the leaf on the vine.

Important constituents which determine the values of leaf for chewing are the essential oil and the sugars.

Leaves yield an aromatic, pungent and sharp taste essential oil about 0.7-2.6 per cent which contains phenol and terpene and other various constituents.

Pharmacodynamics

Rasa	: Kātu, tikta
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarṇa	: Kaphavātaśāmaka Pittaprakopakana.

Properties and action

Karma	: Hṛdya-uttejaka-balya Mukhavaiśadyakāraka- durgandhahara Lālāprasekajanana-rocana Dipana-pācana-anulomana Kṛmighna Kāmoddīpana Vājīkaraṇa Kaphaghna Śītapraśamana Jvaraghna Kaṭupouṣṭika Jantughna-pūti-hara-uttejaka- śothahara-vedanāsthapana Pittaprakopaka.
Roga	: Mukharoga-māsyavairasya- mukhadourgandhya

Aruci-agnimāndya-vibandha
 Kṛmiroga
 Pratiśyāya-svarabheda-kāsa-śvāsa-
 pārsva śūla
 Hṛddourbalya-Hṛdayāvasāda
 Kaṇṭharoga-galarohiṇī (diphtheria)
 Granthi śoṭha-vraṇaśoṭha-
 stanaśoṭha
 Dhavabhaṅga-klibatva
 Sthoulya
 Ślipada
 Netraroga
 Tvagroga
 Jvara-śītajvara
 Dourbalya.

Therapeutic uses

The drug Tāmbūla is aromatic, anthelmintic and aphrodisiac. It is used in anorexia, dyspepsia, foul smell of mouth and intestinal worms. The drug plant is much used with areca nut (pūga) in the form of betel chewing (leaves) in traditional medicine for removing foul smell in mouth and inducing odorous effect.

It the classical texts of medicine, Tāmbūla has been recommended in various recipes useful in different diseases.

The betel leaf mixed with 10 gm. marica (piper nigrum) and taken with cold water for two months in case of obesity and it is suggested to make patent lean and thin by reducing fat as taken medicine or medāpakarṣaṇa (Vṛndamādhava, 12-31). Tāmbūla is suggested to be used regularly in the form of leaves paste mixed with salt alongwith water, in ślipada (filaria) for relief from disease (Bhāvaprakāśa, madhyama, 45-120). In addition, Tāmbūla enters into some recipes for external application particularly prescribed for use in skin diseases (tvagvikāra) and conjunctivities (netrābhiṣyanda) which are incorporated in therapeutical texts (Śāraṅgadhara Saṁhitā, 3-11/51-53 and Gadanigraha, 4-3-150).

Tāmbūla patra (betel leaves) possess an antioxidant action, when heated with oils and fats, especially ghee, they check the development of rancidity in them. They are effective in preserving refined groundnut, mustard, sesame, coconut and safflower oils.

The essential oil and extracts of the leaves possess activity against several Gram-positive and Gram-negative bacteria such as *Micrococcus pyogenes* var. *albus* and var. *aureus*, *Bacillus subtilis*, *Bacillus magaterium*, *Diplococcus pneumoniae*, *Streptococcus phogenes*, *Shigella dysentericae*, *Proteus vulgare*, *Pseudomonas solanacacerum*, *Salmonella typhosa*, *Vibrio comma*, *Shigella dysenteriae*, *Proteus vulgaris*, *Pseudomonas solana solamacaurum*, *Sarcina lutea* and *Ervinia carotovora*. The anti-septic activity is probably due to the presence of chavicol. The essential oil and leaf-extracts also showed antifungal activity against *Aspergillus niger* and *A. oryzae*, and *Curvularia lunata* and *Fusarium oxysporum*.

The betel chewing with other various adjuncts is an ancient practice in society as a part of Indian traditions. The chewing of betel (tāmbūla carvana) attaches historical significance with classical base.

Parts used : Leaves.

Dose : Juice 5-10 ml.

Formulation : Tāmbūlāsava.

TĀMBŪLA (VALLĪ) ताम्बूल (वल्ली)

ताम्बूलवल्ली ताम्बूली नागिनी नागवल्लरी ।

ताम्बूलं विशदं रूच्यं तीक्ष्णोष्णं तुवरं सरम् ॥

वश्यं तिक्तं कटु क्षारं रक्तपित्तकरं लघु ।

बल्यं श्लेष्मास्यदौर्गन्ध्यमलवातश्रमापहम् ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 11-12.

ताम्बूल-वल्ली

अ. ताम्बूलवल्लीताम्बूली नागवल्ली च नागिनी ॥

ताम्बूलवल्लिका पत्रं तिक्तं पाकरसोषणम् ।

सामान्य गुणाः

ब. तीक्ष्णोष्णं तुवरं क्षारं दीपनं विशदं सरम् ॥
 रोचनं स्त्रंसनं स्वर्यं रक्तपित्तविवर्धनम् ।
 कफवातास्य दौर्गन्ध्य कण्डूक्लेदमलापहम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 511-513.

ताम्बूल गुणाः

ताम्बूलमुक्तं तीक्ष्णोष्णं रोचनं तुवरं सरम् ।
 तित्तं क्षारोषणं कामरक्तपित्तकरं लघुः ॥
 वश्यं श्लेष्मास्यदौर्गन्ध्यमलवातश्रमापहम् ।
 मुखवैशद्य सौगन्ध्यकान्ति सौष्ठवकारकम् ॥
 हनुदन्तमलध्वंसि जिह्वेन्द्रिय विशोधनम् ।
 मुखप्रसेकशमनं गलामयविनाशनम् ॥

*Bhāvaprakāśa, Pūrvakhande,
 Dinacaryā prakaraṇam, 5/181-183.*

ताम्बूल सेवनम्

कर्पूर जातीकङ्कोललवङ्ग कटुकाह्वयैः ।
 सुचूर्ण पूगैः सहितं पत्रं ताम्बूल पत्रं शुभम् ॥

Kaiyadeva Nighaṇṭu, Vihāra varga, 78.

ताम्बूल संघटकद्रव्याः

ताम्बूलपत्रं विशदं सतिक्तं वातनाशनम् ।
 पूगं सरं पित्तहरं कषायं लघु दीपनम् ॥
 चूर्णं कफानिलहरं खदिरं कफपित्ताजित् ।

Kaiyadeva Nighaṇṭu, Vihāra varga, 79-80.

ताम्बूल घटक संयोगाजन्य गुणाः

संयोगतो दोषहरं सौमनस्यं करोति च ॥
 मुखवैशद्यसौगन्ध्यकान्ति सौष्ठवकारकम् ।
 जिह्वेन्द्रियहनुदस्तमलस्वरविशोधनम् ॥
 प्रसेक शमनं हृद्यं गलामय विनाशनम् ।
 कृमितृट् कफवातघ्नं मदनोदीपनं परम् ॥
 सौभाग्यकरणं प्राणपदं वाग्बलदं शुचि ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 80-83.

ताम्बूल सेवन विधि-विधान, निषेधादयः

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 83-94.

नागवल्ली

अथ भवति नागवल्ली ताम्बूली फणिलता च सप्तशिरा ।

पर्णलता फणिवल्ली भुजङ्गलता भक्ष्यपत्री च ॥

नागवल्ली गुणाः

नागवल्ली कटुस्तीक्ष्णा तिक्ता पीनसवातजित् ।

कफकासहरा रुच्या दाहकृद्दीपनी परा ॥

Rāja Nighaṇṭu, Āmrādi varga, 246-247.

नागवल्लीभेदादिः

सा श्रीवाट्यम्लादिवाटादिनाना-

ग्रामस्तोमस्थानभेदाद्विभिन्ना ।

एकाऽप्येषा देशमृतस्त्राविशेषा-

आनाकारं याति काये गुणे च ॥

Rāja Nighaṇṭu, Āmrādi varga, 248.

नागवल्ली-ताम्बूलपत्रभेदाः

श्रीवाटी

अम्लवाटी

सतसा

सप्तशिरा

अम्लसरा

पटुलिका

हेसणीया

पर्णशिरा

शीर्णताम्बूल

कृष्ण-शुभ्रपर्ण

Rāja Nighaṇṭu, Āmrādi varga, 249-258.

ताम्बूलस्य विशेष गुणाः

सद्यस्त्रोटितभक्षितं मुखरुजाजाद्यावहं दोषकृत् ।

दाहारोचकरक्तदायि मलकृद्विष्टम्भि वान्ति प्रदम् ॥

यद्भूयो जलपानपोषितरसं तच्चेच्चिरात् त्रोटितं

ताम्बूलीदलमुत्तमञ्च रुचिकृद्वर्ण्यं त्रिदोषात्तिनुत् ॥

Rāja Nighaṇṭu, Āmrādi varga, 256.

ताम्बूलवीटिकायाः कल्पनाभेदेन गुणभेदाः

पर्णाधिक्ये दीपनी रङ्गदात्री पूगाधिक्ये रूक्षदा कृच्छ्रदायी ।

साराधिक्ये खादिरे शोषदात्री चूर्णाधिक्ये पित्तकृत्यपूतिगन्धा ॥

Rāja Nighaṇṭu, Āmrādi varga, 260.

श्लीपदे

सप्तताम्बूलपत्राणां कल्कं तप्तेन वारिणा ।

संसृष्टं लवणोपेतं सेवितं श्लीपदं हरेत् ॥

Bhāvaprakāśa, Madhyakhaṇḍa, 45-12.

नेत्राभिष्यन्दे

ताम्बूलशिगुकरवीरशिरीषदन्ती..... ।

प्रत्येकशो मधुयुतः स्वरसोऽञ्जनेन

कोपं नयनयनयोः सहसैव हन्तिः ॥

Gadanigraha, 4-3-150.

स्थौल्ये

मासद्वयं प्रकुर्याद् दशमरिचोपेतमेकताम्बूलम् ।

खात्वा सुशीतामम्भः पिबेत् कृशः स्यादतिस्थूलः ॥

Vaidya Manoramā, 12-31.

त्वग्रोगे

हेमक्षीरी विडङ्गानि वरद गन्धकस्तथा ।

दद्रुघ्नः कुष्ठसिन्दूरे सर्वाण्येत्र भक्षयेत् ॥

धतूरनिम्बताम्बूली पत्राणां स्वरसैः पृथक् ।

अस्य प्रलेपमात्रेण पामादद्रूविचर्चिका ॥

कण्डूश्च रकसश्चैव प्रशमं यान्ति वेगतः ॥

Śārngadhara Saṁhitā, 3-11-51/53.

TANḌULĪYA

Botanical name : *Amaranthus spinosus* Linn.

Family : *Amaranthaceae*

Classical name : *Tanḍuliya*

Sanskrit names

Tanḍuliya, Tanḍulīyaka, Kāṇḍira (kāṇḍera).

Meghanāda, Meghenādi, Vega, Cāṇḍāla, Bhaṇḍira, Ghanasvana.

Regional names

Choulai, Chourai (Hindi).

A. *Amaranthus spinosus* Linn.

Description

Erect or ascending herbs, upto 1.25 meters high. Stem striate, often purple-tinged, hairy on young parts.

Leaves ovate-lanceolate to oblong, acute or decurrant below; petiole variable in length.

Flower clusters dense, lower ones exclusively female. Spikes with upper flowers all male and lower exclusively female. Bracts ovate-mucronate. Tepals 5, stamens 5 or 3. Stigmas 2-3.

Utricle rugose. Seeds compressed, black shining, very finely reticulate.

Flowering and fruiting time

Plant flowers and fruits throughout the year.

Distribution

Plant occurs in tropical regions. It is very common in waste places, gardens and along way sides.

B. *Amaranthus viridis* L. syn. *Amaranthus gracilis* Desf.

Description

Herbs, upto 1 meter tall, highly variable in size, form and pubescence.

Leaves deltoid-ovate to rhomboid-oblong, base rounded, cuneate or decurrant into a petiole of variable length.

Female flowers more numerous in axillary clusters. Tepals 3, oblong-oval, concave, acute and shortly mucronate in male and narrowly oblong to narrowly spatulate with a minute or obscure mucro in female flowers. Stigmas 2-3, erect.

Capsules strongly rugose. Seeds with paler and thick border.

Flowering and fruiting time

Greater part of the year.

Distribution

Plant occurs in tropical regions. It is very common in gardens, agricultural fields, waste lands and along way sides.

Kinds and varieties

There are mainly two classical varieties of Taṇḍulīyaka viz. Taṇḍulīyaka and Kaṇṭaka taṇḍulīyaka. Some species of *Amaranthus* e.g. *Amaranthus viridis* L., *A. tricolor* L., are also known as varieties of Taṇḍulīyaka.

Amaranthus spinosus Linn. is commonly known as Kateli Cheulai and *A. viridis* L. is named as Jaṅgali Chaulai. *A. tricolor* L., known as Lal sag follows :

***Amaranthus tricolor* L.**

Erect-ascending, simple or branched herbs, upto 1.25 m. high, woody at base, succulent above.

Leaves ovoid-rhomboid or elliptic-oblong, cuneate or acute and often decurrent at base, suffused on bloched with purple; petiole usually shorter than blade.

Male and female flowers inter-mixed, green or crimson. Bracts and bracteoles broad or deltoid-ovate, pale, membranous. Tepals elliptic or oblong-elliptic, narrowed above, stigmas 3, erect or recurved.

Capsules ovoid-urceolate, with a neck below style base. Seeds lenticular brown or thick shining.

Plant flowers and fruits in November-May. Plant occurs in tropical regions. It is frequently growing along waste sides to gardens and waste places.

Chemical composition

The tender shoots of Taṇḍulīya (*Amaranthus gangeticus* Linn.) contain moisture 85.8, protein 4.9, fat 0.5, carbohydrates 5.7, mineral matter 3.1 per cent; Ca 0.5, P 0.1%; Fe 21.4 mg., vitamin A 2,500-11,000 I.U., vitamin B₁ 10 I.U. and vitamin C 173 mg./100 g. The seeds contain saponin which is only slightly toxic.

The plant *Amaranthus blitum* Linn. (*Sada natya*) is reported to be rich in potassium nitrate. *A. blitum* var. *oleracea* Duthic contains 2.9% of protein and is fairly rich in iron, 18.18 mg/100 g.

Another plant *Amaranthus caudatus* Linn. (Ramdana) is chemically rich alongwith nutrient values.

Amaranthus gangeticus Linn. (Lalsag, Cheulai sag) tender shoots contain moisture 85.8, protein 4.9, fat 0.5, carbohydrate 5.7, mineral matters 3.1 per cent; Ca 0.5, P 0.1, Fe 21.4 mg., vitamin B₁ and vitamin C and vitamin A C 173 mg./100 g. Seeds contain saponin.

Amaranthus paniculatus Linn. (Chua, Chaulai) Contains 56-60% starch.

Amaranthus spinosus Linn. (Taṇḍuliya, Kataili chaulai) with considerable food values and contain moisture 85.0, protein 3.0, fat 0.3, carbohydrates 8.1, mineral matter 3.6; Ca 0.8, P 0.05%, Fe 22.0 mg./100 g.

Pharmacodynamics

Rasa	: Tikta, madhura
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Pittakaphahara

Properties and action

Karma	: Sara-anulomana malasāraka- (sṛṣṭamūtramala) Vātanulomana Dīpana Viśaghna Raktapittahara Dāhaśāmaka Madahara Mūtrala Stanyajanana
Roga	: Vibandha-koṣṭhagatavāta Pradara-asṛgdara Viṣa-sarpa-mūṣika-kīṭaviṣa Raktātisāra Agnimāndya Stanyakṣaya Raktavikāra Upadamśa

Carmaroga
Vraṇaśoṭha.

Therapeutic uses

The drug Taṇḍulīya is laxative, galactagogue, stomachic and diuretic. It alleys burning sensation, poison and aggravated vāta pitta and rakta (blood). It is used in various kinds of Jāṅgama viṣa, particularly reptiles and insects (sarpa, mūṣhika, kīṭa etc.); and it is given in all types of poisons and toxic conditions (sarva viṣa) and also kṛtrima viṣa (artificial poison).

The drug has been recommended as medicine for treatment of pradara roga, particularly the root is orally given with honey and rice water etc. and with other adjuvants.

In diarrhoea with blood (raktatisāra), the root of taṇḍulīya mixed with honey and sugar and it is given with rice water (Bangasena, atisāra, 137).

Taṇḍulīya belongs to leaf-vegetable (patraśāka) and the seeds are also roasted and eaten as food grains.

Parts used : Leaves, roots, whole plant.

Dose : Paste 10-20 gms.

TANḌULĪYA (तण्डुलीय)

- क. तण्डुलीयो मेघनादः काण्डेरस्तण्डुलेरकः ।
भण्डीर तण्डुलबीजो विषघ्नश्चाल्प मारिषः ॥
- ख. तण्डुलीयो लघुः शीतो रूक्षः पित्त कफास्त्रजित् ।
सृष्टमूत्रमलो रूच्यो दीपनो विषहारकः ॥

Bhāvaprakāśa Nighaṇṭu, Śāka varga, 12-13.

पानीय तण्डुलीयम्

(चौलाई भेदो जलतण्डुलीयं शास्त्रे कञ्चटमिति प्रसिद्धम्)

पानीय तण्डुलीयं तु कञ्चटं समुदाहृतम् ।

कञ्चटं तिक्तकं रक्तपित्तानिलहरं लघु ॥

Bhāvaprakāśa Nighaṇṭu, Śāka varga, 14.

तण्डुलीयः

- अ. तण्डुलीयस्तु चाण्डालश्चाबालस्तण्डुलीयकः ॥

काण्डीरस्तण्डुलो वेगो मेघनादो घनस्वनः ।
विषघ्नः कंधरो बीज्यपरो मारिष वाष्पकौ ॥

ब. तण्डुलीयो हिमो रूक्षः स्वादुपाकरसो लघुः ।
मदपित्तविषास्रघ्नो दीपनः सृष्टमूत्रजित् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 631-633.

पत्रतण्डुली

तण्डुलीयकदलं हिममर्शः पित्तरक्त विषकाम विनाशि
ग्राहकं च मधुरं च विपाके दाहशोष शमनं रुचिदायि ॥

Rāja Nighaṇṭu, Mūlakādi varga, 145.

प्रदर रोगे तण्डुलीयक मूलकल्कम्

‘तण्डुलीयक मूलं तु सक्षौद्रं तण्डुलाम्बुना ।’

Caraka Samhitā, Cikitsā, 30-96.

असृग्दरे-रक्तप्रदरे

मधुनाताक्षर्यं संयुक्तं मूले स्यात्तण्डुलीयकम् ।

तण्डुलाम्बुयुतं पानात् सर्वप्रदरनाशनम् ॥

Śārṅgadhara Samhitā, 2-5-22.

Baṅgasena, Strīroga, 39.

रक्तातिसारे

मेघनादस्य मूलानि मधुना सितया सहः ।

निहन्ति शोणितस्त्राव तण्डुलोदकपानतः ॥

Baṅgasena, Atisāra, 137.

विषे

क. सर्वविषे

काकाण्डरससंयुक्तां विषाणां तण्डुलीयकः ।

प्रधानः..... ॥

Caraka Samhitā, Cikitsā, 23-217.

तण्डुलीयकमूलेन गृहधूमेन चैकतः ।

क्षीरेण च घृतं सिद्धं समस्त विषरोगजित् ॥

Āṣṭaṅga Saṅgraha, Uttara, 40-128.

ख. कृत्रिम विषे

तण्डुलोदकयुतं परिपिष्टं मूलमम्बुदरवस्य घृताढ्यम् ।

पीयमानमतिदारुणवेगं कृत्रिमं गरलमाशु निहन्ति ॥

Rāja Martanda, 29-9.

ग. सर्पविषे

तण्डुलीयककाश्मर्यकिणिही गिरिकर्णिकाः ।

मातुलुङ्गो सिता शेलुः पाननस्याञ्जनैर्हितः ॥

Āṣṭaṅga Hṛdaya, Uttara, 36-60.

घ. मूषिकविषे

तण्डुलीयकमूलेषु सर्पिः सिद्ध पिबेन्नरः ।

आस्फोटमूल सिद्धं वा पञ्चकपित्थमेव वा ॥

Suśruta Saṁhitā, Kalpa, 7-40.

Āṣṭaṅga Hṛdaya, Uttara, 38-24.

ङ. कीटविषे

‘तण्डुलीयकतुल्यांशां त्रिवृत्तां सर्पिषा पिबेत् ।’

Āṣṭaṅga Hṛdaya, Uttara, 37-25.

TAŅKA

Botanical name : *Pyrus communis* Linn.

Family : Rosaceae

Classical name : Taṅka

Sanskrit names : Taṅka, Amṛtaphala.

Regional names

Nashpati, Nakh (Hindi); Nak, Naspatti (Punj.); Amrupa, Nak, Amaruda (Aph.); Amaruda (Pers.); Kummasra (Arabic); Pear (Eng.).

Description

Tree with pyramidal crown. Leaves orbicular-ovate or elliptic, crenate serrate. Flowers white, in few flowered corymbs. Fruits variable, turbinate or subglobose, calyx lobes persistent, the flesh with gritty concretion.

Flowering and fruiting time

Distribution

Plant is distributed in the temperate regions of Europe and West Asia. Largely cultivated in north-western Himalayas. Generally in India, it grown at elevations of 1,200-1,800 meters in Himachal Pradesh, Kashmir, Uttara Pradesh, Assam and in the Nilgiris at elevation of 1,600-2,000 meters.

Kinds and varieties

In hilly region (Uttar Pradesh), Mehal and Garh mehal are commonly produced and used as popular edible fruit.

Common or European Pear (*Pyrus communis* Linn.) includes a large number of varieties of which two are important viz. var. *communis* and var. *sativa* Dc. There are also oramental forms.

Another kind is known as Sand Pear, Chinese or Japanese Pear or country pear, which is also called Nashpati (Bihar, Uttar Pradesh etc.) Its source plant is *pyrus pyrifolia* (Burm. f.) Nakai which follows :

Pyrus purifolia (Burm. f.) Nakai, var. *culta* (Makina) Nakai. Small tree, 9-15 meters high. Leaves ovate-oblong, 10-15 cm. × 7-10 cm., very dark green. Flowers white, in an umbel. Fruit C. 9 cm. across. mostly apple-shaped with a depression at stem end, the calyx lobes falling before maturity; flesh hard.

Flowering and fruiting time

Distribution

Plant is grown in the plains and hills of Punjab, Khasi hills of Assam, Nilgiris. Cultivated country near often semi-wild in Nilgiris. Introduced in various countries, Native of China and Japan. It is naturalised in India, semi-wild in the Nilgiris.

Chemical composition

Pears are a good source of pectin and contain also appreciable amounts of sugars and thiamine.

Leaves contain arbutin, isoquercitrin, sorbitol, ursolic acid, astragalin and tannin (0.8-2.9 per cent). They dye mordented wool Bark contains fredalin, epifredinol and B-sitosterol. Root bark contain Phloridzon.

The composition of pears (edible portion) of impotant types (grown in different regions) vary and they show also variation in stages of fruits. A sample of pears (Kashmiri) is reported to contain : acidity (as malic) 0.24, reducing sugars 8.2, total sugars (as invert) 10.8 and tannins 0.04 per cent.

Pharmacodynamics

Rasa	: Madhura, kaṣāya
Guṇa	: Guru, snigdha
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Kaphapittahara Vātakara-Tridoṣaśāmaka

Properties and action

Karma	: Rocana-hṛdya Jvaraghna Raktapittaśāmaka Dāhapraśamana Balya.
Roga	: Raktapitta Hṛdroga Jvara Dāha Dourbalya Aruci.

Therapeutic uses

The fruits of Ṭaṅka (pears or Nāspati) are edible commonly and they are consumed primarily as fresh fruits. A good portion of produce of fruits-crop is crashed to prepare juice for beverage and wine industries. The chemical contents and nutrient values of fruit help to maintain a desirable acid-base balance in the human body. Fruits are suggested to patients suffering from diabetes because of the low sucrose content. Various products of Ṭaṅka (pears) with different values are consumed as food items.

The extracts of different parts of the plant have shown variable antibacterial action. Fresh pear juice exhibited good activity against *Micrococcus pyogenes* var. *aureus* and *Escherichia coli*. An aqueous extract of the leaves has been found active against some strains of *Escherichia coli*, cholorogenic acid is present in the vegetative parts of the tree.

The drug Ṭaṅka is useful in health and disease as protective, restorative and curative fruit being medicinally potent owing to its chemical and nutritive values. Besides

the fruits (pears), some other parts are also reported to be medicinally useful.

The fruits of Ṭaṅka are cardiogenic, general tonic, antipyretic and aphrodisiac. They are cold and cause dryness. It allays burning sensation and aggravation of rakta pitta; it promotes desire for consuming food (rucivardhana). It alleviates kaphapitta anomalies and increases vata humor (mārutkṛt). Excess use is slow for digestion (viṣṭambhi). Fruits are useful in heart complaints, fever, debility and ailments caused by pitta kapha doṣa.

Parts used : Fruit.

Dose : Ripe fruit edible.

Formulations : Arkashira, Murabbā Nāśapati.

ṬAṆKA (टङ्क)

अमृतफलम्

अमृतफलं लघु वृष्यं सुस्वादु त्रीन हरेद् दोषाः ।

देशेषु मुद्गलानां बहुलं तल्लभ्यते लोके ॥

Bhāvaprakāśa Nighaṇṭu, Āmrādiphala-varga, 127.

‘कषायं मधुरं टङ्कं वातलं गुरु शीतलम् ।’

Caraka Saṁhitā, Sūtra, 27.

‘शीतं कषायं मधुरं टङ्कं मारुतकृद्गुरु ।’

Suśruta Saṁhitā, Sūtra, 46.

क. राजाम्रष्टङ्क आम्रातो मन्मथोद्भावनस्तथा ।

अन्यो नीलकपित्थः स्याद्राज पुत्रो नृपात्मजः ।

ख. टङ्कं कषायमधुरं विशदं शीतलं गुरु ॥

ग्राहिरूक्षं विबन्धाध्मानातकृत् कफपित्तजित् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 407-408.

‘टङ्कम् ।’

Caraka Saṁhitā, Sūtra, 27.

Suśruta Saṁhitā, Sūtra, 46.

TARUṆĪ

Botanical name : Rosa centifolia Linn.

Family : Rosaceae

Classical name : Taruṇī

Sanskrit names

Taruṇī, Śatapatrī, Sudalā, Bahupatrā,
Bhṛṅgavallabhā, Karṇikā, Cārukeśarā, Atimañjulā,
Bhṛṅgeṣṭā, Mahākumārī, Lākṣā, Gandhāḍhyā.

Regional names

Gulab (Hindi, Mar., Guj.); Golap (Beng.); Irasha (Tam.); Gulabi (Tel.); Varde ahmer (Arab.); Gulesurkh (Pers.); Rose (Eng.). Cabbage Rose, Provence, Rose, Hundred-Leaves Rose.

Description

Thorny (also thornless), erect, climbing or scrambling shrub; 5-7 feet high. Branches with spines, spines uneven, hook-type. Leaves compound, leaflets often five, glandular, glabrous, glandular, dentate. Flowers often pink (specific colour of flowers generally named as rose-coloured). Flowers of different colours, fls. of wide range, solitary or umbelliform clusters in many variable colours.

Flowering and fruiting time

All seasons.

Distribution

Plant is widely cultivated in gardens as ornamental for showy flowers. It is wild as well as cultivated. Largely cultivated as crop on commercial scale for flowers-produce.

Kinds and varieties

Several varieties, forms, types, cultivars and hybrids (complex hybrids) are planted in country. They have distinction in colour, fragrance and beauty in regard to the flowers rendering most delightful rose gardens.

There are innumerable cultivated types of roses dealt under rose breeding and floriculture.

Chemical composition

Flowers contain a good amount of oil (Oleum Rosi), tannic acid and galic acid. Fruits are rich source of vitamin C.

Pharmacodynamics

Rasa : Tikta, kaṣāya, madhura

Guṇa	: Laghu, snigdha
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Vātapittaśāmaka

Properties and action

Karma	: Hṛdya Śoṇitāsthāpana Vājīkaraṇa Medhya-soumanasyajanana Svedāpanyana-tvagdoṣahara Dāhapraśamana Jvaraghna Dhātuvardhana Dīpana-pācana-anulomana Grāhī (lower dose)-mr̥durecana (higher dose) Varṇya-śothahara Vraṇaropaṇa-durgandhanāśana

Roga	: Hṛddourbalya-hṛdroga Raktavikāra Varṇavikāra-tvagdoṣa- durgandhajanavikāra Dāha-jvara Dourbalya Vibandha-koṣṭhagatavita- pācanavikāra Atisāra-grahaṇī Netraroga-netrābhīṣyanda.

Therapeutic uses

The drug Taruṇī is cardi tonic (hṛdya), tonic (balya) lusture-promoting (varṇya), antipyretic (jvaraghna), haemostatic (śoṇitasthāpana) and laxative (sāraka).

A decoction of the flowers is prescribed for ulcers of the intestine. The dried petals are used in sachets. The powder of the rose buttons and seeds are given as astringent in haemorrhage and diarrhoea. The blossoms are used for scenting tea.

The rose-water is useful in eye ailments. A 'Gulakanda' is prepared with flowers which is used in different ailments and it is laxative and health promotor in general.

Taruṇī is useful in the ailments caused by brain abnormality particularly debility and it is used in cardiac complaints. It is used in intrinsic haemorrhage (rakta pitta) and blood impurities (raktavikāra). The drug is used in indigestion, constipation and flatulence; it is useful in diarrhoea and dysentery. Taruṇī is useful in sexual weakness or impotency. It is used in over-sweatening (atisveda), skin affections (tvagvikāra), fever (jvara), burning sensation (dāha), general debility (dourbalya) and other ailing conditions.

Besides the medicinal utility of flowers, the root of plant drug (taruṇīmūla) is useful as an astringent. A decoction of the flowers is prescribed for ulcers in the intestines. The powder of rose buttons and seeds is given as astringent in haemorrhage and diarrhoea. The blossoms are also used for scenting tea. The petals of flowers are employed for preparing 'gulkand', a conserved with sugar, Rose water is used for different purposes including sprinkling edible items.

Flowers (puṣpa) are produced on large scale through commercial farming under floriculture. Flowers are utilised for perfumery, besides their ornamental and socio-religious utility in country.

Parts used : Flowers.

Dose

Powder 3-6 gm., Aqua (arka-jala) 20-40 ml.
Gulakanda 10-20 gm.

Formulation (yoga) : Rose aqua (rose-water) Gulakanda.

TARUṆĪ (तरुणी)

क. शतपत्री तरण्युक्ता कर्णिका चारुकेशरा।

महाकुमारी गन्धाढ्या लाक्षापुष्पाऽतिमञ्जुला ॥

ख. शतपत्री हिमा हृद्या ग्राहिणी शुक्रला लघुः ।
दोषत्रयास्त्रजिद्वर्ण्या कट्वी तिक्ता च पाचनी ॥

Bhāvaprakāśa Nighaṇṭu, Puṣpa varga, 22-23.

तरुणी-भद्रतरुणी

अ. कर्णिका रामतरुणी तरुणी चारुकेसरा ।
कण्टकप्रावृता वीरा नीलालिसंकुला ।
अपरा भद्रतरुणी बृहत्पुष्पाति केशरा ।
ब. कर्णिका कटुका तिक्ता शीतला शुक्रला लघुः ।
ग्राहिणी दीपनी हृद्या वर्ण्यो दोषत्रयापहा ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1479-1481.

तरुणी

तरुणी सहाकुमारी गन्धाढ्या चारुकेसरा भृङ्गेष्ट्या ।
रामतरुणी तु सुघ्ना बहुपत्रा भृङ्गवल्लभा च दशाह्वा ॥

तरुणी गुणाः

तरुणी शिशिरा स्निग्धा पित्तदाहज्वरापहा ।
मधुरा मुखपाकघ्नी तृष्णा विच्छर्दि वारिणी ॥

Rāja Nighaṇṭu, Karavīrādi varga, 125-126.

राजतरुणी

महती तु राजतरुणी महासहा वर्ण्यपुष्पकोऽम्लानः ।
अमिलातकः सुपुष्पः सुवर्णपुष्पश्च सप्ताह्वः ॥

राजतरुणी गुणाः

विज्ञेया राजतरुणी कषाया कफकारिणी ।
चक्षुष्या हर्षदा हृद्या सुरभिः सुरवल्लभा ॥

Rāja Nighaṇṭu, Karavīrādi varga, 127-128.

शतपत्री सरा वृष्णा शीता हृद्या च शुक्रला ।
लघ्वी च तुवरा स्वादुः सुरभिः ग्राहिणी मता ॥
वर्ण्या तिक्ता च कट्वी च रुच्या चाग्निप्रदीपनी ।
त्रिदोषमुखपाकं च रक्तपित्तं कफं तथा ।
पित्तं रक्तविकारं च दाहं चैव विनाशयेत् ॥

Nighaṇṭu Ratnākara.

TILA

Botanical name : *Sesamum indicum* Linn.

Family : Pedaliaceae

Classical name : Tila

Sanskrit names

Tila, Pitratarpaṇa, Pavitra, Pāpaghna,
Homadhānya, Pūta dhānya, Jatila.

Regional names

Til (Hindi); Til (Beng.); Til (Mar.); Tal (Guj.); Tir
(Sindhi); Ellu (Tam.); Gubbul (Tel.); Simsim, Samsam,
Hal (Arabic); Kunjad (Pers.); Sesamum (Eng.).

Description

An erect branched or unbranched annual, 60-180
cm. high., slightly foetid (smelling). Stem soft tomentose.

Leaves 7.5-12.5 cm., simple, or when variable, with
upper ones narrowly oblong, middle ones ovate and
toothed and the lower ones lobate or pedatisect; small or
big in size being variable; lvs. linear, oblong, lanceolate and
in variable shape or kind, alternate in general (but lower
leaves opposite).

Flowers white, pink or mauve-pink with darker
markings, borne in racemes in the leaf-stalks; fls. soft, hairy
or glabrous; sub-erect or drooping.

Fruits capsular, oblong-subtriangular, slightly com-
pressed, dehiscent, deeply 4-grooved, 1.5-5 cm. long. Seeds
black, brown or white, 2.5-3 mm. long and C. 1.5 mm.
broad, small; white and black in colour, red also.

Flowering and fruiting time

Plant flowers in October-December and fruits in
December-January. Fruits attaining maturity during sum-
mers or pre-monsoons.

Sometimes plant in fruiting stage bears some flower
also in May-June months (planted state).

Distribution

Plant is cultivated throughout India. It is under
commercial farming for seed-oil crop produce, also for ed-
ible seeds.

Chemical composition

Seed of sesamum (tila bīja) contains : moisture 4.1-6.5, fat 43.0-56.8, protein 16.6-26.4, fibrous matters 2.9-8.6, carbohydrates 9.1-25.2, mineral matters 4.1-7.4, calcium 1.06-1.45 and phosphorous 0.47-0.62.

Seeds contain various vitamins, particularly vitamin A, B and C. Seeds oil contains sesamin and sesaminin; and they also contain sesamol, a phenol compound.

Analysis of a number of samples of sesame seeds oil for glyceriote composition have led to conclusion that the composition appears to be less affected by climatic and other factors during growth of the crop (than sun flowers or linseed oil). Sesame oil is rich in oleic and linoleic acids. Which together account for 85 per cent of the total fatty acids.

The range of values for the different component acids are : myristic 0.1-0.3, palmitic 7.8-9.4, stearic 3.6-5.7, arachidic 0.4-1.2, hexadecenoic 0.4-0.5, oleic 35.0-49.4 and linoleic 37.7-48.4% and lignoceric and in traces.

Kinds and varieties

There are three varieties of sesamum seeds (tilabīja) base on colour distinctions viz. white (śveta), red (rakta) and yellow (pīta). Red variety of sesamum seeds is known as 'Ramtil'.

The cultivated varieties of sesamum differ from each other in their flowers colour, and in the size, shape and arrangement of pods, and also in the size, colour and maturity of the seed.

The commonly cultivated varieties are mostly either black or white seeded, and also brown seeded varieties. In some areas (like Uttar Pradesh), the white seeded varieties are called 'tilli' and the black seeded once 'til'. Various intermediate shades between black and white (like light black, ash, greenish brown and brown, light brown and dull white) are also occasionally found.

A number of improved varieties (by breeding and hybridization) of sesamum are under large scale farming in agro-practices in different parts of country.

Pharmacodynamics

Rasa	: Madhura; Anurasa : Kaṣāya, tikta
Guṇa	: Guru, snigdha
Virya	: Uṣṇa
Vipāka	: Madhura
Doṣakarma	: Tridoṣaśāmaka

Properties and action

Karma	: Keśya Balya Snehana Yogavāhī Vraṇaśodhana-ropaṇa Vadanāsthāpana Vājikaraṇa Sandhānīya Medhya Dīpana-grāhī-śūlapraśamana Raktasrāvarodhaka Ārttavajanana.
Roga	: Keśavikāra-khālitya-pālitya Vātavikāra (vātavyādhi)-pakṣāghāta-ardita Śīroroga-śīraḥśūla Vraṇa-śoṭha Viṣa-kīṭaviṣa Kṣaya Vātarakta. Rasāyana Yakṛtplihāroga Udararoga Atisāra Arśa Mastiṣkadourbalya Rajorodha-kaṣṭārtava Stanyālpatā-kāmaśakti-hrāsa Agnimāndya-grahaṇī Hikkā-śvāsa Prameha-pūyameha Dantadourbalya

Netraroga-timira
 Kṣaya-dourbalya-kārśya
 Viṣa-kīṭa-vr̥ścikaviṣa
 Raktagulma.

Therapeutic uses

The drug Tila is demulcent, emollient, diuretic, emmenagogue, lactagogue and mild laxative. It is used in burns, constipations, dysentery, piles, scalds and urinary disorders.

The seeds (tila bīja) are considered emmollient, diuretic, lactagogue and a nourishing tonic. They are helpful in piles; a paste of the seeds mixed with butter being used in bleeding piles. A decoction of the seeds is considered to be emmenagogue and also given in cough. Combined with linseed (Ataśī), the decoction of the seeds as used as an aphrodisiac. A plaster made ground seeds is applied to burns, scalds etc. and a poultice of the seeds as applied to ulcers. Powdered seeds are used in amenorrhoea and dysmenorrhoea.

The oil (tila taila) is regarded as best oil among the oils employed for medicinal purposes used in different modes. It is widely used in Indian medicine in therapeutics.

The seeds of sesame (tila bīja) are used as a nourishing food and also as flavouring agent. It is invariably dehulled for use as food. There is traditional practice of consumption of seeds in different forms and conventional conventions, and further some commercial methods have also been developed.

The oil of seeds is edible. It is widely used as an ingredient of confectionery and for making margarine. It is well digested and absorbed as any other vegetable oil or fat. The oleaginous edible seeds of Tila (*Sesamum indicum* Linn.) are traditionally esteemed for their oil (also oilcake for cattle feed) and they have further acquired additional importance as a source of protein for nutrition. The bulk of oil (over 82%) produced in country is utilized for edible purposes.

The seeds oil (tila bīja taila) is used in the prepara-

tion scented hair-oils and in therapy as a vehicle for fat soluble substances. The oil is used also in the formulation of antacids; ointments, injectable as a vehicle for fat-soluble substances. It is also used in cosmetics, soaps insecticides and perfumes etc.

Parts used : Seeds, oil.

Dose : Seeds powder 3-6 gm., Seeds oil 10-20 ml.

Formulations : Tilādi guḍikā, Tilādi lepa, Tilāṣṭaka.

TILA (तिल)

तिलभेदाः

क. तिलः कृष्णः सितो रक्तः सवन्योऽल्पतिलः स्मृतः ।

तिलगुणाः

ख. तिक्तो रसे कटुस्तिक्तो मधुरस्तुबरो गुरुः ॥
विपाके कटुकः स्वादुः स्निग्धोष्णः कफपित्तनुत् ।
बल्य केश्यो हिमस्पर्शस्त्वच्यः स्तन्यो व्रणे हितः ।
हन्त्योऽल्पमूत्रकृच्छ्रकृद् ग्राही वातघ्नोऽग्निमतिप्रदः ।
कृष्णः श्रेष्ठमस्तैषु शुक्रलो मध्यमः सितः ।
अन्येहीनस्तरः प्रोक्तास्तज्ज्ञै रक्तादयस्तिलाः ॥

Bhāvaprakāśa Nighaṇṭu, Dhānya varga, 63-65.

तिल-वन्यतिलः

अ. तिलस्तैलफलः पूतः स्नेहपूरकलोऽपरः ।
तिलपिञ्जस्तिलपेजो वनजोऽन्यस्तु जर्तिलः ॥

तिलगुणाः

ब. तिलः कषायो मधुरस्तिक्तकः कटुको रसः ।
विपाके कटुकः स्वादुः सुस्निग्धो बलकृत्गुरुः ॥
केश्यो व्रणहितस्त्वच्यो हिमस्पर्शोऽनिलापहः ।
दन्त्योऽल्पमूत्रो मेधाग्नि कफपित्त विवर्धनः ॥

कृष्ण-श्वेत-तिलः

स. तिलेषु शुक्रलः कृष्णः प्रधानो मध्यमः सितः ।
अन्योऽरुणादयो ज्ञेया गुणैर्न्यून तरास्तिलाः ॥

Kaiyadeva Nighaṇṭu, Dhānya Varga, 80-83.

तिलः

- क. तिलस्तु होमधान्यं स्यात् पवित्रः पितृतर्पणः ।
पापघ्नः पूतधान्यञ्च जटिलस्तु वनोद्भवः ॥
स्निग्धो वर्णबलाग्निवृद्धिजननस्तुल्या निलघ्नो गुरुः ।
सोष्णः पित्तकरोऽल्पमूत्रकरणः केश्योऽतिपथ्यो व्रणे ।
ख. संग्राही मधुरः कषायसहितस्तिको विपाके कटुः
कृष्णः पथ्यतमः सितोऽल्पगुणदः क्षीणास्तथाऽन्ये तिलाः ॥

Rāja Nighaṇṭu, Śālyādi varga, 111-112.

तिल तैलम्

तिलतैलमलङ्करोति केशं मधुरं तिक्तकषायमुष्ण तीक्ष्णम् ।
पित्तास्रदोषदं क्रिमिकुष्ठघ्नं तिलजवच्च चक्षुष्यम् ॥

Rāja Nighaṇṭu, Kṣīrādi varga, 109.

तिलतैलस्य वातनाशकत्वम् (वैशिष्ट्यम्)

तिलादिस्निग्धवस्तूनां स्नेहं तैलमुदाहृतम् ।
तत्तु वातहरं सर्वं विशेषात्तिलसम्भवम् ॥

Bhāvaprakāśa Nighaṇṭu, Taila varga, 1.

तिलतैलस्य श्रेष्ठत्वम्

तैलं स्वयोनिवत्तत्र तिलतैलं वरं गुरु ।

एरण्ड तैल गुणाः

‘सर्वेषु तैल जातानां तिल तैलं प्रशस्यते ।’
कषायानुरस सूक्ष्ममुष्णं स्रोतोविशोधनम् ॥
पिष्टं स्वादु रसे पाके सतिक्तं कटुकं सरम् ।
वयसः स्थापनं त्वच्यं योनिशुक्र विशोधनम् ॥
मेधाकान्तिबलारोग्यस्मृति शुक्रविवर्द्धनम् ।
वातं वातकफं हन्ति कुरुते केवलं कफम् ॥
गुल्मप्लीहोदरानाहविबन्धान् वातशोणितम् ।
अष्टीलावर्ध्म हृद्रोगविषमज्वरविद्रधीः
शूलशोफौ कटीगुह्यकोष्ठपृष्ठोदभवौ जयेत् ।

रक्तएरण्ड तैलम्

रक्तैरण्डोद्भवं तैलं तीक्ष्णोष्णं पिच्छिलभृशम् ॥

Kaiyadeva Nighaṇṭu, Taila varga, 312-316.

तिलतैल गुणाः

कषायानुरसं तिक्तं मधुरं रसपाकतः ॥
 विकाशि विशदं सूक्ष्ममुष्णं संस्पर्श वीर्ययोः ।
 मेदोविलेखनं केश्यं तर्पणं रक्तपित्तकृत् ॥
 निहन्ति केवलं वातं कफयुक्तं च दीपनम् ।
 व्रणजन्तुप्रमेहघ्नं व्यवायि कफकुन्त च ॥
 मेधामांस बलस्थैर्य वर्णं मार्द्धवशुकृत् ।
 बद्धमूत्रपुरीषञ्च गर्भाशयविशोधनम् ॥
 योनिकर्णशिरः शूलशमनं लघुताकरम् ।
 त्वग्दोषजिच्च चक्षुष्यमभ्यङ्गे भोजनेऽन्यथा ॥

Kaiyadeva Nighaṇṭu, Taila varga, 299-303.

स्रोतेगतप्रभावादि क्रियाः

श्लक्ष्णं पुरीषं बध्नाति स्खलितं तु प्रवर्तयेत् ।
 रूक्षादिक्रुद्धपवनस्रोतसंकोचतो यदि ॥
 रसोऽसम्यक् वहन् कार्श्यं कुर्याद्रक्ताद्य वर्द्धयन् ।
 तेषु प्रविष्टं रसतः सौम्य स्निग्धत्वमार्दवैः ।
 तैलं क्षमं रसं नेतुं कृशानां तेन बृंहणम् ॥

Kaiyadeva Nighaṇṭu, Taila varga, 304-305.

यकृत्प्लीहा रोगे तिल प्रयोगः

‘तिलान् सलवणांश्चैव घृतं षट्पलकं तथा ।’

Cakradatta, Plāhayakṛcchikitsā, 38-9.

बहुमूत्रे

यथा बहुलमूत्रत्वे तिला वैद्यै किलाट्टता ।

तथा न किञ्चिद परं भेषजं प्रतिभातिमे ॥

Siddha Bhaisajya Maṇimāla, 4-577.

नाड्याम्

‘तिलैरपामार्गं फलैश्च पिष्ट्वाससैन्धवैर्वन्धनमत्र कुर्यात् ।’

Suśruta Saṁhitā, Cikitsā, 17-18.

तिल तैलम्-तिल तैल गुणाः

क. तिल तैलं गुरु स्थैर्यबलवर्णकरं सरम् ।

वृष्यं विकाशि विशदं मधुरं रसपाकयोः ॥

सूक्ष्मं कषायानुरसं तिक्तं वातकफापहम् ।
 वीर्योष्णं हिमं स्पर्शं बृंहणं रक्तपित्तकृत् ॥
 लेखनं बद्धविण्मूत्रं गर्भाशयविशोधनम् ।
 दीपनं बुद्धिदं मेध्यं व्यवायि व्रणमेहनुत् ॥
 श्रोत्रयोनिशिरः शूल नाशनं लघुताकरम् ।
 त्वच्चं केश्यं च चक्षुष्यमभ्यङ्गे भोजनेऽन्यथा ॥

Bhāvaprakāśa Nighaṇṭu, Taila varga, 2-5.

तिल तैल-बहुपयोगाः

द्विद्यभिद्यभिन्नच्युतोत्पिष्टमथितक्षतपिच्विते ।
 भग्नस्फुटितबिद्धाग्निदग्धविश्चलष्टदारितो ॥
 तथाऽभिहतनिर्भुग्नमृगव्याघ्रादि विक्षते ।

Bhāvaprakāśa Nighaṇṭu, Taila varga, 6.

बस्तौ पानेऽन्नसंस्कारे नस्ये कर्णाक्षिपूरणे ॥
 सेकाभ्यङ्गावगाहेषु तिलतैलं प्रशस्यते ॥

Bhāvaprakāśa Nighaṇṭu, Taila varga, 7.

तिल तैलं कर्मसम्पादनत्वम्

ननु बृंहण लेखनयोः कथं समानाधिकरण्यम्—

रूक्षादिदुष्टः पवनं स्रोतः संकोचयेद् यदा ।
 रसोऽसम्यग्वहन् कार्श्यं कुर्याद्रक्तान्यवर्द्धयन् ॥
 तेषु प्रवेष्टुं सरतासौक्ष्म्यं स्निग्धत्वमार्दवैः ।
 तैलं क्षमं रसं नेतुं कृशानां तेन बृंहणम् ॥
 व्यवायि सूक्ष्म तीक्ष्णोष्ण सरत्वैर्मेदसः क्षयम् ।
 शनैः प्रकुरुते तैलं तेन लेखनमीरितम् ॥
 द्रुतं पुरीषं बध्नाति स्खलितं तत्प्रवर्त्तयेत् ।
 ग्राहकं सारकञ्चापि तेन तैलमुदीरितम् ॥

Bhāvaprakāśa Nighaṇṭu, Taila varga, 8-11.

भग्न चिकित्सायां गन्धतैलम्

(तिलप्रधानघटक-सप्रक्षेपादि घटक द्रव्याः)

Cakradatta, Bhagna Cikitsā, 49/18-29.

अतिसारे तिल कल्कम्

कल्कस्तिलानां कृष्णानां शर्करापञ्चभागिकः ।

आजेन पयसापीतः सद्यो रक्तं नियच्छति ॥

Caraka Samhitā, Cikitsā, 19-84.

तिमिर रोगेषु तिलतैलपक्कं गोमयतैलम्

गवां शकृत्काथ विपक्कमुक्तमंहितञ्च तैलंतिमिरेषु नन्यतः ।

घृतं हितं केवलमेव पैत्तिके तथाऽणुतैलंपवनासृगुत्थयोः ॥

Cakradatta, 59-60.

कल्कस्तिलानां कृष्णानां शर्करापञ्चभागिकः ।

आनेन पयसा पीतः सद्योऽतीसारनाशनः ॥

Bhāvaprakāśa, Atisārādhikāra, 2-54.

तिलतैलं भवेत्प्रस्थं तत्षोडशगुणे शनैः ।

काञ्जिकैः विपचेत्तस्याद्वाहञ्चरं परम् ॥

Bhāvaprakāśa, Dāhādhikāra, 21-18.

भगन्दर चिकित्सायां तिलाभ्यादि लेपः

Cakradatta, 46-9.

महादारुण शूले तिलादि गुटिका

तिलैश्च गुटिकां कृत्वा भ्रामयेज्जठरोपरि ।

शूलं मृदुस्तरं तेन शान्ति गच्छति सत्वरम् ॥

Bhāvaprakāśa, Śulādhikāra, 30-34/35.

फलारुष्करजन्यशोथे

महिषी क्षीरंसर्पिर्नवनीत समन्वितैः ।

तिलैर्लिप्तः शमं याति शोथो भल्लातकोत्थितः ॥

Bhāvaprakāśa, Madhyakhaṇḍa, Śothādhikāra, 42-23.

शोथे लेपनार्थम्

‘महिष्या नवनीतं वा लेपाद् दुग्ध तिलान्वितम् ।’

Bhāvaprakāśa, Sthoulyādhikāra, 42-25.

दन्तचल

‘दन्तचाले हितं श्रेष्ठं तिलोग्राचर्वणं सदा ।’

Cakradatta, Mukharoga Cikitsā, 56-4.

शोथहर लेपम्

यष्टीदुग्धतिलैर्लेपो नवनीतेन संयुक्ताः ।

शोथमारुष्करं हन्ति चूर्णेः शालदलस्य च ॥

Bhāvaprakāśa, Sthoulyādhikāra, 42-24.

अर्शचिकित्सायां कृष्णतिलप्रयोगः

असितानां तिलानां प्राक् प्रकुञ्चं शीतवार्यस्तु ।

खादतोऽर्शसि नश्यन्ति द्विजदाढर्याङ्गपुष्टिदम् ॥

Cakradatta, Arśa Cikitsā, 5-22.

Vṛndamādhava, 5-1.

व्रणशोथे तिलादि-शक्तुक-पिण्डिका (उपानाह प्रयोगः)

सतिला सातसी बीजा दध्यम्ला शक्तुपिण्डिका ।

सकिण्व कुष्ठलवणा शस्ता स्यादुपनाहने ॥

Cakradatta, Vraṇaśoṭha Cikitsā, 44-19.

व्रणशोधनार्थं तिलाष्टक लेपः

तिलकल्कः सलवणो द्वे हरिद्रेत्रिवृद् घृतम् ।

मधूकं निम्बपत्राणि लेपः स्याद् व्रणशोधनः ॥

Cakradatta, Vraṇaśoṭha Cikitsā, 44-27.

सदाहवेदनावातप्रधान व्रणे भृष्टतिलप्रलेपः

सदाहा वेदनावन्तो ये व्रणा मारुतोत्तराः ।

तेषां तिलानुमाश्चैव मृष्टान पयसि निवृतान् ।

तेनैव पयसा पिष्ट्वा दद्यादालेपकं भिषक् ।

Cakradatta, 44-41.

शिशीतल्वस्थ (गलस्थ) कफांश निर्हरणार्थम्

तर्कधो गुडिकां तसां निर्वाप्य कटुतैलके ।

ततैलं पानतो हन्ति बालानुमल्वमुद्धतम् ॥

Cakradatta, Bālaroga Cikitsā, 64-2.

क्षये

तिलमाषाश्वगन्धानां चूर्णेमाजघृतान्वितम् ।

लिह्यात् क्षौद्रयुतं प्रातः क्षयव्याधिनिवर्हणम् ॥

Gadanigraha, 2-9-66.

वातरक्ते

प्रभृष्टैः क्षीर निष्पिष्टै स्तिलैरप्यथवोमया ।

शताह्वा क्षीरसंपिष्टा बीजं वा वर्धमानजम् ॥

Āṣṭāṅga Hṛdaya, Cikitsā, 22-33/34.

वाजीकरणे

बस्ताण्डसिद्धे पयसि भावितानसकृतिलान् ।

यः खादेत् ससितान् गच्छेत् स स्त्रीशतमपूर्ववत् ॥

Āṣṭāṅga Hṛdaya, Uttara, 40-25.

तिलाज्यत्रिफलाक्षौद्रव्योषभस्त्रातक शर्करा ।

वृष्यः सप्तसप्तो सेव्यः कुष्ठहाकामचारिणः ॥

Cakradatta, 50-62.

विषे

कीटविषे

‘पिण्याकेन व्रणालेपस्तैलाभ्यङ्गश्च वातिकेन ।’

Āṣṭāṅga Hṛdaya, Uttara, 37-20.

वृश्चिकदंशे

‘लेपः सुखोष्णश्च हितः पिण्याको गोमयोऽपि वा ।’

Āṣṭāṅga Hṛdaya, Uttara, 37-33.

रसायने

दिने दिने कृष्णतिलप्रकुञ्चं समश्नतः शीतजलानुपानम् ।

पोषशरीरस्य भवत्यनल्यो दृढीभवन्त्यामरणाच्च दन्ताः ॥

सायं तिलैरामलकानि कृष्णैश्चाणि संक्षुध्य हरीतकीर्या ।

येऽद्युर्मयूरा इव ते मनुष्या रम्यं परीणामवाप्नुवन्ति ॥

Āṣṭāṅga Hṛdaya, Uttara, 39-159/161.

खालित्ये पालित्ये च

तिलाः सामलकाश्चैव किञ्जल्को मधुकं मधु ।

बृंहेद् रञ्जयेच्चेतत् केशान् मूर्धप्रलेपनम् ॥

Caraka Samhitā, Cikitsā, 26-279.

रक्तगुल्मे आर्तव रोधे च

तिलक्काथो घृतगुडव्योषभागीरजोन्वितः ।

पानं रक्तभवे गुल्मे नष्टे पुष्पे च योषितः ॥

Āṣṭāṅga Hṛdaya, Cikitsā, 14-120.

Rajamārtanḍa, 31-8.

Vṛndamādhava.

अतिसारे

तिलकल्को हितश्चात्र मौद्गो मुद्गरसस्तथा ।

Suśruta Samhitā, Uttara, 40-115.

‘कल्कतिलानां कृष्णानां शर्करापञ्चभागिकः ॥’

Caraka Samhitā, Cikitsā, 19-84.

अत्यग्नौ

फलानां तैल योनीनामुत्कुञ्चाश्च सशर्कराः ।

मार्द जनयत्यग्नेः स्निग्धाः मांसरसास्तथा ॥

Caraka Samhitā, Cikitsā, 15-227.

उदररोगे

‘तिलान् खलवणांश्चैव घृतं षट्पलकं तथा ।’

Vṛndamādhava, 37-40.

नेत्ररोगे

तिलतैलमक्षतैलं भृंगस्वरसोऽसनाच्च निर्यूहः ।

आयसपात्रविपक्वं करोति दृष्टेर्बलं नस्यम् ॥

Āṣṭāṅga Hṛdaya, Uttara, 13-46.

दन्तदौर्बल्ये

‘तिलयष्टी मधुशृतं क्षीरं गण्डूषधारणम् ।’

Āṣṭāṅga Hṛdaya, Uttara, 34-2.

गुह्य रोगे

‘तिलकल्कघृत क्षौद्रेर्लेपः पक्वे तु पाटिते ।’

Āṣṭāṅga Hṛdaya, Uttara, 34-2.

आरुष्कजनित शोथे

अजादुग्धातिलैर्लेपोनवनीतेन संयुतः ।

शोथमारुष्करं हन्ति लेपो वा कृष्णमृत्तिलैः ॥

Sārṅgadhara Samhitā, 3-11-7.

भगन्दरे

‘अथैनं घृतसंसृष्टैस्तिलैः पिष्टैः प्रलेपयेत् ।’

Suśruta Samhitā, Cikitsā, 8-21.

वातव्याधौ

‘जीर्णे सर्पिस्तथा तैलं तिलसर्षपजं हितम् ।’

Caraka Samhitā, Cikitsā, 28-188.

Āṣṭāṅga Hṛdaya, Cikitsā, 22-58.

बृंहणार्थं तिलाः मुख्या वातरोगविनाशनाः ।

गुडमिश्रान् तिलान् खादेत् पललं वा गुदान्विताम् ॥

Gadanigraha, 2-19-200.

शूले

तिलैश्च गुटिकां कृत्वा भ्रामयेज्जठरोपरि ।

गुटिका शमयत्याशु शूलं चैवातिदुःसहम् ॥

Vṛndamādhava, 26-12.

व्रणरोपणे

‘तिलकल्कः समधुको घृताक्तौ व्रणरोपणः ।’

Suśruta Samhitā, Sūtra, 11-22.

सदाहा वेदनावन्तो ये व्रणाः मारुतोत्तराः ।

तेषां तिलानुमां चैव भृष्टान् पयसि निर्वृतान् ॥

तेनैव पयसा पिष्ट्वा कुर्यादालेपनं भिषक् ।

Vṛndamādhava, 44-38.

अशंसि

तिलारुष्कर संयोगं भक्षयेदग्निवर्धनम् ।

कुष्ठरोगहरं श्रेष्ठमर्शसां नाशनं परम् ॥

Vṛndamādhava, 5-10.

कृष्णतिलप्रसूतं प्रकुञ्चं वा प्रातः प्रातरुपसेवेत शोतोदकानुपानम् ।

एभिरविवर्धतेऽन्निर

चोपशाभ्यन्ति ॥

Suśruta Samhitā, Cikitsā, 6-13.

नित्यं खादेत् सतिलान् कृष्णवर्णान् प्रातः प्रातः कौडवार्धप्रमाणम् ।

शीतं तोयं संप्रापयन्तु जीर्णे भुञ्जीतात्रं दुष्टर्नामरोगी ॥

Kalyāṇakāraka, 12-135.

तिला भल्लातकं पथ्या गुडश्चेति समांशकम् ।

दुर्नामश्वासकासघ्नं प्लीहपाण्डु ज्वरापहम् ॥

Vṛndamādhava, 5-11.

स्नेहने तिल (तैलम्)

सर्वेषां तैलजातानां तिल तैलं विशिष्यते ।

बलार्थे स्नेहने चाग्रयम् ।

Caraka Samhitā, Sūtra, 13-12.

‘सर्पिष्मतो बहुतिला स्नेहनी लवणान्विता ।’

Caraka Samhitā, Sūtra, 13-85.

ग्राम्यानूपौदकं मांसं गुडं दधि पयस्तिलान् ।

कुष्ठी शोथी प्रमेही च स्नेहने न प्रयोजयेत् ॥

Caraka Samhitā, Sūtra, 13-91.

TILAPUṢPĪ-HṚTPATRĪ

Botanical name : Digitalis purpurea Linn.

Family : Scrophulariaceae

Classical name : Hṛtpatri-Tilapūṣpi

Sanskrit names : Hṛtpatri-Tilapūṣpi.

Regional names

Digitalis (Hindi); Digitalis (Eng.); Foxglove (Eng.); Common Foxglove, Purple Foxlove (English).

Description

A biennial, sometimes perennial herb, about 1 to 1.5 m. high. During first year, plant bears a rosette of radical rugose, somewhat downy.

Leaves 15-30 cm. long, ovate to ovate-lanceolate with long winged petioles. From the centre of the leaf rosette arises, in the second year, a single erect flowering axis with sessile leaves terminating in a onesided raceme.

Flowers 5-8 cm. long, declined tubular-campanulate, purple, yellow or white with ciliate lobes, borne in 30-60 cm. long, one-sided branches; flowers spotted within. Corollas 4 to 5 cm. in length. Stamens 4, didynamous. Floral formula : K (5), C (5), A (4) didynamous.

Fruits bilocular, capsule which contains numerous seeds attached to axile placentae. Seeds small and light.

Flowering and fruiting time

Summer season and onwards.

Distribution

It grows at about 5,000 to 8,500 feet altitude in the Himalayan region particularly sandy and shady places. In India, the plant is cultivated particularly in Kashmir (Chiefly in Tanmarg and Kishtwar and also other places) and it is also cultivated in Darjeeling and Nilgiri hills. The plant has become naturalised in these localities of hilly regions; Uttar Pradesh hills region as an escape, at an altitude of 1524 to 2590 meters it is also found in gener where is is also cultivated.

The plant is a native of Europe except in the Mediterranean region but it has been naturalised in other continents including North America and Asia.

Kinds and varieties

Some other species of Digitalis are used as substitutes of Digitalis purpurea Linn. They are Digitalis lanata

Ehrh., *Digitalis lutea* Linn. and *Digitalis thapsi* Linn. There are some common adulterants of *Digitalis purpurea* Linn. They are mainly Mullein leaves (*Verbascum thapsus* Linn.), Comfrey leaves (*Symphytum officinale* Linn.), Primrose leaves (*Primula vulgaris* Hudson) and leaves of *Inula conyzia* De candolle and also *Inula helenium* Linn.

Chemical composition

Digitalis purpurea leaves of contain three important active glycosides i.e. digitoxin, gitoxin and gitalin. *Digitalis lanata*, another species of *Digitalis* plant drug, contains digoxin, gitoxin and digitoxin.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka Pittavardhaka.

Properties and action

Karma	: Hṛdya Kaphaghna Āksepāśāmaka Mūtrāghāta Vājīkaraṇa Garbhāśāyasaṅkocaka Jvarghna
Roga	: Tvagvikāra (tīvra kṣobha-śoṭha vedanājanana) Hṛdvikāra Hṛdvikarajanya śoṭha- hṛddourbalyajanya śoṭha Kāsa-śvāsa-phuphphusaśoṭha Raktālpatajanya śoṭha Klaibyaroga Rajorodha Tīvra jvara

Therapeutic uses

It is an effective drug specifically known for action in cardiac diseases. Leaves are used for certain ailing condi-

tions of the heart mainly as a cardiac stimulant and tonic. The leaf-drug is recommended for its effect on the cardiovascular system, increasing the force of systolic contraction and the efficacy of the decompensated heart. It shows the heart rate and reduces cardiac oedema with diuresis. It is myocardial stimulant in congestive heart failure, auricular flutter and rapid auricular fibrillation. This drug has been shown to increase the coagulability of blood and antagonize the anticoagulant action of heparin in the body.

The drug is a diuretic, useful in dropsy and renal obstructions. Its local effect causes irritation. An ointment of digitalis glycosides is said to be useful for cleaning wounds. In cases of burns, it is more selective than tannic acid or silver nitrate in preserving cells severely injured by heat. It is commonly administered in the forms of tablets, powder or prepared digitalis tincture, catchets, suppositories and injections.

In therapeutic doses, the drug usually produces mild toxic effects causing headache and giddiness and it is necessary to regulate the dose in such a manner as to avoid these effects.

Digitalis glycosides are also of value in the management of certain arrhythmias and normal rhythm of the heart. This drug is also used as a remedy in fever convulsions and dysmenorrhoea. It also possesses aphrodisiac properties besides other properties.

Antifungal activity of drug Digitalis has been found. Crude extract of Digitalis purpurea leaves exhibits antifungal activity phytopathogenic fungi belonging to the genera fomes, cytospora, pestalotiopsis and ceratocystis. Digitonin (obtained from *D. purpurea*) shows wide spectrum of antimycotic activity including yeast.

Pharmacological action of drug digitalis finds that digitalis preparations are mainly used for their action on cardiac muscle. The pharmacological effectiveness of the cardio-active glycosides is dependent on both the aglycones and the sugar attachments; the inherent activity resides in the aglycones, but the sugars render the com-

pounds more soluble and increase the powder of fixation of the glycosides to the heart muscles. The overall action of the digitalis glycosides is complicated by the number of different effects produced and their exact mode of action on myocardial muscle in relation to current views on cardiac muscle physiology is still an area of investigation.

Different types of cardiac glycosides of *Digitalis purpurea* have experimentally been used to interpret high and low affinity for binding sites employing contracting heart muscle, cardiac cell membrane and heart muscle cells. It is observed that cardiac glycosides of *Digitalis purpurea* at low concentrations inhibit the ubiquitous sodium pump in different types of cells including cardiac and vascular smooth muscle cells, neurons and kidney tubule cells. It is also suggested that gitoxin might be a good alternative to digoxin in the treatment of acute and chronic cardiac failures. The loss of appetite, nausea and vomiting caused by digitalisation can be improved by certain indigenous formulations under proper treatment in potients of congestive heart failures.

The medicinal use of *Digitalis* of Foxglove leaves carries a long history in drugs materia medica nearly about two hundred years, from its introduction (the London Pharmacopoeia) to further therapeutic uses (The Indian Pharmacopoeia) in treatment for curing heart diseases.

Toxicity studies observed poisonous action and therapeutic use of digitalis also result into toxic symptoms. Two or three dried leaves are considered to be lethal dose. Generally an excess or constant use (or high dose) causes nausea, vomiting (greenish liquid or substance vomited), diarrhoea, scanty urine, headache, low pulse rate and irregular palpitation of heart and other signs and symptoms. Suitable treatment and measures countering toxic effects are recommended in such condition which include emesis, stomach wash, cardiac stimulants, fomentation of body, complete bed rest of patient and other clinical requirements, besides discontinuation of digitalis use in patient(s) in toxic condition.

Digitalis has been well-known herbal drug recommended against heart ailments (during fourth decade of nineteenth century) and simultaneously its poisonous nature was also known. Foxglove leaves succeeded in curing dropsy (unwanted accumulation of liquid in the body cavities) now known to be manifestation of heart diseases.

Being a cardiac stimulant and cardiac tonic, it effects on the cardio-vascular system, increasing the force of systolic contraction and the efficiency of the compensated heart. It slows the heart rate and reduces cardiac oedema with diuresis. It is used as myocardial stimulant in congestive cardiac failure, auricular flutter and rapid auricular fibrillation. Digitalis increases the coagulability of blood and to antagonize the anticogulant action on heparin in the body. It is a diuretic, useful in dropsy, and renal obstruction. Local effect of digitalis causes irritation.

Digitalis is also of economic uses, besides its specific medicinal properties in heart diseases. Plants of digitalis or Foxglove *Digitalis purpurea* Linn. are often cultivated in the garden as an ornamental border plant for its beautiful flowers with deep purple eyespots on its inner surface. There are several horticultural varieties which possess low therapeutic potentialities and not much recommended in medicinal uses.

The leaves of Digitalis or Foxglove (Hṛtpatrī) are prescribed and used in pharmaceutical preparations. Therapeutic potency of leaves collected during the first year is reported to be somewhat higher than that of leaves collected during the second year, but the difference in the potencies appears to be small. Leaves are picked in the afternoon during August-September in the first year and in second year, they are picked when two-third of the flowers have developed. The basal and top leaves are left behind and about three-fourths of all in each plant are removed. Yellow and withered leaves are discarded as they are poor in active glycosides. The leaves are dried, stored and preserved by following prescribed process, and rendering the crude raw drug possessing high potency for effective medicinal uses.

Parts used : Leaves.

Dose

Powder 500 mg. (initial doses divided) and 100 mg. (normal day dose) Tincture 5-15 drops.

TINDUKA

Botanical name

Diospyrus peregrina (Gaertn.) Gurke.

Syn. *Diospyros embryopteris* Pers.

Family : Ebenaceae

Classical name : Tinduka

Sanskrit names

Tinduka, Sphūrjaka, Kālaskandha, Asitokāraka, Nīlasāra, Atimuktaka, Ramaṇa, Syandanāhva.

Regional names

Tendu, Tedu, Gabh (Hindi); Gab (Beng.); Temburani (Mar.); Timbaravo (Guj.); Panichika (Tam.); Tumika (Tel.); Abanuse Hindi (Arabic, Persian); Indian or Gaub Persimmon (Eng.).

Description

A medium-sized or small, evergreen tree, with many spreading branches forming a shady crown near the ground, quite-glabrous : except young parts and inflorescence. Bark dark-grey or greenish-black, exfoliating in large pieces.

Young foliage reddish. Leaves 12-23 × 4.6 cm., ovate-oblong to oblong, coriaceous, disticous, spreading, 4-11 inch. long and 1.3-3 in. wide, lanceolate, dark-green (crimson when young) glabrous and shining; petiole 5 in long wrinkled.

Flowers unisexual, 4-merous, white or cream-coloured female. Female flowers solitary, drooping; drooping; calyx accrescent. Male flowers in peduncled cymes; flowers-buds ovoid-oblong.

Fruits 3-5 cm. across, almost glabrous or 1-2.5 in. diam., almost globose or sub-globose, covered with deciduous rusty-coloured scruff; yellow when ripe. Seeds 4-8

embedded in glutinous pulp, compressed smooth, reddish-brown.

Flowering and fruiting time

It flowers during summers and onward bears fruits.

Distribution

It occurs in India generally in moist and shady places.

Kinds and varieties

There are some species of *Diospyros* are found, known and used as different botanical sources as well as kinds (particularly local varieties). *Diospyros melanoxylon* Roxb., *D. cordifolia* Roxb. and *D. montana* Roxb. and *D. tomentosa* Roxb. are species other than *Diospyros peregrina* (Gaertn.) Gurk. which are commonly known as Tendu, Kendu, Kala tendu, Bistendu, Vistend, Bhaktendu and several other region or local names prevalent in the areas of their occurrence. Among these of *Diospyros*, *Diospyros montana* Roxb. and *D. cordifolia* Roxb. may be put in group of plants (fruits) of Viṣatinduka (Bistend, Bistendu) while other species *Diospyros melanoxylon* Roxb. and *D. peregrina* (Gaertn.) Gurke. are main plant sources for common Tinduka of which fruits are edible in ripen state, and the fruits of other species indicated stand non-edible normally.

The botanical description of all the main three species referred in context of Tinduka is as follows :

Diospyros malabarica (Desr.)

Syn, *Diospyros empyopteris* Pers., *D. peregrina* sensu Gurke, *D. malabarica* Dear.

Dense; spreading-branched trees upto 15 meters high. Leaves distichous, upto 20 cm. long, ovate-oblong to oblong, coriaceous, reddish when young, dark green above and glaucous-green beneath. Flowers dioecious, axillary, 4-merous. Female flowers solitary, drooping; calyx slightly accrescent, pubescent outside corolla white glaucous. Male flowers 1-5-together, with stamens and staminodes. Berry subglobose, upto 6 cm. across, pulpy, 4-8-seeded, covered with rusty scurf, which brushes off at the maturity of fruit.

Plant occurs in India, Malaya and Australia. It is occasionally planted in gardens. Plant flowers in March-May and fruits during rainy season.

***Diospyros cordifolia* Roxb.**

Syn. *Diospyros montana* Cl., *Diospyros montana* var. *cordifolia* Hiern.

Large shrub or small tree with short often crooked trunk, Trunk and large branches armed with many stout and often branching spines. Bark blackish or dark brown, furrowed with longitudinal and transverse cracks.

Leaves ovate-oblong to ovate-lanceolate, cordate or rounded at the base, subacuminate 1.5-2.5 in. softly downy on both surfaces especially when young, petiole 1/8 - 1/4 in. long.

Flowers male fls. pale white, in triad on solitary cymes, calyx persistent, enlarged in fls., lobes reflexed. Female fls. solitary.

Fruits globose, 1.5-1 in. in diam., yellow when ripe.

***Diospyros montana* Roxb.**

Syn. *Diospyros montana* Hiern., *Diospyros montana* Merr.

Medium sized or small tree, sometimes armed. Trunk usually crooked covered with dark, rust-coloured nearly smooth bark. young branches softly pubescent.

Leaves ovate-oblong, subacuminate, 2.5-4 in. long, bluntly on both acuminate usually rounded at the base, thenly coriaceous, margins undulate, softly pubescent when young finally glabrous on both surfaces, petioles 1/6 - 1/5 in. long.

Flowers Male fls. pale yellow, in small, few-flowered panicles. Calyx of female fls., persistent, enlarged in fts. reflexed, glabrous outside and inside.

Fruits pendulous, globose, about 2.5 cm. across, supported by the enlarged reflexed, calyx-lobes, reddish, brown.

***Diospyros melanoxydon* Roxb.**

Syn. *Diospyros exsculpta* Buch-Ham., *Diospyros tupru* Buch-Ham., *Diospyros wightiana* Wall.

Medium sized deciduous tree; bark dark grey or black, exfoliating in rectangular scales; young parts and inflorescence clothed with grey or tomentum.

Leaves 2.5-6 × 1-2.9 in., alternate or sub-opposite coriaceous, elliptic oblong, obtuse or subacute, softly tomentose on both sides when young, glabrous above and pubescent beneath when mature, base usually acute, rarely rounded; main nerves 6-10 pairs with reticulate veins between; petioles 1/4 - 1/3 in. long.

Flowers : Male fls. 4-6 merous, 3-12 together in tomentose panicles drooping cymes longer than the petioles. Female fls. rather longer than the male, solitary, sub-sessile, 4-5-merous.

Fruits yellow when ripe, ovoid or globose 1-1.3 in. long, fruiting calyx, thickly coriaceous, flat, the lobes undulate, often with reflexed margins.

Seeds 2-8 compressed, oblong, testa, rugose, shining, albumen ruminant.

Chemical composition

Proximate analysis of dried and powdered fruit gave following values : ether extr. 1.2, alcohol extr. 12.4, water extr. 12.4, organic residue 61.9 and ash 4.9%. Fruits contain pectin C. 50%.

Pharmacodynamics

Rasa	: Kaṣāya - Madhura (ripe fruit)
Guṇa	: Rūkṣa, laghu - Guru (ripe fruit)
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāma

Properties and action

Karma	: Udardapraśamana Stambhana-śothahara Raktaprasādana-raktastambhana Kaphaghna-kāśahara Mūtrasaṅgrahāṇīya Śukrastambhana Kuṣṭhaghna-kaṇḍūghna Tvacya-carmavikṛtīhara Varṇya-savarṇīkaraṇa

Roga

Jvaraghna
 Viṣāghna-sarpaviṣahara.
 : Udarda-koṭha-śītapitta
 Granthi-visphoṭa-vraṇa-sadyovraṇa-
 agnidagdha
 Varṇavikṛti
 Mukhapāka-upajihvikāśoṭha
 Karṇavikāra-karṇasrāva
 Pradara-svetapradara-raktapradara
 Raktasrāva
 Raktapitta
 Raktavikāra
 Atisāra-pravāhikā
 Kāsa
 Prameha
 Śukrameha-śighrapatana-
 dhātukṣaya-svapnadoṣa
 Kuṣṭha-udarda-tvagvikāra
 Jvara-viṣamajvara
 Sarpaviṣa.

Therapeutic uses

The drug Tinduka is udarda praśamana and useful in Kuṣṭha and other skin diseases (tvagvikāra); it is blood purifier (raktaprasādana) and haemostatic (raktastambhana). It is astringent, febrifuge and anti-dote to poison.

The decoction of bark is used in prameha, bloody diarrhoea, dysentery. The fruits, seeds and seeds oil are also used in these diseases. In cough (Kāsa), the extract of bark is given or chewed as pill. Bark is useful in leucorrhoea, spermatorrhoea and seminal or sexual disorders (abnormal or untimely ejaculation).

The decoction of bark is orally taken in udarda, skin affections, urticaria and similar allergic conditions. A paste of bark is also applied on skin diseases, particularly eruptions and glandular affections. Bark powder is locally applied as haemostatic (styptic) remedy. The vaginal douche of bark decoction is useful in leucorrhoea.

The leaves (*Diospyros melonoxylon* Roxb.) are diuretic, carminative, laxative and styptic. Dried flowers are

reported to be useful in urinary, skin and blood diseases. The bark is astringent and its decoction is used in diarrhoea and dyspepsia. A dilute extract is used as an astringent lotion for the eyes.

Tinduka phala are edible in ripe stage (pakva) in general. The fruits of some types are (*D. kaki* linn. f.) astringent (puckery) due to the presence of tannins and they become really delicious when they ripe. The fruits of some other species are also edible when they ripe (*D. melanoxylon* Roxb., *D. chloroxylon* Roxb., *D. ebanum* Koenig., *D. ferrea* (Willd.) Bakh.). The fruits of Tinduka (Gaub Persimmon), obtained from the trees of *Diospyros peregrina* (Gaxrtn.) Gurke., are as spherical berry, as big as a middle-sized apple, with a leathery and they become yellow when they ripe and fully ripe fruits have a mawkish sweet taste and are edible. Ripe fruits are resistant to insects. Leaves (tendu patta) are utilised for Biri wrapping.

Parts used : Fruit, bark, , seeds, seeds oil.

Dose

Decoction 50-100 ml., Seeds powder 1-3 gm. Seeds oil 10-20 drops., Ripe fruit edible.

Groups

Udardaprasamana (Caraka Samhitā), Nyagrodhādi (Suśruta Samhitā).

TINDUKA (तिन्दुक)

- क. तिन्दुकः स्फूर्जकः कालस्कन्धश्चासितकारकः ।
 ख. स्यादामं तिन्दुकं ग्राहि वातलं शीतलं लघु ॥
 पक्वं पित्तप्रमेहास्रश्लेष्मघ्नं मधुरं गुरु ॥

Bhāvaprakāśa Nighaṇṭu, Āmrādiphala varga, 65.

तिन्दुक

- अ. तिन्दुको नीलसार कालस्कन्धोऽतिमुक्तकः ।
 स्फूर्जको रामणश्चैव स्फूर्जनः स्यन्दिनाह्वयः ॥
 ब. तिन्दुकस्तु कषायः स्यात् संग्राही वातकृत्परः ।
 पक्वस्तु मधुरः स्निग्धो दुर्जरः श्लेष्मलो गुरुः ॥

Rāja Nighaṇṭu, Āmrādiphala varga, 77-78.

काकतिन्दुक

अ. तिन्दुकोऽन्यः काकपीलुः काकाण्डः काकतिन्दुकः ।
काकस्फूर्जकः काकेन्दुः काकाह्वः काकबीजकः ॥

ब. काकतिन्दुः कषायोऽम्लो गुरुर्वात विकारकृत् ।
पक्वस्तु मधुरः किञ्चित् कफकृत्पित्त वान्तिहृत् ॥

Rāja Nighaṇṭu, Āmrādiphala phala varga, 79-80.

‘तिन्दुकं अनन्नद्रव्यरुचिकराणां श्रेष्ठम् ।’

Caraka Saṁhitā, Sūtra, 25-33.

‘तिन्दुकं कफपित्तघ्नं कषायं मधुरं लघुः ।’

Caraka Saṁhitā, Sūtra, 27.

शिशूनां हिक्कासू

जम्बूकतिन्दुकानाञ्च पुष्पाणि च फलानि च ।

घृतेन मधुना लीढ्वा मुच्यते हिक्कया शिशुः ॥

Baṅgasena, Bālaaroga, 72.

अग्निदग्धे

‘तिन्दुकस्य कषायैर्वा घृतमिश्रैः प्रलेपयेत् ।

सर्वेषामग्नि दग्धानमेतद्रोष्णमुत्तमम् ॥’

Bhāvaprahāsa, Cikitsā, 47-105.

कर्णस्त्रावे

तिन्दुकान्यमया लोध्रः समंगा चामलक्यपि ।

ज्ञेयाः पञ्चकषायास्तु कर्मण्यस्मिन् भिषग्वरैः ॥

Śārṅgadhara Saṁhitā.

गात्रसवर्णकरत्वे

‘लेपः सवर्णकृत् पिष्टं स्वरसेन च तिन्दुकम् ।’

Āṣṭāṅga Hṛdaya, Uttara, 32-22.

अतिसारे

तिन्दुकत्वचमाहन्त्य काश्मरीपत्रवेष्टितम् ।

मृदा विलिप्य विधिवद् दहेन् भृङ्गनिना भिषक् ॥

रसं गृहीत्वा सक्षौद्रं सर्वातीसार नाशनम् ॥

Śārṅgadhara Saṁhitā, 3-3-36-37.

कर्णरोगे-कर्णस्त्रावे

तिन्दुकान्यमया रोध्रं समङ्गामलकं मधु ।

पूरणाञ्चान्न पथ्यं स्यात् कपित्थरसयोजितम् ॥

Suśruta Saṁhitā, Uttara, 21-46.

TINIŚA

Botanical name : *Ougenia oojeinensis* (Roxb.) Hochn.

Family : Leguminosae-Fabaceae

Classical name : Tiniśa

Sanskrit names

Syandana, Nemī, Cakrasamvaraṇa, Aśmagarbhaka, Tiniśa, Rathadru, Vanjula, Rathavṛkṣa.

Regional names

Sandan, Chhanan (Hindi); Tinish (Beng.); Tinas (Mar.); Syandan (Maha.); Tanachh (Guj.); Tella motuku (Tel.); Narivengai (Tam.); Malavinna (Mal.); Kurimutal (Kann.); Anjan (Uriya).

Description

Medium-sized deciduous trees; bark thin, grey or pale brown, blaze streaked with streaked with red.

Leaves pinnately 3-foliate, stipulate petioles 5-15 cm. long; leaflets broadly elliptic-obovate, acute 6.5 × 3.9 cm., glaucous above, finely pubescent below, entire or obscurely crenate.

Flowers in axillary racemes, fascicled at the nodes of old wood; bracts scale-like. Calyx 3-4 mm., tube campanulate; teeth small, 2 upper teeth connate, lower ones longer than laterals. Corolla white or pink, exerted 8-13 mm. long, standard orbicular wings spurred and slightly connate to the obtuse keel. Stamens 9-1, diadelphous.

Pods linear-oblong, flat 5-10 cm. long, 2-5 jointed; seeds reniform.

Flowering and fruiting time

Plant flowers in February-April and fruits in April-June. Generally flowering is during spring season and fruiting season is summers..

Distribution

Plant occurs in mixed forests in various provinces; Uttar Pradesh, Central India (Madhya Pradesh).

Chemical composition

The bark contains tannin 7%. A kino-like exudation from the incised bark is obtained. The heartwood contains

a dimethoxy-7-methoxy-6-methyl isoflavanone. Heartwood contains homeferreirin and oujenin.

Pharmacodynamics

Rasa	: Kaṣāya
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka.

Properties and action

Karma	: Mūtrasaṅgrahaṇīya Śothahara-kuṣṭhaghna-medohara Vraṇaropaṇa Rasāyana Stambhana Śoṇitāsthāpana Dāhapraśamana Jvaraghna.
Roga	: Prameha Śotha-kuṣṭha-śvitra-vraṇa Atisāra-pravāhika-raktātisāra Raktavikāra-raktapitta Dourbalya.

Therapeutic uses

The drug *Tiniśa* is *mūtrasaṅgrahaṇīya* (anti-diuretic) and useful (bark and heart-wood) in *prameha* (group of urinary anomalies).

It is useful in diarrhoea, dysentery, blood diseases, intrinsic haemorrhage, *kuṣṭha*, debility, inflammation, ulcers, fever, burning sensation and ailments caused by aggravation of *kapha* and *pitta doṣa*. It also belongs to *rasāyana* drugs.

Externally the drug is applied as paste over ulcers, inflammation, leucoderma and *kuṣṭha*.

The drug is used in anaemia (*pāṇḍu*), worms (*krimi*) and obesity (*meda*). The bark is used as a febrifuge and also as fish poison. The kino-like exudation from the incised bark is used in diarrhoea and dysentery.

Tiniśa (*sandan*) wood leaves and bark are also eco-

nomically useful (including timber, cordage and cattle fodder, implements etc.).

Parts used : Heartwood, bark.

Dose : Decoction 50-100 ml.

Group (gāṇa) : Śālasārādigaṇa (Suśruta Samhitā).

TINIŚA (तिनिश)

क. तिनिशः स्यन्दनो नेमी रथर्दुज्जुलस्तथा ।

ख. तिनिशः श्लेष्मपित्तास्रमेदः कुष्ठप्रमेहजित् ।

तुवरः श्वित्रदाहघ्नो व्रणपाण्डु कृमिप्रणुत् ॥

Bhāvaṇprakāśa Nighaṇṭu, Vaṭādi varga, 76.

अ. सुगर्भकः सर्वसारः चक्रसंवरणस्तथा ॥

स्यन्दनस्तिनिशो नेमी रथवृक्षोऽश्मगर्भकः ।

ब. तिनिशस्तुवरो हन्ति श्वित्रकुष्ठं व्रणकृमीन् ।

प्रमेह पाण्डुतादाह बलासं पित्तमेदसी ॥

Kaṭyadeva Nighaṇṭu, Oṣadhi varga, 815-817.

तिनिशः

तिनिशः स्यन्दनश्चक्री शताङ्गः शकटो रथः ।

रथिको भस्मगर्भश्च मेषी जलधरो दशः ॥

तिनिश गुणाः

तिनिशस्तु कषायोष्णः कफरक्ततिसारजित् ।

ग्राहको दाहजननी वातामयहरः परः ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 114-115.

तिनिशः

तिनिशः तुवरश्चोष्णो ग्राहकः कफवातहा ।

रक्ततिसारं कुष्ठं च मेहमेदव्रणं तथा ॥

रक्तदोषं च पित्तं च श्वित्रकुष्ठकृमीस्तथा ।

दाहं च पाण्डुरोगं च नाशयेदिति कीर्तितः ॥

Nighaṇṭu Ratnākara.

रसायने

‘बलातिबलानन्दनागुरुधवतिनिशखदिर शिंशपासनस्वरसाः

पुनर्नवान्ता श्रौषधयो दश नागबलया व्याख्याताः ।’

Caraka Samhitā, Cikitsā, 1-2-12.

कुष्ठे

‘इतिषट्कषायाः निर्दिष्टाः सप्तमश्च तिनिशस्य ।
स्नाने पाने च हिता..... ॥’

Caraka Samhitā, Cikitsā, 7-98.

आलेपनं प्रघर्षणमवचूर्णनमेत एव च कषायाः ।
तैलघृतपाकयोगे चेष्ट्यन्ते कुष्ठशान्त्यर्थम् ॥

Caraka Samhitā, Cikitsā, 7-95.

रक्तातिसारे

....शल्लकीतिनिशत्वचः ।

क्षीरे विमृदिताः पीताः सक्षौद्रा रक्तनाशनः ॥’

Suśruta Samhitā, Uttara, 40-119.

TINTIDĪKA

Botanical name : *Rhus parviflora* Roxb.

Family : Anacardiaceae

Classical name : Tintiḍika

Sanskrit names : Tintiḍika

Regional names

Samakadana (Hindi); Khatua, Tung (M. P. Central India); Khatte masur (Punj.); Sumaka (Arab.); Sumac (Eng.).

Description

Shrubs or small trees, upto 3 meters high; young branches, petioles under surface of leaves and panicle rusty-tomentose.

Leaves 3-foliolate; petiole 1-2.5 cm. long; terminal leaflets 4.5-6.5 × 3-4 cm.; lateral ones 1.5-3.5 × 1.5-3 cm.; sessile, elliptic, obovate or suborbicular, irregularly crenate in the upper 2/3rd, portion, apex rounded or emarginate; base of lateral leaflets oblique.

Flowers yellowish-green, in terminal and axillary, 4-12.5 cm. long, panicles. Pedicels very short. Bracts linear. Sepals ovate, apex acute, unequal. Petals more than twice the length of the sepals, oblong. Stamens 5-6; Staminodes present in the female. Ovary ovoid.

Drupes brown, 3-4 mm. across, shining, subglobose or ovoid.

Flowering and fruiting time

Plant flowers in May-June, and fruits in July. Flowering and fruiting stages during the period from summers to rains.

Distribution

Plant occurs in western Himalaya at 2,000-5,000 feet altitudes, from Nepal to Kumaon region wild state.

It grows on higher hill slopes in mixed forests in Madhya Pradesh, Central India.

Kinds and varieties

The small fruits in dried state (fruits like masura), commercially known as 'samak dana' are sold in raw-drug market usually, and they are fruits of *Rhus parviflora* Roxb. which occurs in India. Imported 'samak dana' fruits are procured from *Rhus coriaria* Linn. Which is occurring in Afghanistan, Italy, Spain and Persia. Samak dana as a drug (fruit-coat) is frequently used in Unani medicine. Both kinds of fruits, obtained from *Rhus* species, are used as substitute or adulterant.

Pharmacodynamics

Rasa	: Amla
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Amla
Doṣakarma	: Vātaśāmakā Kaphapittavardhaka

Properties and action

Karma	: Rocana Dīpana-grāhī Hṛdya Mūtrāltvakara Jvaraghna Śothahara-vedanāsthāpana Dantya Dāha-tṛṣṇā-chardi-praśamana
Roga	: Aruci-tṛṣṇā-vamana Agnimāndya

Atisāra-grahaṇī-pravāhikā
 Hṛdroga
 Bahumūtra
 Dāha-traṣṇā-jvara
 Dantavikāra-dantadourbalya-
 dantamūlaśoṭha
 Netrābhiṣyanda
 Pīnasa.

Therapeutic uses

The drug Tintidika is stomachic, appetizer, anti-pyretic, analgesic, dentrifice and cardiogenic. It is useful in diarrhoea, dysentery, burning sensation, conjunctivitis, vomiting, oedema and overthirst.

The fresh or dried fruits are eaten. Dried leaves are either mixed with or substituted for tobacco. Tree affords poor quality of cattle fodder.

It has properties similar to that of *Rhus sinuata* Thunb. syn. *R. mysorensis* Heyne. and it is used likewise.

The drug is useful in urinary ailments, fever, heart disease, polyuria, dental complaints and ailments with inflammation and pains.

The fruits are used in medicine. The drug is also haemostatic and useful in haemorrhage (raktasrāva).

The drug is usually given various diseases in Unani medicine.

Parts used : Fruit.

Dose : 3-6 gm.

TINTIDĪKA (तिन्तिडीक)

वातापहं तिन्तिडीकमामं पित्तबलासकृत् ।

ग्राह्युष्ण दीपनं रुच्यं संपक्वं कफबातनुत् ॥

Suśruta Samhitā, Sūtra, 46.

TODARI

Botanical name : *Lepidium iberis* Linn.

Family : Cruciferae

Classical name : Todarī

Common name : Todari

Sanskrit names

Masūrabīja, Picchilabījā, Supicchilā, Kaṭutrṇa, Kaṇṭakṣupā, Todarikā, Bijakā.

Regional names

Todari (Pers.); Bajrula Khumkhum (Arabic); Pepper-grass (Eng.).

Description

A spiny small herb with small pods containing minute and flat seeds resembling to lentil (masūra) in shape. Seeds mucilaginous as when the seeds soaked in water, they become thickly coated with mucilage.

Distribution

Plant occurs wild in southern Europe and it extends to Siberia and Iran. It is also found in Punjab. Seeds Todari commercial name are mainly imported for Persia and marketed in India (Bombay).

Kinds and varieties

The seeds of plant *Lepidium iberis* Linn. form the drug Todari which is available in raw drugs market. This drug may be found of three kinds mainly with colour distinction viz. white (safed todari), brown (syah and yellow todari) (pili todari). The white kind or safed todari is reddish and larger which is obtained from *Lepidium iberis* var. *alba*, but yellow kind of Todari (pili) is considered best in view of its medicinal properities.

Chemical composition

Seeds contain mucilage and an amorphous bitter principle leptidin. They also yield volatile oil containing sulphur. White kind of Todari seeds contain fixed oil, mucilaginous substance, colouring matter and a volatile oil.

Pharmacodynamics

Rasa	: Katu, tikta
Guṇa	: Guru, picchila
Virya	: Uṣṇa

Vipāka	: Kaṭu
Doṣakarma	: Vātapittaśāmaka

Properties and action

Karma	: Chhedana-śleṣmahara-kaphaghna Vājikaṛaṇa Stanyajanana Raktotkleśaka Mūtrala

Roga	: Kāsa-śvāsa-śleṣmavikāra Śoṭha-sandhivāta-vātavikāra Klāibya-śukravikṛti-kāmaśaitya Stanyakṣaya Dourbalya.

Therapeutic uses

The drug Todarī is alleviating Kapha doṣa when aggravated or increased abnormally; and it is used in Kāsa (cough) and Śvāsa (bronchial asthma).

It is aphrodisiac, emmenagogue and diuretic. Externally the paste of seeds is rubefacient. In condition of swelling, the seeds are ground and pasted topically. Seeds oil is used for massage in sandhivāta, characterised by pain and swelling in joints.

The powder of seeds is given orally with milk as an aphrodisiac and the same is also considered useful as a galactagogue in mothers suffering from inadequate lactation.

The seeds are useful in dysuria (mūtra kṛcchra) and also in general debility.

Parts used : Seeds.

Dose : 3-6 gm.

TODARĪ (तोदरी)

तोदरी त्रिविधा श्वेता पीता रक्ता च वर्णतः ।

कटूष्णा पिच्छिला गुर्वी वातश्लेष्महरा सरा ।

कासे श्वासे च दौर्बल्ये मूत्रकृच्छ्रे प्रशस्यते ॥

Dravyaaguna Vigyāna, part II, p. 273.

TRAPUṢA

Botanical name : *Cucumis sativus* Linn.

Family : Cucurbitaceae

Classical name : Trapuṣa

Sanskrit names

Trapuṣa, Kaṇṭakiphala, Suṣītala, Sudhāvāsa.

Regional names

Khira (Hindi); Shasha (Beng.); Tavase, Khira (Mar.); Tanshi (Guj.); Muhivetti (Tam.); Unnakaipa (Tel.); Kasad (Arabic); Khiyar (Pers.); Cucumber (Eng.).

Description

Hispid trailing annual herbs; stems angled; scabrous.

Leaves angular or slightly 3-5-lobed, cordate, hispid; lobes triangular, acute or acuminate, dentate.

Flowers yellow. Male flowers, clustered hypanthium tubular or campanulate with long white hairs; sepals linear, spreading filaments short; anthers cohering crested. Female flowers solitary hypanthium ureceolate with oblan-ceolate sepals, hairy. Young ovary muricate with rigid prickles.

Fruits oblong, cylindric yellowish-green; seeds numerous, white.

Flowering and fruiting time

Plant flowers and fruits in May-September.

Distribution

Plant is mostly cultivated for its fruits. It is probably indigenous to north India. It is widely cultivated throughout India and in the tropical and subtropical parts of the world. Plant is popular vegetable crop producing cucumber fruits, popularly known Khirā in northern India (also other names in southern region).

Kinds and varieties

There are numerous varieties under cultivation. Some bear fruits 10-15 in. long and 3-4 in. diam., with fairly thick and white others yield small, ovoid fruits, with thin and smooth rind. The colour of the fruits varies from pale

whitish, green to dark green, turning brownish yellow or rusty brown when mature. Another variety, Mundosa, with small spines on the fruits is popular in some parts of Madras.

The cultivated forms are divisible into two groups, the hot weather forms and the rainy season forms. The former comprise creeping plants which yield small, egg-shaped, dark green fruits known as Gharkins. The rainy season varieties have much larger fruits and are more commonly grown throughout India.

Chemical composition

Analysis of fruits gave the following values : moisture 95.4, protein 0.4, fat 0.1, carbohydrates 2.8, mineral matter 0.3; Ca 0.01, P 0.03%, Fe 1.5 mg./100 g.

The odorous principle of cucumber is extractable with alcohol. It is used in blending certain bouquet perfumes.

Fruits contains vitamin C 7 mg./100 g.

Pharmacodynamics

Rasa	: Madhura
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Pittaśāmaka Vātakaphāvardhaka

Properties and action

Karma	: Mūtrasaṅgrahaṇīya-mūtrala Dāhapraśamana-pittaśāmaka Trṣṇāśāmaka Viṣṭambhī Raktapittaśāmaka Balya
Roga	: Dāha Anidrā Śīraḥśūla Trṣṇā Raktapitta Mūtrakṛcchra Dourbalya.

Therapeutic uses

The drug *Trapuṣa* is diuretic (*mūtrala*) and useful in dysuria (*mūtrakṛcchra*) and other allied complaints of urinary system (and *mūtravahasrotas*). *Trapuṣa* is useful in Calculus and gravel (*aśmari-śarkarā*).

The seeds are cooling, tonic and diuretic. The seed Kernels (forming 75% of the seeds) are edible, and are used in confectionery.

The seeds are useful as tonic and given in debility. Fruits are useful in intrinsic haemorrhage (*raktapitta*). It is useful in jaundice (*Kāmalā*) and excess thirst (*trṣṇā*).

In condition of burning sensation (*dāha*), the seeds are useful and they are particularly taken during summer season to combat heat effect, the different (traditionally as a *pānaka* or 'thandai').

The drug has also external uses in some ailments. The oil of seeds is applied in condition of sleeplessness (*insomia*), burning sensation (*dāha*) and headache (*śiraḥsūla*). the pulp of fruit is used in topical application.

The presence of proteolytic enzymes, ascorbic acid, oxidase and succinic and malic dehydrogenases in fruits has been reported.

In general, the drug is useful for alleviating aggravation of *pitta doṣa*; the fruits increase *vātakapha doṣa*.

The fruits of *trapuṣa* in raw state are commonly eaten as fruit, salad, vegetable and utilised in prepare some recipes of food (e.g. *raita*, *barhi* etc.) in cooking. The small fruits are preferred for pickling while the larger ones are used for salads and for cooking in curries. In the hills region (U.P. now Uttaranchal) the fruits are quite popular as edible and vegetable item. The fruits of small or bigger size when they ripen and become yellow, are employed to prepare a common household dish of 'raita' (with curd, turmeric and other spices including *rājikā*) and also served in rural and road-side (tourist spots) hotels; the local peoples much relish this food recipe in hill tradition. The fruits [yellowish-brownish colour] are generally preserved in houses for certain dietetic purposes in the region.

Parts used : Fruit, seeds.

Dose

Fruit juice 25-50 ml., Seeds powder 3-6 gm., Fruit edible.

TRAPUSA (SA) त्रपुस (ष)

- क. त्रपुसं कण्टकिफलं सुधावासः सुशीतलम्।
 ख. स्वादु पित्तापहं शीतं रक्तपित्तहरं परम्।
 त्रपुसं लघु नीलञ्जनवं तृद्वलमदाहजित्॥

पक्कापकृततफलबीजगुणांश्च

तत्पक्कमम्लमुष्णं स्यात्पित्तलं कफवातनुत्।

तद्बीजं मूत्रलं शीतं रूक्षं पित्तास्रकृच्छ्रजित्॥

Bhāvaprakāśa Nighaṇṭu, Āmrāphaladi varga, 46-48.

- अ. त्रपुसं च सुधावासो मूत्रलं कटुकं तथा।
 अपरं कटुकं तिक्तं विपाण्डुर्हस्तिपर्णिनी॥
 दीपनीया मूत्रफला पाण्डुपुत्रा मुखप्रिया।
 सनीलं त्रपुसं बालं पित्तनुदतिमूत्रलम्॥
 ब. तिक्त स्वादु हिमं रूक्षं मूत्रकृच्छ्रास्रपित्तजित्।
 स. तत् पाण्डु कफकृज्जीर्णमम्लं वातकफापहम्॥
 गुरु प्रगंधि त्रपुसं न वर्षासु हितं भवेत्।
 द. तदल्प दोषं भवति हेमन्ते त्रपुसं नवम्॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 547-550.

त्रपुसी

- क. त्रपुसी पीतपुष्पी कण्टालुस्रपुसकर्कटी।
 बहुफला कोशफला सा तुन्दिलफलामुनिः॥
 ख. स्यात् त्रपुसीफलं रुच्यं मधुरं शिशिरं गुरु।
 भ्रमपित्त विदाहार्ति वान्तिहृद्बहुमूत्रदम्॥

Rāja Nighaṇṭu, Mūlakādi varga, 205-206.

अरण्य त्रपुसं शीर्णवृन्तञ्च

- अ. मुखवासः शीर्णवृन्तः वनत्रपुसकं मतम्।
 विचित्रं पाण्डुरं चित्रफलं च वरतिक्तकम्॥

- ब. अरण्यत्रपुषं रूक्षं तिक्तं संग्राहि वामनम्।
हन्ति कृच्छ्रकफानाहमष्ठीलामुदराणि च॥
स. शीर्णवृन्तं स्वादु तिक्तं क्षारं रुच्यग्निपित्तकृत्।

अश्मरी शर्करासु

‘.....खादयेक्षुं विदारिं त्रपुषाणि चैव।’

Caraka Saṁhitā, Cikitsā, 26-71.

‘हृद्यं मेघुष्णमष्ठीलानाहदोषासजिह्वु ॥’

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 538-560.

मूत्रकृच्छ्रे त्रपुसी बीजम्

‘पीतञ्च त्रपुसीबीजं सलिलाज्यपयोऽन्वितम्।’

Bhāvaprakāśa, Mutrakṛcchṛādihikāra, 35-40.

शीतज्वरे

‘तक्रानुपानं त्रपुषं भक्षयित्वाऽनलं जयेत्।’

Āṣṭāṅga Saṅgraha, Cikitsā, 2-99.

रक्तपित्ते

‘त्रपुषी मूलकल्कं वा सक्षौद्रं तण्डुलाम्बुना।’

Suśruta Saṁhitā, Uttara, 45-24.

TRĀYAMĀṆĀ

Botanical name : *Gentiana kurroa* Royle.

Family : Gentianaceae

Classical name : Trāyamāṇā

Sanskrit names

Trāyamāṇā, Phalinī, Trāyantī, Bheyanāśinī, Girisānujā, Baladevādri, Maṅgalya, Balabhadra, Kṛtatrāṇā.

Regional names

Kadu (Hindi, Solan); Kadu (Kashmir), Nilakanth, Tita (Hindi); Karu, Koutki (Hindi, Beng.); Pashanbhed (Bombay).

Description

A small perennial herb with a stout rhizome bearing decumbent flowering stems, each with 1-4 blue flowers. Leaves radical and cauline, the former oblong-lanceolate

and tufted, and the latter linear and in pairs united at the base into tube.

Perennial herb about 1 foot high in ridges of rocks or rocky hills. Aerial stem 2-12 in. tall. Flowers blue, 1-4 in number, on aerial stem. Leaves radical leaves 6 in. long and 1/3 in. broad, oblong-lanceolate, tufted; cauline leaves 1 in. long, in pairs, linear, pairs united at the base into a tube. Radical leaves 7.5 cm. - 12.5 cm. $\times$ 5/8-5/4 cm., generally lying on rocky situation (place of growth). Flowers blue but white dotted, 4.375 cm. - 5 cm. long and 15/8 cm. (3/4 in.) in diam., solitary or 2-3 fls. together; corolla double in comparison to calyx; calyx linear, 5-lobed differing in shape with lobes of corolla, lanceolate, pointed. Fruits capsule, oblong, 5/8 cm. (3/4 in.) long and 1/3 cm. (1/5 in.) broad; seeds longer (in length) than breadth. Root stock stout, cylindrical, brown, 1-3 in. long, near about 1/2 in. diam., available in pieces, wrinkled (in raw drug material).

Root Drug :

Root-stock of perennial nature, spreading with growth under ground. Roots dusty or ash coloured with whiteness of which top knotly and from where cylindrical, somewhat bluntly quadrangular rhizomes having 7.5 - 15 cm. arise. Rhizome-back scares of broken (ditatched) threadlike rostlets in row (lines). Roots and rhizomes some twisted and longitudinal wrinkled; only rhizome annulate and tranversely wrinkled, transverse cut shows cambium line; outer bark and internal central portion woody and porous with radiate fibres. Woody portion of rhizome quadrangular. Rhizome and roots both most bitter in taste.

Flowering and fruiting time

Plant flowers in autumn season.

Distribution

Plant occurs in north west Himalayas and Kashmir at the elevation from 1,523 meters to 3,337 meters (5,000-11,000 ft.).

Kinds and varieties

The dried rhizomes and roots of *Gentiana kurroa* Royle. are described under the name Indian Gentian in

I.P.C. and they are used as a substitute for the true gentian and supplied exported from the hills to the plains. The rhizome and roots of *Picrorhiza kurroa* Royle ex Benth., another herb found in the himalayas, are mixed with as an common adulterant or substituted for those of *Gentiana kurroa* Royle. Besides similar properties and medicinal uses, the common vernacular and trade name Kutki is generally applied to both drugs Kaṭuka and Trāyamāṇā.

The dried rhizomes and roots of *Gentiana lutea* Linn. are yellow *Gentiana* are official in the pharmacopeia under the names *Gentiana*, *Gentian*, *Gentianae Radix* and *Gentiana Roots*. The plant is a native of Europe and Asia minor and the drug which is one of the popular bitters imported to India.

Chemical composition

Analysis of the drug (from Kashmir) gave 20% aqueous extract and 0.70% ash, but no gentiopicrotin. A transparent brittle, colourless and tasteless and tasteless resin was present in the extent of C. 20 percent.

The comparatively low percentage of water-soluble substances and the absence of gentiopicrotin in the sample were probably due to the unsatisfactory method of drying employed at the source.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Laghu, rūkṣa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	:

Properties and action

Karma	: Jvaraghna
	Dīpana-āmapācana-anulomana
	Kṛmighna
	Raktaśodhaka-śothahara
	Ārtavañjanana
	Stanyaśodhana
	Mūtrajanana
	Kuṣṭhaghna
	Kaṭupouṣṭika.

Roga	: Jvara
	Pāṇḍu-jvarottara dourbalya
	Agnimāndya-āmadoṣa-ādhmāna-
	śūla-vibandha
	Uadararoga
	Kṛmi
	Yakṛdvikara
	Arśa
	Gulma
	Kaṣṭārtava
	Stanyavikāra
	Mūtrakṛcchra
	Kuṣṭha
	Vraṇa
	Carमारoga
	Khālitya.

Therapeutic uses

The drug Trāyamāṇa is cholagogue (pittavirecana-pittasāraka); is has properties of pittasamśodhana. It is āmapācana and jvaraghna.

The drug is purgative, liver-stimulant, anthelmintic, carminative, stomachic and bitter tonic. It is emmenagogue, diuretic, diaphoretic, blood purifier and wound-healer. Drug is stanyaśodhana, śothahara, kuṣṭhaghna, keśya (hair promoter) and viśaghna.

The drug possessing similar properties to that of Kaṭuka has relevance in therapeusis.

The dried rhizomes and roots of Trāyamāṇa (*Gentiana kurroo* Royle) described under the name Indian Gentian in I.P.C. are used as a substitute for the true gentian and exported from the hills to the plains.

The rhizomes and roots of plant drug Trāyamāṇa are used in treatment of various diseases. Trāyamāṇa is prescribed particularly in the diseases of digestive system and specifically indicated in the treatment of fever (as a diaphoretic or svedajanana, āmapācana and kaṭu pouṣṭika) and in convulsance for restoring normalcy (by checking debility after fever). The drug is specially one of the useful drug against liver disorders and anaemia.

Trāyamāṇa is internally given for treating oedema (śoṭha), blood impurities (raktavikāra), gulma, abdominal colic (śūla), constipation (vibandha), liver complaints (yakṛdvikāra) and ailments caused due to āma-doṣa. It is useful in dysmenorrhoea and lactation complaints.

The drug is employed in various recipes of doṣa viśodhana or saṁśodhana karma, in visarpa in classical texts of medicine. Further it is indicated in the management of jvara, atisāra, raktapitta, gulma, and some other ailments in therapeutic texts. The roots are used as a masala for fattening horses in veterinary medicine.

Parts used : Roots (root stock), whole plant.

Dose : Powder 1-3 gm.

Groups

Tiktaskandha (Caraka Samhitā), Lakṣādi (Suśruta Samhitā).

TRĀYAMĀṆA (त्रायमाणा)

क. बलभद्रा त्रायमाणा त्रायन्ती गिरिजाऽनुजा ।

ख. त्रायन्ती तुवरा तिक्ता सरा पित्तकफापहा ।
ज्वरहृद्रोगगुल्मार्शो भ्रमशूलविषप्रणुत् ॥

Bhāvaprakāśa Nighaṇṭu, Gudūcyādi varga, 243.

अ. त्रायन्ती त्रायमाणार्द्रा फलिनी भयनाशिनी ॥

बलभद्रा कृतत्राणा बलदेवाद्रि सानुजा ।

मङ्गल्या वार्षिकी त्राणा सुहृत्त्राणा सुनामिका ॥

त्रायमाण गुणाः

ब. त्रायन्ती तुवरा तिक्ता सरा पित्तकफापहा ।

ज्वरहृद्रोग गुल्मार्शः भ्रमशूलविष प्रणुत् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1029-1031.

त्रायमाणा

क. त्रायमाणा कृतत्राणा त्रायन्ती त्रायमाणिका ।

बलभद्रा सुकामा च वार्षिकी गिरिजाऽनुजा ॥

मङ्गल्याह्वा देवबला पालनी भयनाशिनी ।

अवनी रक्षणी त्राणा विज्ञेया षोडशाह्वया ॥

त्रायमाणगुणाः

ख. त्रायन्ती शीतमधुरा गुल्मज्वरकफास्त्रनुत् ।

भ्रमतृष्णा क्षयग्लानि विषच्छर्दि विनाशिनी ॥

Rāja Nighaṇṭu, Parpāṭadi varga, 57-59.

ज्वरे

‘त्रिवृतां त्रायमाणां वा पयसा ज्वरितः पिबेत् ।’

Caraka Samhitā, Cikitsā, 3-232.

अतिसारे दोषविशोधनार्थम्

‘पलाशवत् प्रयोज्या वा त्रायमाणा विशोधिनी ।’

Caraka Samhitā, Cikitsā, 19-69.

Āṣṭāṅga Hṛdaya, Cikitsā, 9-39.

रक्तपित्ते

त्रायमाणां गवाक्ष्या वा मूलमामलकानि वा ।

विरेचनं प्रयुञ्जीतं प्रभूतमधुशर्करम् ॥

Caraka Samhitā, Cikitsā, 4-57.

गुल्मे

द्विपलं त्रायमाणायाः जलद्विप्रस्थ साधितम् ।

अष्टभागस्थितं पूतं कोष्णं क्षीरसमं पिबेत् ॥

पिबेदुपरि तस्योष्णं क्षीरमेव यथाबलम् ।

तैनं निर्हुतदोषस्य गुल्मः शाम्यतिपैत्तिकः ॥

Caraka Samhitā, Cikitsā, 5-128/129.

विसर्पे

निरामे श्लेष्मणि क्षीणे वातपित्तोत्तरे हितम् ।

धृतं तिक्तं महातिक्तं शृतं वा त्रायमाणया ॥

Āṣṭāṅga Hṛdaya, Cikitsā, 18-9.

विरेचनं त्रिवृच्चूर्णं पयसा सर्पिषाऽथवा ।

योज्यं कोष्ठगते दोषे विशेषेण विशोधनम् ॥

Āṣṭāṅga Hṛdaya, Cikitsā, 18-3.

त्रायमाणाशृतं वापि पयो दद्याद् विरेचनम् ।

रसेनयुक्तं त्रायन्त्या द्राक्षायास्त्रैफलेन वा ॥

Caraka Samhitā, Cikitsā, 21-65.

TRIŚIRĀPARṆA-AJĀPARṆA

Botanical name

Eupatorium triplinerve Vahl.

Syn. *Eupatorium ayapana* Vent.

Family : Asteraceae (Compositae)

Classical name : Triśirāparṇa-Ajāparṇa

Common name : Ayapan

Sanskrit names

Triśirāparṇa, Ajāparṇa, Sugandhapatrā.

Regional names

Ayapan (Hindi, Bengla).

Description

An aromatic undershrub, 3-4 ft. high, with trailing stem, rooting at the nodes, with sub-sessile, lanceolate leaves. Branches reddish, slightly hairy.

Leaves sub-sessile lanceolate, 2-3 in. long and 2/3 in. broad, acuminate, long-pointed; lvs with three prominent nerves, reddish, leaves strongly or pungently odorous when bruished.

Flowers in dense corymbs of flower-heads, bluish in colour.

Fruit achenes, 5-gonos, truncate.

Flowering and fruiting time

Post-rains, autumn and onwards.

Distribution

Plant is grown in Indian gardens as an ornamental plant; it is now noturalised in many parts of India. It thrives on any ordinary and under partial shade at low or medium elevations. Plant is under cultivation in country; it is easily propogated by cuttings or suckers for undertakings.

It is native of America.

Chemical composition

The leaves yield on steam-distillation, a pale green essential oil (yield 1.0-1.14%) with the physical constants on record. The principal constituent of the oil is thymohydroquinone dimethyl ether, a sesquiterpene and traces coumarin are present.

The leaves contain carotene 2.200/100 g. and free vitamin C 25 mg./100 g., this is a 100% increase in vitamin C content on frying the leaves in oil.

Pharmacodynamics

Rasa	: Tikta, Kaṣāya
Guṇa	: Laghu, rūksa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka

Properties and action

Karma	: Raktastambhaka Raktaśodhaka Raktapittaśāmaka Hṛdayottejaka Kaphaniḥsāraka Svedajanana Jvaraghna-viṣamaj- varpravatibandhaka Śitaprasāmana Kaṭupouṣṭhika Viṣaghna.
Roga	: Raktasrāva Vraṇa Viṣa Raktavikāra Raktapitta Raktapradara Raktamūtratā-prameha Hṛddourbalya-Hṛdayāvasāda Carmavikāra Kāsa-pratiśyāya-śvāsa Śitajvara Pitajvara Agnimāndya-ajirṇa-śūla.

Therapeutic uses

The drug Ajāparṇa is an effective haemostatic (raktastambhana); and it is blood purifier (raktaśodhana) and cardiac stimulant. It is expectorant, diaphoretic, anti-pyretic specially anti-malarial or anti-periodic fever. It counters poison.

Externally the leaves are applied on ulcers, poison and haemorrhage. It is orally given in snake-bite. Herb is useful in raktapradara (menorrhagia). The drug is used in raktapitta, dyspepsia, colic, cough, coryza, asthma, prameha (pittaja), raktamūtratā, skin diseases and sitajvara.

The plant drug is comparable to chamomile (*Anthemis* sp.) in its medicinal effects. It is stimulant and tonic in small doses and laxative when taken in quantity. A hot infusion is emetic and diaphoretic. A decoction of the herb and the juice of the leaves are considered detergent and applied to foul ulcers.

A decoction of the leaves is a popular haemostatic remedy against various kinds of haemorrhage. An aqueous extract of the dried leaves and shoots is a cardiac stimulant increasing the force of the heart beat but diminishing its frequency. The leaves possess a coumarin-like odour.

Both ayapanin and ayapin are non-toxic and are effective when applied locally or when administered by subcutaneous injection or by mouth. They have no effect on respiration or on blood pressure.

The drug is emetic and purgative in excess doses.

Parts used : Whole plant.

Dose : Juice 5-10 ml.

TRISIRĀPARṆA-AJĀPARṆA

(त्रिशिरापर्ण-अजापर्ण)

अजापर्णं तु तुवरं तिक्तं वीर्योष्णमेव च ।

कफपित्तहरं हृद्यं ज्वरघ्नं रक्तरोधकम् ॥

Dravyaguṇa Vigyāna, Part II, p. 790.

TRIVRT

Botanical name

Operculina turpathum (Linn.) Silva Manso.

Family : Convolvulaceae

Classical name : Trivṛt

Sanskrit names

Trivṛt, Tribhaṇḍī, Suvahā, Tripuṭā, Saralā, Recanī.

Regional names

Nishoth, Pitohari (Hindi); Teurhi (Beng.); Nishottar (Mar.); Nasottar (Guj.); Shivadai (Tam.); Chivatai (Mad.); Tegarh (Tel.); Vilitigade (Kann.); Chivak (Mal.); Dudholomi (Uriya); Turvud (Arabic); Turpeth, Indian Jalap (Eng.).

Description

Extensive climbers; stem sulcate or angular, glabrous or sparsely-pilose.

Leaves variable in shape, orbicular to lanceolate, pubescent beneath; basally cordate or hastate, dentate to shallowly lobed or margins.

Flowers 1 or few together. Outer sepals pubescent, inner glabrous corolla white, campanulate to broadly funnel shaped, upto 4.5 cm. long.

Capsule globose, enclosed in enlarged, bristly sepals. Seeds black, glabrous.

Flowering and fruiting time

Plant flowers and fruits in November-February or March-December.

Distribution

Plant occurs in Tropical Asia and Australia. It is occasionally growing wild upon hedges or bushes. Plant is found throughout India upto an altitude of 900 meters. Occasionally grown also as ornament in gardens.

Kinds and varieties

Classically, there are two kinds of Trivṛt viz. aruṇa and śyāma. Aruṇābha trivṛt is considered best and ideal laxative drug in comparison to śyāma (śyāmā trivṛt). In practice also two kinds of Trivṛt (nishoth) are available e.g. black and white. White nishoth is barkless root and stems of Mūrvā or Marsdenia tenacissima which has no purgative activity.

Chemical composition

The active principle is a glycosidic resin (m. p. 193°,

acid val. 2 20.3-24.5, sap. val. 160.5-164) present in the drug upto 10 per cent. It is similar to jalap. the resin is brownish, yellow and odourless with a bitter pungent taste which is soluble in alcohol and particularly soluble in ether. It contains an ether insoluble glycoside turpentin, which constitutes about half of resin and two ether soluble glycosides, namely a-turpethin (8%) and B-turpethin (00.6%). Besides the resin the drug contains a small amount of volatile oil and a yellow colouring matter. This resin is active similar to jalap (*Exogonium purga*) which is well substituted by Indian turpeth.

Actually, the drug Trivṛt is root of *Operculina turpethum* Silva. Manso. which has two varieties on account of its stages with colour distinction. In classical texts of indigenous medicine, two kinds of Trivṛt are mentioned and the characteristics, collection etc. of potential roots-material of trivṛt are indicated alongwith other details of medicinal usefulness.

Pharmacodynamics

Rasa	: Tikta, Kaṭu
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāma

Properties and action

Karma	: Sukhavirecana-Bhedana-recana Śothahara Jvaraghna Lekhana-medohara.
Roga	: Vibandha-ānāha-koṣṭhagatavāta Arśa Udararoga-gulma Amalapitta Vātarakta-ānavāta Kāsa-śvāsa Śotharoga Jvara Medoroga-atisthoulya.

Therapeutic uses

The drug Trivṛt is an ideal laxative, and it is used in general anasarca, consumption, dropsy, eye diseases, erysepalas, fevers, hepatic and haemophilic disorders, jaundice and piles. The drug is much used in dropsy due to heart, kidney and liver diseases.

The drug powder (root-bark) is given in gas troubles and hyperacidity and various abdominal disorders specially flatulence, constipation tympanitis. It is quite useful in piles. The drug is useful in gout and arthritis. Drug is used in obesity being lekhaṇa (emaciating) medicine, and also in oedema. The drug is major ingredient of Avipattikara cūrṇa prescribed frequently.

Alcoholic extracts of fresh roots of Trivṛt (*Operculina turpethum* Silva. Manso) show antibacterial activity against *Micrococcus pyogenes* var. *aureus* and *Eicherichia coli*.

The young leaves and tender stems are reported to used as vegetable. Stems are utilised for tying purposes.

The root-drug is almost as effective as true jalap (*Exogonium purga*) and superior to rhubarb (*Rheum emodi* Wall ex Meisrñ.) and useful in all the affections where jalap or rhubarb is indicated.

The drug is administered in the form of powder, it may given in combination with cream of tartar in equal proportion. White turpeth is preferred is preferred to black turpeth as cathartic; the latter produces drastic purgation and causes vomiting.

Trivṛt has classically been discussed in detail in regard to its therapeutic utility independently (*Caraka Saṁhitā*, *Kalpa*, 7) incorporating several uses and recipes in therapeutics and recommending this drug as a best laxative herbal agent (*Ibid*; op. cit., *Sūtra*, 25).

Parts used : Root bark.

Dose : Powder 1-3 gm.

Formulations

Avipattikara cūrṇa, Trivṛdādi cūrṇa, Trivṛdādi Kvātha, Trivṛdādi guḍikā, Pathyādi modoka, Vyoṣādi

guṭikā, Trivṛdādi ghṛta, Trivṛdāvaleha, Trivṛdyariṣṭam, Trivṛt Kalpa yogāḥ (Caraka, Kalpa, 7).

Groups

Bhedaniya (Caraka Samhitā), Adhobhāgahara, Śyāmādi (Suśruta Samhitā).

TRIVṚT (त्रिवृत्)

क. श्यामात्रिवृत्

ततो हीनगुणा श्यामा तीक्ष्णा तीव्रविरेचनी ।

कण्ठोत्कर्षण संमोहमूर्च्छादाहभ्रमप्रदा ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1019.

ख. त्रिवृत्

त्रिवृदुष्णा कटुस्तिका रूक्षा स्वाद्वी विरेचनी ।

कषाया कटुका पाके वातला कफपित्ताहा ॥

ज्वरशोफोदरप्लीहपाण्डुव्रणविनाशनी ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1016-1017.

श्वेतात्रिवृत्

श्वेता त्रिवृद्विरेचनीस्यात्स्वादुरुष्णा समीरहत् ।

रूक्षा पित्तज्वरश्लेष्मशोथोदरापहा ॥

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 194.

श्यामा त्रिवृत्

श्यामा त्रिवृत्ततो हीनगुणा तीव्रविरोचिनी ।

मूर्च्छादाहमदभ्रान्तिकण्ठोत्कर्षणकारिणी ॥

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 196.

त्रिवृत्तिका कटूष्णा च क्रिमिदोषो दरात्तिजित् ।

कुष्ठकण्डू व्रणान् हन्ति प्रशस्ता च विरेचने ॥

Rāja Nighaṇṭu, Pippalyādi varga, 167.

त्रिवृता कटुरुष्णा च कृमिश्लेष्मोदर ज्वरान् ।

शोफ पाण्डुवामय प्लीहान् हन्ति श्रेष्ठा विरेचने ॥

Dhanvantari Nighaṇṭu.

विरेचने

‘त्रिवृत् सुखविरेचनानाम् ।’

Caraka Samhitā, Sūtra, 25.

‘विरेचने त्रिवृन्मूलं श्रेष्ठमाहुर्विरेचने ।’

Caraka Samhitā, Kalpa, 7.

त्रिवृतस्य विरेचनाय विविधयोगाः

पानकानि रसान् यूषान्मोदकान् रागषाडवान् ।

अनेन विधिना कुर्याद्विरेकार्थं कफाधिके ॥

Caraka Samhitā, Kalpa, 7-33.

पैत्तिक पाण्डुरोगे त्रिवृता चूर्णम्

‘द्विशर्करं त्रिवृच्चूर्णं पलाद्धं पैत्तिके पिबेत् ।’

Cakradatta, Pāṇḍu Cikitsā, 8-4.

वातरक्ते

धारोष्णं मूत्रसंयुक्तं क्षीरं दोषानुलोमनम् ।

पिबेद्वा सत्रिवृच्चूर्णं पित्तरक्तावृत्तानिले ॥

Bhāvaprakāśa, Vātaraktādhikāra, 29-69.

त्रिवृत गुणकर्माणि

कषाया मधुरा रूक्षा विपाके कटुका च सा ।

कफपित्तप्रशमनीं रौक्ष्याच्चानिलकोपनीं ॥

सेदानी मौषधैर्युक्ता वातपित्तकफापहैः ।

कल्पे वैशेष्यमासाद्य सर्वरोगहरा भवेत् ॥

Caraka Samhitā, Kalpa, 7-5/6.

त्रिवृत भेदाः

मूलं तु द्विविधं तस्या श्यामं चारुणमेव च ।

तयोर्भुख्यतरं बिद्धि मूलं यदरुणप्रभम् ॥

Caraka Samhitā, Kalpa, 7-7.

सुख विरेचनत्वम्

सुकुमारे शिशौ वृद्धे मृदुकोष्ठे च तच्छुभम् ।

मोहयेदाशुक्ररित्वाच्छ्यामां क्षिण्वीत् मूर्च्छयेत् ॥

Caraka Samhitā, Kalpa, 7-8.

कार्मुकत्वम्

तैक्षण्यात् कर्षति हृत्कण्ठमाशु दोषं हरत्यपि ।

शस्यते बहुदोषाणां क्रूरकोष्ठश्च ये नराः ॥

Caraka Samhitā, Kalpa, 7-9.

प्रशस्त त्रिवृत

गुणबल्यां तपोर्भूमौ जातं मूलं समुद्धरेत् ।

उपोष्य प्रथतः शुक्ले शुक्लयासाः समाहितः ॥
गम्भीरानुगतं श्लक्ष्णमतिर्यम्बिसृतं च यत् ।
तद्विपाठयोद्धरेद् गर्भं त्वचे शुष्कां निधापयेत् ॥

Caraka Samhitā, Kalpa, 7-10/11.

त्रिवृत् प्रयोगविधिः

‘स्निग्धस्विन्नो विरेच्यस्तु पेयामात्रोषितः सुखम् ।’

Caraka Samhitā, Kalpa, 7-12.

विरेचनार्थं त्रिवृत्तस्य श्रेष्ठत्वम्

विरेचने त्रिवृन्मूलं श्रेष्ठमाहुर्मनीषिणैः ।

तस्या संज्ञा गुणा कर्म भेदः कल्पश्च वक्ष्यते ॥

Caraka Samhitā, Kalpa, 7-3.

सलक्षणत्रिवृत् प्रयोगम्

एकैकं सैन्धवादीनां द्वादशानां सनागरम् ।

त्रिवृद्विगुणसंयुक्तं चूर्णमुध्याम्बुना पिबेत् ॥

Caraka Samhitā, Kalpa, 7-14.

कफज गुल्मे सुधाक्षीर द्रवे चूर्णं त्रिवृतायाः

सुधा क्षीर द्रवे चूर्णं त्रिवृतायाः सुभावितम् ।

कार्षिकं मधुसर्पिभ्यां लीढ्वो साधु विरिच्यते ॥

Caraka Samhitā, Cikitsā, 5-153.

उदरे

‘पयसा वा सत्रिवृत् कल्केन ।’

Caraka Samhitā, Cikitsā, 13-69.

समधुयष्टि त्रिवृत् प्रयोग

‘मधुकार्धाशयुक्तं पिबेत् ।’

Caraka Samhitā, Kalpa, 7-17.

त्रिवृत् एकाकी प्रयोग

‘लिह्याद्वा मधुसर्पिभ्यां संयुक्तं ससितोपलम् ।’

Caraka Samhitā, Kalpa, 7-21.

त्रिवृदावलेह योगः

श्यामात्रिवृत्कषायेण कल्केन च शर्करम् ॥

साधयेद्विवलेहं लिह्यात् पाणितलं तथा ।

Caraka Samhitā, Kalpa, 7-23/24.

द्वे त्रिवृत् योगः

यवैः श्यामात्रिवृत्काथस्विन्नैः कुल्माषमम्भसा ।
 आसुतं षडहं पक्षे जातं सौवीरकं पिबेत् ॥
 सृष्टान वा समुषाम्बुदीन यथांस्तच्चूर्णं संयुताम् ।
 आसुतानाम्भसा तद्वत् पिबेज्जातं तुषोदकम् ॥

Caraka Samhitā, Kalpa, 72-73.

उदर हिताय त्रिवृत्लेहः

Suśruta Samhitā, Sūtra, 44-16.

त्रिवृत्तादि विरेचन योग

‘त्रिवृता त्रिफला.... । कृत्वा चूर्णं तु सप्ताहं भाव्यमामलकी से ॥
 तथोऽयं तर्पणाय यूषे पिशिते रागयुक्तिषु ।’

Caraka Samhitā, Kalpa, 7-65.

गुल्मनाशाय विरेचनार्थञ्च योगाः

- क. तुल्याम्लं त्रिवृताकल्कमिवं गुल्महरं घृतम् ॥
 ख. श्यामात्रिवृतयोर्मूलं पचेदामलकैः सह ।
 जले तेज कषायेण पक्त्वा सर्पिः पिबेन्नरः ॥
 ग. श्यामा त्रिवृत्कषायेण सिद्धं सपिः पिबेत्तथा ।
 साधितं वा पयस्ताभ्यां सुखं तेन विरिच्यते ॥

Caraka Samhitā, Kalpa, 7-66/68.

त्रिवृद्दश योगाः

(मदनकल्पोक्त वमन योगेषु त्रिवृन्मिश्रणीकृत्य)

तथा मदनकल्पोक्तान् षाडवादीन् पृथग्दशः ।

त्रिवृच्चूर्णेन संयोज्य विरेकार्थं प्रयोजयेत् ॥

Caraka Samhitā, Kalpa, 7-74.

मनोनुकूल द्रव्य सहित त्रिवृत् प्रयोगः

त्वक्केशराग्रातकदाडिमैलासितोपलामाक्षिक मातुलुङ्गैः ।

मद्यैस्तथाऽन्यैश्च मनोनुकूलैर्युक्तानि देयानि विरेचनानि ॥

Caraka Samhitā, Kalpa, 7-75.

उदावर्त्त नाराच चूर्णम्

खण्डपलं त्रिवृत्ताऽक्षः कृष्णाकर्षो द्वयोश्चूर्णम् ।

प्राग्भोजनस्य मधुना विडालपदकं नरो लिह्यात् ॥

एतद् गाढपुरोषे देयं विज्ञैरुदावर्त्ते ।

मधुरं नरपति योग्यं चूर्णं नाराचकं नाम्ना ॥

Bhāvaṇṇaprakāśa, Udāvaritādhikāra, 31-30/40.

श्यामात्रिवृत्कल्पेषु त्रिवृद्विविध (बहुशः) योगाः

श्यामायास्त्रिघृतायाश्च कल्पेऽस्मिन् समुदाहृतम् ।

शतं दशोत्तरं सिद्धं योगानां परमर्षिणा ॥

Caraka Samhitā, Kalpa, 7-80.

ऋत्वनुसारेण त्रिवृद्धिरेचन प्रयोगाः

क. वर्षाकालिक

त्रिवृतां कौटजं बीजं पिप्पलीं विश्वभेषजम् ।

क्षौद्रद्राक्षारसोपेतं वर्षास्वेद्विरेचनम् ॥

ख. शरत् कालिक

त्रिवृद् दुरालभामुस्तर्करोदीच्य चन्दनम् ।

द्राक्षाम्बुना सयष्ट्याहसातलं जलदात्यये ॥

ग. हेमन्तकालिक

त्रिवृतां चित्रकं पाठानजार्जी सरलं वचाम् ।

स्वर्णक्षीरीं च हेमन्ते पिष्ट्वा तूष्णाम्बुना पिबेत् ॥

घ. ग्रीष्मकालिक

‘शर्करा त्रिवृता तुल्या ग्रीष्मकाले विरेचनम् ।’

Caraka Samhitā, Kalpa 7-57/58.

सर्वर्तुक योगाः

‘त्रिवृत्स्वायन्ति हपुषाः.....एषसर्वर्तुको

योगः स्निग्धानां मलदोषहृत् ॥’

Kalpa, 7-59/60.

त्रिवृतादि विरेचन योग

Caraka Samhitā, Kalpa, 7-63/64.

त्र्यूषणाद्य चूर्ण

पथादि मोदक

कल्याणक गुड

व्योषादि गुटिका

त्रिवृतादि मोदक

त्रिवृत् मोदक

वैरेचनिक मोदक
वैरेचनिक तर्पण योग

Caraka Samhitā, Kalpa, 7-65.

त्रिवृद्धरिष्टम्

त्रिवृन्मुष्टींस्तु सनखानष्टौ द्रोणेऽम्भसः पचेत् ।
पादशेषं कषायं तं पूतं गुडतुलायम् ॥
स्निग्धे स्थाप्यं घटे क्षौद्रपिप्पलीफलचित्रकैः ।
प्रलिप्ते मधुना मांसं जातं तन्मात्रया पिबेत् ॥
ग्रहणीपाण्डुरोगघ्नं गुल्मश्चयथु नाशनम् ।
सुरां वा त्रिवृतायोगकिष्वां तत्क्राथसंयुताम् ॥

Caraka Samhitā, Kalpa, 7-69/71.

अश्रुगोधाधिकारे बाहुशालगुडम्

Bhāvaprakāśa, Arsādhikāra, 5-81/90.

नाडीव्रणे श्यामाघृतम्

Bhāvaprakāśa, Nāḍīvraṇādhikāra, 49-12.

भगन्दर चिकित्सायां त्रिवृदादि लेपः

Cakradatta, Bhagandara Cikitsā, 46-5.

कुष्ठाचिकित्सायां विरेचन प्रयोगः

‘विरेचनन्तु कर्तव्यं त्रिवृद्दन्ती फलत्रिकैः ।’

Cakradatta, Kuṣṭha Cikitsā, 50-4.

उदावर्त्तनाराच चूर्णम्

खण्डफलं त्रिवृता सममुपकुल्याकर्षं चूर्णितं श्लक्ष्णम् ।
प्राग्भोजने च समधु विडालपदकं लिहेत् प्राज्ञः ॥
एतद् गाढपुरीषे पित्ते कफे च विनियोज्यम् ।
स्वादुर्नृपयोग्योऽयं चूर्णो नाराचको नाम्ना ॥

Cakradatta, Udāvarta Cikitsā, 28/9-10.

उदावर्त्तं त्रिवृत्तादि गुटिका

त्रिवृत् कृष्णाहरीतक्यो द्विचतुः पञ्चमभागिकाः ।

गुटिका गुडतुल्यास्था विड् विबन्धगदापहाः ॥

Cakradatta, Udāvarta Cikitsā, 28-6.

Vṛndamādhava, 28-6.

उदावर्त्तं चिकित्सायां श्यामादि गण

Cakradatta, Udāvarta Cikitsā, 28/4-5.

आनाहे त्रिवृताऽऽदि वटिका

Cakradatta, Ānāha Cikitsā, 29-4.

विषमज्वरे

‘शान्तिं नयेत् त्रिवृद्वापि सक्षौद्रा विषम ज्वरम् ।’

Vṛndamādhava, 1-246.

गुल्मे

‘पिबेत् त्रिवृन्नागरं वा सगुडां वा हरीतकीम् ।’

Suśruta Samhitā, Uttara, 42-62.

सुधाक्षीरेण द्रवे चूर्णं त्रिवृतायाः सुभावितम् ।

कार्षिकं मधुसर्पिभ्यां लीढ्वा साधु विरिच्यते ॥

Caraka Samhitā, Cikitsā, 5-153.

Āṣṭāṅga Hṛdaya, Cikitsā, 14-97.

‘त्रिवृच्छाकेन वा स्निग्धमुष्णं भुञ्जीत भोजनम् ।’

Suśruta Samhitā, Uttara, 42-90.

विसर्पोपक्रमेषु विरेकार्थं त्रिवृच्चूर्णम्

‘त्रिफलारससंयुक्तं सपिस्त्रिवृत्तया सह ।

प्रयोक्तव्यं विरेकार्थं विसर्प ज्वरशान्तये ॥’

Cakradatta, Visarpa-visphoṭa Cikitsā, 53-3.

विसर्प चिकित्सायां शोधन प्रयोगः

‘त्रिवृद्धरीतकीभिश्च विसर्पे शोधनं हितम् ।’

Cakradatta, Visarpa-visphoṭa Cikitsā, 53-12.

विरेचने त्रिवृदेक्षु पुटपाकः

छित्त्वा द्विधेक्षुं परिलिप्य कल्कैस्त्रिमण्डिजातैः परिवेष्ट्यरज्ज्वा ।

पक्वं तु सम्यक् पुटपाकयुक्तया खादेत्तु तं पित्तगदो सुशीतम् ॥

Cakradatta, Virecanādhikāra, 70-4.

उदावर्ते आनाहे च

त्रिवृद्धरीतकी श्यामाः स्नुहीक्षीरेण भावयेत् ।

वटिका मूत्रपीतास्ताः श्रेष्ठाश्चानाह भेदिका ॥

Vṛndamādhava, 29-3.

अर्शसि

श्रेष्ठा रसोन त्रिवृतां पथ्यां तक्त्रेण वा सह ।

पथ्यां वा पिप्पलीयुक्तां घृतभृष्टां गुडान्विताम् ॥

Āṣṭāṅga Hṛdaya, Cikitsā, 8-58.

पाययेद्वा त्रिवृच्चूर्णं त्रिफलारससंयुतम् ।
हते गुदाश्रये दोषे गच्छन्त्यर्शसि संक्षयम् ॥

Caraka Samhitā, Cikitsā, 14-66

त्रिवृहन्ती पलाशानां चाङ्गेर्याश्चित्रकस्य च ।
सुभृष्टं यमके दद्यात् शाकेदधिसराप्लुतम् ॥

Caraka Samhitā, Cikitsā, 14-122.

स्तनशुद्धये

‘त्रिवृतामभयां चापि त्रिफलारससंयुताम् ।’

Caraka Samhitā, Cikitsā, 30-254.

विसर्पे

त्रिवृच्चूर्णं समालोड्य सर्पिषा पयसापि वा ।
धर्माम्बुना वा संयोज्य मृद्वीकानां रसेन वा ॥
विरेकार्थं प्रयोक्तव्यं सिद्धं वीसर्पनाशनम् ॥

Caraka Samhitā, Cikitsā, 21-64/65.

वातरक्ते

‘त्रिवृद्विदारीक्षुरकक्वाथो वातासनाशनः ।’

Baṅgasena, Vātarakta, 40.

Bhāvaprakāśa, Cikitsā, 29-40.

विद्रव्यौ

‘त्रिवृद्धरीतकीनाञ्च चूर्णं लिह्यान् मधुद्रवम् ।’

Suśruta Samhitā, Cikitsā, 16-12.

नेत्ररोगे

रसक्रियां शर्करा क्षौद्रयुक्तां पालिन्ध्यां वा मधुकै वाऽपि कुर्यात् ।

Suśruta Samhitā, Uttara, 16-7.

‘त्रिस्त्रिवृद् वारिणां पक्वं क्षतशुके घृतं पिबेत् ।’

Āṣṭāṅga Hṛdaya, Uttara, 11-30.

विषे

‘तण्डुलीयकतुल्यांशं त्रिवृतां सर्पिषां पिबेत् ।’

Āṣṭāṅga Hṛdaya, Uttara, 37-25.

‘स्तुक्क्षीर पिष्टां पालिन्दी मज्जिष्ठां मधुना लिहेत् ।’

Suśruta Samhitā, Kalpa, 7-22.

पाण्डौ कामलायाम्

द्विशर्करं त्रिवृच्चूर्णं बलार्थं पैत्तिकः पिबेत् ।

Caraka Samhitā, Cikitsā, 19-57.

‘सशर्करा कामलिना त्रिभण्डी हितागवाक्षी समुद्रा च शुण्ठी ।’

Suśruta Samhitā, Uttara, 44-30.

Vṛndamādhava, 8-94.

उदरे

पेया वा त्रिवृतः शाकं मण्डूक्या वास्तुकस्य वा ।

कालशाकं यवाख्यं वा खादेत् स्वरससाधितम् ॥

Āṣṭāṅga Hṛdaya, Cikitsā, 15-82.

शंखिनीस्नुक्त्रिवृदन्तीचिरबिल्वादि पल्लवैः ।

शाकं गाढपुरीषास्य प्राग्भक्तं दापयेद् भिषक् ॥

Caraka Samhitā, Cikitsā, 167.

कामलायाम्

‘कामली त्रिवृतां वापि त्रिफलायाः रसैः पिबेत् ।’

Caraka Samhitā, Cikitsā, 16-60.

छित्वां द्विधेक्षुं परिलिप्य कल्कैः त्रिभण्डजातैः परिवेष्ट्य रज्ज्वा ।

पक्वं तु सम्यक् पुटपाकयुक्त्या खादेत्तु तं रोगमादौ सुशीतम् ॥

Cakradatta, 71-5.

जीर्णज्वरे

‘त्रिवृताशर्करायुक्तः पित्तश्लेष्म ज्वरापहः ।’

Caraka Samhitā, Cikitsā, 3-209.

लिङ्गाद् वा त्रैवृतं चूर्णं संयुक्तं मधुसर्पिषा ।

पिबेद् वा क्षौद्रमावाप्यं सघृतं त्रिफला रसम् ॥

Caraka Samhitā, Cikitsā, 3-231.

‘त्रिवृतां त्रायमाणां वा पयसा ज्वरितः पिबेत् ।’

Caraka Samhitā, Cikitsā, 3-232.

TULASĪ

Botanical name : *Ocimum sanctum* Linn.

Family : Lamiaceae

Classical name : Tulasī

Sanskrit names

Tulasī, Sulabhā, Devadundubhi, Grāmyā,
Apetarākṣarī, Surasā, Bhūtaghnī, Bahumañjarī.

Regional names

Tulasi (Hindi, Beng., Guj., Tam., Tel.); Shritulasi (Kann.); Mittavu (Mal.); Sacred Basil, Holy Basil (Eng.).

Description

An erect, herbaceous, much-branched, softly hairy, annual, 30-75 cm. high. Leaves elliptic-oblong, acute or obtuse, entire or serrate, pubescent on both sides, minutely gland-dotted.

Flowers purplish or crimson, in racemes, close-whorled. Nutlets sub-globose or broadly ellipsoid, slightly compressed, nearly smooth, pale brown or reddish, with small black markings.

Flowering and fruiting time**Distribution**

Plant occurs throughout India, ascending upto 1,800 meters in the Himalayas, and in Andamans and Nicobar Islands. It is commonly cultivated in gardens; it is frequently found as an escape.

It is most commonly planted-pot herb on account of its particularly socio-religious importance as a sacred plant (Hindu religion) as well as environmental (including anti-microbial) utility for Indian community as a whole in general.

A common plant, generally known as *śyāmā tulsi*, *Kāli tulsi* and *Ban tulsi*, follows :

Ocimum basilicum L. syn. *Ocimum americanum* L., *O. Canum* Sines., Erect diffusely branched, glandular pubescent herbs, upto 60 cm. tall. Leaves elliptic-lanceolate, entire or shallowly toothed. Racemes 10-15 cm. long pedicels, 1-2 cm. long. Calyx villous throughout accrescent, deflexed, 2-lipped, upper lip entire larger, lower unequally 4-toothed, mucronate. Corolla white, 2-lipped 4/1. Anther cells confluent. Nutlets ellipsoid, black mucilaginous when wetted.

Plant occurs in paleotropics. It is frequently growing in gardens, lawns, agricultural fields, waste places and on ridges.

Kinds and varieties

Classically, there are mainly two kinds of Tulasi viz.

Śveta tulasī and Kṛṣṇa tulasī as indicated in Nighaṇṭus (Bhāvamiśra). Suśruta Saṁhitā mentions two varieties as Surasā and Śveta surasā. Thus, two kinds of Tulasi are broadly considered such as white (śveta) and black (kṛṣṇa) Tulasi.

Some species of *Ocimum* genus are referred in context of Tulasi. *Ocimum canum* Sims. (white flowered, Śveta surasā), *O. gratissimum* Linn. (Phaṇijjaka, Rāmatulasī), *O. americanum* Linn. (a variety of śveta tulasī) and *O. kilimandascharicum* Guerke. (Kapuri tulasī-Karpūra tulasī).

Chemical composition

The leaves on steam-distillation yield a bright yellow volatile oil possessing a pleasant odour characteristic of the plant with an appreciable note of cloves. The yield of oil varies with type, season, and the place of origin. Data of analysis of various samples (collected from different parts of country) are on record, showing the yield of oil (0.1-0.23% and 0.20-0.33% etc.), acid val. (1.1-1.6), phenols (45-70%) and aldehydes (15-25%) and almost similar varying data.

The seeds of plant give a greenish yellow fixed oil (17.8%) with good drying properties, and with analytical characteristics (i.e. sp. gr., acid val., sap. val., iod. val., thio cyanogen val.; hachner val. and unsapon. matter containing sitosterol). The fatty acid composition of the oil is as follows : palmitic 6.9, stearic 2.1, oleic 9.0, linoleic 66.1 and linolenic 15.7 per cent.

Pharmacodynamics

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma

Properties and action

Karma	: Kaphaghna Kāśahara-śvāsahara-kṣayaaghna (kṣaya jīvāṇuniśūdana) Kaṇṭhya

Hikkānigrahaṇa
 Chardinigrahaṇa
 Kṛmighna-dīpana-pācana-
 anulomana
 Jantughna-durgandhanāśana
 Vātahara-śothahara
 Mūtrala (seeds)
 Hṛdya
 Raktaśodhaka
 Śukrala
 Tvagdoṣahara-Kaṇḍūghna
 Kuṣṭhghna-svedajanana-tvacya
 Jvaraghna-śītapraśamana-
 viśamajvaraghna-jvarapraṭiśedhaka
 Viśaghna
 Balya (seeds)
 Viśaṅkrāmaka.

Roga

: Vātaśleṣmika jvara-pratiśyāya
 Kāsa-śvāsa-pārsvaśūla-yakṣmā
 Agnimāndya-ajirṇa chardi-
 udaraśūla-pravāhikā
 Kṛmiroga
 Jantu (kīṭāṇu) saṅkramaṇa-
 bāhyakṛmi
 Vedanā-āksepa-śoṭha
 Tvagroga-kacchu-pāmā-kaṇḍu
 Jirṇavraṇa-śoṭha-vraṇa-
 dagdhavraṇa
 Śīroroga
 Karṇaśūla
 Hṛddourbalya-raktavikāra
 Śukrameha
 Mūtrakṛcchra-mūtradāha-
 bastiśoṭha-aśmarī
 Makkalaśūla
 Viśa-vṛścikadamśa
 Jvara-jirṇajvara
 Dourbalya

Netraroga
Bālaroga.

Therapeutic uses

The drug Tulasī is antipyretic, aromatic, carminative, diaphoretic and expectorant. It is used in anorexia, cough, hiccough, pleurisy, respiratory disorders and leprosy. The drug is given in traditional medicine in catarrh, coryza, cold, fever, influenza, fevers specially simulating symptoms of malaria. Seeds jelly is water is given in diarrhoea and dysentery in children.

Ethnobotanically it is much used in cold and fever as household remedy. The plant is considered a valuable and sacred plant which is commonly potted in the house as well as it is planted in the small gardens adjoined to religious places, in addition to its plant available in the premises of temples (for worship and religious purposes).

The juice of leaves possesses diaphoretic, antiperiodic, stimulating and expactorant properties. It is used in catarrh and brochitis applied to the skin in ringworm and other cutaneous diseases and dropped into ear to relieve earache. Various parts of Tulasī plant are effectively used in a number of diseases and it is regarded a potent drug as a whole.

An infusion of the leaves is used as a stomachic in gastric disorders of children. A decociton of the root is given as a diaphoretic in malarial fevers. The seeds are mucilaginous and demulcent and are given in the disorders of genito-urinary system. They contain antistaphylocoagulose which can be extracted with water and alcohol.

The oil is reported to inhibit in vitro growth of *Mycobacterium tuberculosis* and *Micrococcus pyogenes* var. *aureus*, since the oil possesses antibacterial and insecticidal properties, which is one-tenth activity (potency) of streptomycin and one-fourth that of isoniaziol. It has marked insecticidal activity against mosquitoes.

Apart from the high medicinal efficacy, Tulasī has great religious value and antimicrobial potentials.

Parts used : Leaves, roots, seeds.

Dose

Juice 10-20 ml., Roots decoction 50-100 ml., Seeds powder 3-6 gm.

Groups

Śvāsahara (Caraka Samhitā), Surasādi, Śirovirecana (Suśruta Samhitā).

TULASĪ (तुलसी)

तुलसी तुवरा तिक्ता तीक्ष्णोष्णा कटुपाकिनी ॥

रूक्षा हृद्या लघु कट्वी दाहपित्ताग्निवर्द्धनी ।

जयेद् वातकफश्वासकासहिध्मावमिकृमीन् ॥

दौर्गन्ध्य पार्श्वरुक्कुष्ठविषकृच्छ्राश्मदृग्गदान् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1154-1156.

तुलसी त्रितयम्

तुलसी-श्वेततुलसी-कर्पूरतुलसी

Kaidyadeva Nighaṇṭu, Oṣadhi varga, 1151-1154.

तुलसी शुक्ला कृष्णा च

तुलसी कटुकाः तिक्ता हृद्योष्णा दाहपित्तकृत् ।

दीपनी कुष्ठकृच्छ्रास्त्रपार्श्वरुक्कफवातजित् ॥

शुक्ला कृष्णा च तुलसी गुणैस्तुल्या प्रकीर्तिता ॥

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 63.

बर्बरी (बनतुलसी)-बर्बरी त्रितयम्

बर्बरी त्रितयं रूक्षं शीतं कटु विदाहि च ॥

तीक्ष्णरुचिकरं हृद्य दीपनं लघुपाकि च ।

पित्तलं कफवातास्रकण्डूकृमिविषापहम् ॥

Bhāvaprakāśa Nighaṇṭu, Puṣpa varga, 70-71.

तुलसी गुणाः

तुलसी कटुतिक्तोष्णा सुरभिः श्लेष्मवातजित् ।

जन्तुभूतक्रिमिहरा रुचिकृद्वात शान्तिकृत् ॥

Rāja Nighaṇṭu, Karavirādi varga, 150.

तुलसी जातयः

कृष्णा तु कृष्णतुलसी श्वेता लक्ष्मीः सिताह्वया ।

कासवात क्रिमि वमि-भूतापहारिणी पूता ॥

Rāja Nighaṇṭu, Karavirādi varga, 151.

बर्बरी बीजम्

‘बीजं चास्या दाह शोषनाशकं परिकीर्तितम् ।’

Kaiyadeva Nighaṇṭu.

हिक्काकासविषश्वासपार्श्वशूल विनाशनः ।

पित्तकृत् कफवातघ्नः सुरसः समुदाहृतः ॥

Caraka Samhitā, Sūtra, 27.

कफानिल विषश्वास कासदौर्गन्ध्यनाशनः ।

पित्तकृत् पार्श्वशूलघ्नः सुरसः समुदाहृतः ॥

Suśruta Samhitā, Sūtra, 46.

नेत्ररोगे

क. नेत्राभिष्यन्दे

ताम्बूल शिग्रु करवीरशिरीषदन्तीश्यामादधित्थ सुमनासुरसारजकानाम् ।

प्रत्येकशो मधुयुतः स्वरोऽञ्जनेन कोपं नयनयोः सहसैव हन्तिः ॥

Gadanigraha, 4-3-150.

ख. पक्ष्मशाते

संचूर्ण्य पुष्पकासीसं भावयेत् सुरसारसैः ।

ताम्रेदशाहं परमं पक्ष्मशाते तदञ्जनम् ॥

Āṣṭāṅga Hṛdaya, Uttara, 9-20.

विषमन्त्रे

‘पीतो मरिचचूर्णेन तुलसी पत्रजो रसः ।’

Śārṅgadhara Samhitā, 2-1-10.

Bhāvaprakāśa, Jvarādhikāra, 1-754.

बाल स्कन्दापस्मार ग्रहे सुरसादि गणः

Bhāvaprakāśa, Bālarogādhikāra, 71/51-53.

व्रण (दग्ध व्रण) रोपणार्थं कुठेरक (श्वेत तुलसी)

‘अन्तर्दग्धकुठारको दहनजं लेपान्निहन्ति व्रणम् ।’

Cakradatta, Vraṇaśoṭha Cikitsā, 44-48.

‘सुरसादिरसैः सेको लेपनं लशुनेन वा ।’

Vṛndamādhava, 44-44

कुष्ठ रोगे

निम्बादि प्रलेपे

Gadanigraha, 2-36-141.

तुम्बुर्वाद्य योगे

Gadanigraha, 2-36-146.

शीतपित्तोदरं कोठेषु

‘सुरसास्वरसैर्वाथ लेपयेत् परमौषधम् ।’

Yogarātnākara, p. 348.

वृश्चिकविषोपचारार्थं तुलसीमूल भ्रामण प्रयोगः

दंशे भ्रामणविधिना वृश्चिक विषहृत् कुठेरपादगुडिका ।

पुरधूपपूर्वमर्कच्छदमिव पिष्ट्वा कृतो लेपः ॥

Cakradatta, Viṣa Cikitsā, 21.

क्रिमिरोगे

‘.....सुरसादीन् वा लिङ्गात् क्षौद्रयुतान् पृथक् ।’

Suśruta Samhitā, Sūtra, 38-18/19.

Āṣṭāṅga Hṛdaya, Cikitsā, 20-27.

कर्णशूले

सुरसादौ कृतं तैलं पञ्चमूलं महत्यपि ।

मातुलुङ्गरसः शुक्तं लशुनार्द्रकयो रसः ॥

एकैकः पूरणो पथ्यास्तैलं तेष्वपिवाकृतम् ॥

Suśruta Samhitā, Uttara, 21-32.

अजीर्णे

श्वेतपर्णा समूलेन सविश्वेन शृतं जलम् ।

अजीर्णं शमयेच्चूर्ण कर्णः काश्यभिवाधिनाम् ॥

Vaidya Manoramā, 6-30.

कासे

कासमर्दाश्वविट्भृङ्गराजवार्ताकाजो रसः ।

सक्षौद्रः कफकासघ्नः सुरसस्या सितस्य च ॥

Caraka Samhitā, Cikitsā, 18-117.

पालित्वे

सहचरादितैले

Āṣṭāṅga Hṛdaya, Uttara, 24-37/38.

शिरोगते विषे

शिरोगते विषे नस्तः कुर्यान् मूलानिबुद्धिभान् ।

बन्धुजीवस्य भार्याश्य सुरसस्यासितस्य च ॥

Caraka Samhitā, Cikitsā, 23-181.

मक्कलशूले

सुरसादलनिष्यन्दः पुराणगुडध्यमण्डलसंमिश्रः ।

पीतः प्रसूतिसमयादनन्तरं शूलमपहरति ॥

Gadanigraha, 6-7-9.

बालरोगे

ध्वस्तोदरश्चसनकास विपद्गणानि पिष्ट्वा लवङ्गतुलसीदल टङ्कणानि ।

सम्पाययेत् कफकृतज्वरकर्षणानि बालान् प्रदर्श्य वरकाञ्जनकङ्कणानि ॥

Siddhabhaiṣajya Manimālā, 4-1138.

TUMBURU

Botanical name

Zanthoxylum armatum Dc.

Syn. *Zanthoxylum alatum* Roxb.

Family : Rutaceae**Classical name : Tumburu-Tejovati****Sanskrit names**

Phala (fruits) : Tumburu, Vanaja.

Pādapa (plant) : Tejovati, Tajohvā.

Regional names

Tejabal, Tumru, Tumbul, Nepali dhaniya (Hindi); Timur (U.P. hills); Nepali dhane (Beng.); Phagira Kavava Khandan (Arabic); Kavava dahana Kushada (Pers.); Toothache tree (Eng.).

Description

Shrub or sometimes a small tree with corky bark and numerous long straight spines on branchlets and leaf-stalks, with pinnate leaves, and with small yellow flowers in short branched lateral clusters. Parts of plant are odorous and soft or tender in general.

Young shoots glabrous. Banches armed with nearly

straight; prickles upto .5 in. long, raised on old stems on the top of on oval woody pedestal. Twigs smooth, greenish, with scattered pale lenticels. Bark pale brown, rather deeply furrowed, corky, blaze .3-.6 in pale, yellowish-brown with or without paler streaks soft, the whole rapidly darkening on exposure.

Leaves imparipinnate, 4-9 in. long, the rachis with a foliaceous green wing upto 0.15 in. lobed broad, often bearing straight pink pickles upto 0.6 in. long. Leaflets 5-11, lanceolate, more or less serrate and each serrature with a pallucid gland, sparsely pellucid-punctate, acute or acuminate, sessile, glabrous, dark, glossy green above, pale beneath; the terminal 2.5-4.5 by 6-7.1 in., the lateral smaller. Leafstalks narrowly winged.

Flowers polygamous, yellow, in dense, pubescent lateral panicles, 1.3 in. long. Fls. C. 1 mm., one-sexed, calyx with 6-8 acute lobes; petals absent; stamens 6-8, much longer than calyx in male flowers.

Fruit of carpels 0.15 in. diam., globose, red, glabrous. Seeds solitary, 1 in. diam., globose, shining, black. Ripe capsules 3-4 mm., globular, red, wrinkled, aromatic. 1-3 carpels, Ft. drupes ultimately splitting in 2 valves, with solitary and shining Seeds.

Flowering and fruiting time

Plant flowers during summers and fruits during the period from rains to autumn. Flowers in April-May and fruits in May-October.

Distribution

Plant occurs at elevation of 1,100-2,500 meters in the Himalayas. Plants are found generally in helges, shrubberies cultivated areas and other localities in hilly regions.

Kinds and varieties

Another kind of plant drug, known as Tirphal or Chirphal, occurring in southern India and Assam, has been botanically identified as *Zanthoxylum limonella* (Denenst.) Aiston. Which bears comparatively larger fruits than *Z. alatum* Roxb. The fruits of *Zanthoxylum acanthopodium* DC. resembles with *Z. alatum* DC.

Chemical composition

Plant contains essential oil, linalocol, dipentene, an essential oil, cinamic methyl ester. Fruits contain an essential oil and a resinous substance which produces an intense tingling sensation in the mouth and this irritating principle is possibly fragramide.

Bark of the plant contains some alkaloids viz. berberine, dictamine, mangofluorine, xanthoplanine, skimmianine, besides volatile oil and resin.

Pharmacodynamics

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma Pittavardhaka.

Properties and action

Karma	: Dantya-dantaśodhana Jantughna-pūti-hara- kothapraśamana-uttejaka Vātahara-nāḍyottejaka Dīpana-pācana-yakṛduttejaka Kṛmighna Hṛdayottejaka Kaphaghna Śirovirecana Hikkānigrahaṇa Mūtrajanana Svedajanana-kuṣṭhaghna Jvaraghna Kaṭupouṣṭika Madhumehaghna
Roga	: Dantavikāra Mukha-danta-galaroga Vraṇa karṇaroga-karṇaśūla Śiraśśūla Vātavyādhi-pakṣāghāta-apatantraka- āmavāta-urustambha Agnimāndya-atīśāra

Gulma-gulmajaśūla
 Yakṛtplihaṇṇa
 Arśa
 Kṛmiroga
 Hṛddourbalya
 Kāsa-śvāsa-pārśvaśūla
 Mūtrakṛcchra
 Tvagvikāra
 Kuṣṭha
 Jvara
 Dourbalya.

Therapeutic uses

The drug Tumburu is aromatic, stomachic, digestive and carminative. It is used in anorexia, dyspepsia, gastro-intestinal diseases, liver and spleen diseases. The drug is much useful in cholera and diseases of mouth including dental ailments.

The plant classically known as Tumburu (fruits) and Tejovati (plant), belongs to potential dentrific (dantya and danta-śodhana) herbal agents in Indian medicine. The twigs are used as tooth brushes (dantadhāvan, dātaun dantapāvana). Branchlets are employed for cleaning teeth. Fruits are used as tooth powder or they are major ingredient of various recipes of tooth powders. Fruits are good remedy for toothache. Juice is used and also decoction is similar utilised in the ailments of mouth, throat and also in dental complaints. The fruits crushed and boiled (little) in water and this lukewarm fluid is used as a wholesome gargle to vocal cavity in general.

The drug is useful in nervous disorders, vāṭavyādhi, paralysis, rheumatism, dyspepsia, loss of gastric (digestion) power, diarrhoea, liver and spleen enlargement, piles and worms affections. Externally the seeds are useful in various skin disorders such as itch, eczema, dermatitis, leucoderma etc.

It is useful in cardiac complaints as cardio-stimulant, and used in dysuria, cough, asthma, skin affections, fever and general debility as a bitter tonic.

The fruits and seeds are also used as spice, condiments and edible items. Shoots are also useful in cooking.

Parts used : Bark, fruits.

Dose : Powder 1-2 gm.

Formulations

Tejovatyādyā ghr̥ta, Tejohvādi cūrṇa (danta-mañjana), Tumbavādi cūrṇa.

Groups : Tiktaskandha, Śirovirecana (Caraka Saṁhitā).

TUMBURU (तुम्बुरु)

तुम्बरुः कटुकस्तिक्तो रूक्षोष्णो दीपनो लघुः ॥

तीक्ष्णो हृद्यः कटुः पाके विदाही रोचनो जयेत् ।

कफवातापतन्त्राक्षिकर्णकोष्ठ शिरोरुजः ॥

कुष्ठशूलवमिश्वासप्लीहकृच्छ्रोदरकृमीन् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1375-1376.

तुम्बुरुफलम्

तुम्बुरु ग्रथितं तिक्तं कटुपाकेऽपि तत्कटु ।

रूक्षोष्णं दीपनं तीक्ष्णं रूच्यं लघु विदाहि च ॥

वातश्लेष्ममाक्षिकर्णौष्ठशिरोरुग्गुरुताकृमीन् ।

कुष्ठ शूलारुचिश्वासप्लीहकृच्छ्राणि नाशयेत् ॥

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 114-115.

तुम्बरुः कटुतीक्ष्णोष्णः कफमारुत् शूलजित् ।

अपतन्त्रोदराध्मान कृमिघ्नो वह्निदीपनः ॥

Dhanvantari Nighaṇṭu.

तुम्बरुर्मधुरस्तिक्तः कटूष्णः कफवातनुत् ।

शूलगुल्मोदराध्मान-कृमिघ्नो वह्निदीपनः ॥

Rāja Nighaṇṭu, Āmrādi varga, 185.

तेजिनी कफहृद्रोगमुखदन्तादिरोगजित् ।

हिक्काग्निमांघमर्शांसि कण्ठरोगस्य नाशिनी ॥

Śodhala.

तेजोवती कटूष्णा च तिक्ता चाग्निदीपनी ।

पाचका रुचिदा कण्ठ्या कफवातविनाशिनी ॥

कण्ठबुद्धिकरीं पित्तकासश्वासविषापहा ॥

हिक्काग्निमांद्यमर्शांसि मुखरोगस्य नाशिनी ।

Nighaṇṭu, Ratnākara.

त्वग् रोगे

उद्वर्त्तन योगे

Caraka Samhitā, Sūtra, 3-8/9.

कुष्ठे

तिक्तेक्षाक्कादि तैले

कनकक्षीरी तैल

Caraka Samhitā, Cikitsā, 7-111/116.

Caraka Samhitā, Cikitsā, 7-108/110.

शिरो विरेचने

अपामार्गस्य बीजानि पिप्पलीमरिचानि च ।

विडङ्गान्यथ शिग्रूणि सर्षपांस्तुम्बुराणि च ॥.....

ज्योतिष्मतीं नागरञ्च दद्याच्छीर्षविरेचने ।

गौरवे शिरसः शूले पीनसेऽधार्वभेदके ।

क्रिमिव्याधौ पस्पारे घ्राणनाशे प्रमोहके ॥

Caraka Samhitā, Sūtra, 2-3/6.

Vimāna, 8-15.

तेजोवती-तेजोह्वा

पाठां तेजोवतीं पथ्यां समभागं विचूर्णयेत् ।

मुखरोगेषु सर्वेषु सक्षौद्रं तद् विधारयेत् ॥

Caraka Samhitā, Cikitsā, 26-189, 190, 195, 199.

मूढगर्भे शल्यकर्मोत्तरम्

‘तथा तेजोवतीं चापि पाययेत् पूर्ववद् भिषक् ।’

Suśruta Samhitā, Cikitsā, 15-23.

हिक्कायां श्वासे च

तेजोवत्यादि घृतम्

Caraka Samhitā, Cikitsā, 17-141/144.

उरुस्तम्भे

Caraka Samhitā, Cikitsā, 27-54/55.

अर्शे धूमार्थं तुम्बुरादि घृतम्

‘तुम्बुरूणि विडङ्गाणि देवदार्वक्षता घृतम् ।’

Caraka Samhitā, Cikitsā, 14-50.

अपतन्त्रके तुम्बुर्वादिचूर्ण

तुम्बुरुण्यभया हिङ्गु पौष्करं लवणत्रयम् ।
यवक्वाथाम्बुना पेयं हृद्गहे चापतन्त्रके ॥

Caraka Samhitā, Siddhi, 9-18.

दन्तरोगे तेजोह्लादि चूर्ण-दन्तमंजन योग

तेजोह्लामभयामैलां समङ्गां कटुकां घनम् ॥
पाठां ज्योतिष्मतीं लोभ्रं दावीं कुष्ठं च चूर्णयेत् ।
दन्तानां घर्षणं रक्तस्त्राव कण्डूरुजापहम् ॥

Caraka Samhitā, Cikitsā, 26-190/191.

मुखामयानां (दन्त-गल-मुख-कफजादयः)

तेजोवती (घटकद्रव्य) प्रयोग

कालक चूर्णम्

Caraka Samhitā, Cikitsā, 26-194/196.

पाठादि चूर्णम्

Caraka Samhitā, Cikitsā, 26-199/200.

पिप्पल्यादि चूर्णम्

Caraka Samhitā, Cikitsā, 26-188/190.

अपतन्त्रके

‘तुम्बुरुपुष्कराहहिङ्गुवम्लवेतस पथ्यालवणत्रयं यवक्वाथेन पातुं प्रयच्छेत् ।’

Suśruta Samhitā, Cikitsā, 5-21.

पार्श्वशूले

तत्र पुष्करमूलानि हिङ्गु सौवर्चलं विडम् ।
सैन्धवं तुम्बरं पथ्यां चूर्णं कृत्वा तु पाययेत् ॥
पार्श्वं हृद्बस्तिशूलेषु यवक्वाथेन संयुतम् ॥

Suśruta Samhitā, Uttara, 42-120/121.

गुल्मजशूले

.... वीक्ष्य योजयेत् ।

पथ्यां त्रिलवणं क्षारं हिङ्गुतुम्बुरु पौष्करम् ॥

Suśruta Samhitā, Uttara, 42-69.

कर्णशूले

हिङ्गुतुम्बरु शुण्ठीभिस्तैलं तु सार्धपं पचेत् ।
एतद्धि पूरणं श्रेष्ठं कर्णशूलनिवारणम् ॥

Caraka Samhitā, Cikitsā, 26-222.

अर्शसि

धूपने

‘तुम्बुराणि विडङ्गानि देवदार्वक्षता घृतम् ।’

Caraka Samhitā, Cikitsā, 14-50.

दीपने

पिष्टैर्गजकणा..... ।

तुम्बुर्वजाजीयवनिका....कल्पयेत् ॥

फलाम्लान् यमकस्नेहान् पेयामूषरसादिकान् ।

एभिरेवौषधं साध्यं वारि सर्पिश्च दीपनम् ॥

Āṣṭāṅga Hṛdaya, Cikitsā, 8-50/51.

TŪNĪ-TUNNAKA

Botanical name

Toona ciliata Roem.

Syn. *Cedrela toona* Roxb. ex Rottl.

Family : Meliaceae

Classical name : Tūṇī-Tunnaka

Sanskrit names

Tūṇī, Āpīna, Tunnaka, Kāntala, Tuṇika, Kacchapa, Nandī, Tūṇika, Pītaka, Kuṭheraka, Nandivṛkṣa, Nandaka.

Regional names

Tun (Hindi); Poma (Assam); Karuk (Mar.); Tun (Beng.); Santhan-venbu (Tam.); Malarveppu (Mal.); Mandurika (Kan.); Nandichettu (Tel.); Toona, Red Cedar, Moulmein cedar (Eng.)

Description

Trees upto 40 meters tall, large tree. In the open, it tends to branch lower down forming a large crown.

Leaves even-or odd-pinnate, 30-75 cm. long; leaflets obliquely ovate-or oblong lanceolate, 6-15 cm. long, acuminate at apex, entire or endulate, glabrous base obtuse, cemeate.

Flowers in sub-erect panicles Ca 7 mm. across, white; calyx minutely lobed or sub-entire. Petals white, ob-

long, erect or sub erect. Filaments hairy. Disc orange-red. Stigma free.

Capsules ellipsoid upto 2.5 cm. long, 5 valved. Seeds brown membranous, winged at both ends.

Woods are of timber utility carrying commercial importance.

Flowering and fruiting time

Plant flowers and fruits in March-April.

Distribution

Plant is distributed in the sub-Himalayan tracts and outer Himalayas upto an altitude of 4,000 ft., and in Assam, Bengal, Chota Nagpur, Western Ghats and other hills of the Deccan Peninsula.

Chemical composition

The flowers of Tunnaka (*Cedrela toona* Roxb. ex Rottl.) contains a red colouring matter nyctanthin, identical with the colouring matter of the flowers of *Nyctanthes arbor-tristis* Linn. Flowers also contain a flavorne or flavornol dyestuff. They contain quercetin, probably as glucoside. Flowers form the source of one of the less important natural dyestuff known in Bengal as Gunari. Toona colour is useful for dyeing fabrics.

Bark contains tannic acid, a bitter resin, citric acid, a phobaphene-like-compound and starch. The wood yields 0.44 % of a golden yellow ethered oil, containing copaene, cardinol, cadinene and other bicyclic sesquiterpenes, a colouring matter and a lactone, cedrelone.

Woods yield of golden yellow ethereal oil (0.44%).

Kinds and varieties

Cedrella serrata Royle. syn. *Toona serrata* M. Roem., is known as Hill Toon (Eng.), Darlu (U.P.), Soni (Kumaon), Drawa (Punjab) and Tungadoma (Burma) and other regional names. It is a moderate-sized tree found in Hazra, Rawalpindi, Jaensar, Tehri-Garhwal, Manipur and Upper Burma, at altitudes of 4,000-8,000 ft. The bole is about 20 ft. high, with a girth of 5 ft. The wood is somewhat similar to that of *Cedrela toona* Roxb. but is lighter and stronger than Toona (Tunnak.). It is useful in timber and

allied perposes of economic utility. Plant is also considered of medicinal importance.

Pharmacodynamics

Rasa	: Tikta, Kaṣāya, Kaṭu
Guṇa	: Laghu, śīta
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Pittaśāmaka

Properties and action

Karma	: Grāhī Kuṣṭhaghna Dāhapraśamana Balya Śukrala-vṛṣya Raktapittaśāmaka Raktaśodhana Vraṇaropaṇa Jvaraghna.
Roga	: Vraṇa Kuṣṭha-śvitra Raktadoṣa Raktapitta Dāha Śiraḥśūla Dourbalya Atisāra Jvara.

Therapeutic uses

The drug Tūṇi or Tunnaka is astringent and anti-periodic. It is useful in infantile dysentery. It is also used as an external application for ulcers.

Bark is medicinally useful. It contains tannic acid, a bitter resin, citric acid, a phlobothene-like compound and starch. The ash is rich in calcium. Leaves are used in medicine. Flowers are source of herbal dye, though it is not fast, but better results are obtained by the use of mordants; the flowers are used in conjunction with safflower and turmeric.

The drug is useful diarrhoea, debility, sexual debility, raktapitta, haemorrhage, fever (periodic fever), burning sensation, leucoderma, kuṣṭha, headache and some other ailments.

Parts used : Bark, Leaves.

TŪNĪ (तूणी)

- क. तूणी तुन्नक आपीनस्तुणिकः कच्छकस्तथा ।
कुठेरकः कान्तलको नन्दीवृक्षश्च नन्दकः ॥
- ख. तूणी रक्तः कटुः पाके कषायो मधुरो लघुः ।
तिक्तो ग्राही हिमो वृष्यो व्रणकुष्ठास्रपित्तजित् ॥
Bhāvaprakāśa Nighaṇṭu, Vaṭādi varga, 45-46.
- क. तूणीकस्तूणिकस्तूणी पीतकः कच्छपस्तथा ।
नन्दी कुठेरकः कान्तो नन्दीवृक्षो नवाह्वयः ॥
- ब. नन्दीवृक्षः कटुस्तिक्तः शीतस्तिक्तास्र दाहजित् ।
शिरोऽर्त्ति श्वेतकुष्ठघ्नः सुगन्धि पुष्टि वीर्यदः ॥
Rāja Nighaṇṭu, Candanādi varga, 73-74.

TŪTA

Botanical name : Morus alba Linn.

Family : Moraceae

Classical name : Tūta

Sanskrit names : Tūta, Tūda.

Regional names

Shahatuta, Sahatut (Hindi); Tut (Beng.); Tut, Ambut (Mar.); Shetur (Guj.); Reshine (Tel.); Missukette (Tam.); Hippurile (Kan.); Tuto (Oriya); White Mulberry (Eng.).

Description

Large shrubs or small trees, upto 8 meters high.

Leaves broad-ovate or ovate-cordate, serrate-dentate, sometimes lobed, acute or acuminate, hairy on nerves beneath.

Flowers modoeious, Male spikes catkin like, elongate or lax, short-pedencled. Female catkin ovoid, pedunculate. Tepals 4, accrescent and succulent in female flowers. Style short and thick; stigma 2-fid, hairy.

Fruiting calyx white, purple or black, variable in size and colour varietywise; upto 6 cm. long.

Flowering and fruiting time

Plant flowers and fruits in February-June.

Distribution

Plant is distributed in Asian tropics. It is commonly planted in gardens and house premises.

Commonly known as Mulberries, a few of the *Morus* species are valued for their foliage which constitute the chief feed for mulberry silkworms (*Bombyx mori* Linn.). Some species are grown for their edible fruits and useful timber.

Kinds and varieties

There are some species of *Morus*, commonly known as different kinds of Mulberries (Tuta); *Morus alba* Linn. (white Mulberry), *Morus laevigata* wall ex Brandis, *Morus nigra* Linn. (Black Mulberry), *Morus serrata* Roxb. (Himalayan Mulberry) and *M. australis* Poiret.

Chemical composition

Analysis of ripe fruits (*M. nigra* Linn.) gave following values : moisture 05.5, protein 0.7, fat 0.4, Carbohydrates 12.2; fibre 0.8, mineral matter 0.4; and calcium 60 mg., phosphorous 20 mg. and iron 2.6 mg./100 g.; and nicotinic acid 0.2 mg., riboflavine 0.92 ug. and ascorbic acid 10 mg./100 g.

Chemical study finds that the reducing sugars constitute the bulk of carbohydrates. Fruits (*Morus alba* Linn.) also contain a flavonoid, possibly eridicryol.

The relation between the chemical composition of mulberry leaves fed to larvae and the resultant silk production has been extensively investigated. It has been found that accumulation of protein in larvae depends largely on the concentration of carbohydrates in the leaves of mulberry.

The leaves contain ascorbic acid, carotene, vitamin B₁, folic acid, folinec acid and vitamin D.

Pharmacodynamics

Rasa	: Madhura
Guṇa	: Śīta
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittaśāmaka

Properties and action

Karma	: Sāraka
	Dāhaśāmaka
	Tṛṣṇāhara
	Śītakara
	Grāhi
	Kṛmighna
	Tṛptikara
Roga	: Vibandha
	Dāha
	Tṛṣṇā
	Atisāra
	Kṛmi.

Therapeutic uses

The drug Tūta is cooling and it is useful in various ailments. Ripe fruits are sweet and edible; they allays vāta and pitta doṣa. Fruits are refrigerant and laxative.

The milky juice of exuded by plant is used as a plaster of sores. The fruits are eaten, though insipid; it is excellent when stewed with sugar. Ripe fruits are sweet and flavoured. They are eaten fresh or made into jam, jelly and syrup (sherbet). The leaves are diaphoretic and emollient. The leaves are good source of ascorbic acid (vitamin C.). A decoction of leaves is used as a gargle in inflammation of the throat. The fruit is cooling and laxative. It is sorethroat, dyspepsia and melancholia. The bark is used as a purgative and vermifuge. Aqueous and alkali extracts of leaves and stems are active against Gram-positive bacteria and yeasts. The stem contains steroidal sapogenis; a-amyrin is present in the bark. The leaves containing ascorbic acid (200-300 mg./100g.), of which over 90% is present in reduced form,

and they also contain some other vitamins. Leaves are rich in calcium. An infusion of leaves causes a drop in blood sugar sometimes diuresis and a reduction of arterial pressure.

The medicinal properties of ripe and unripe differ. Fruits and leaves are medicinally useful. Leaves are sometimes eaten as vegetable. They are also useful as cattle fodder, and they are nutritious and palatable. Leaves are stated to improve milk yield when to fed dairy animals.

The fruits (*Morus alba* Linn.) are eaten fresh or made; into juice, stews and tarts, they may be squashed and fermented to yield spiritous liquors.

The properties of ripe and unripe differ. Leaves and bark are also used in medicine.

The juice of fruits forms a grateful drink during convalescence after febrile diseases.

Fruits juice or drink (syrup) checks thirst and cools the blood. The bark is laxative and vermifuge.

Parts used : Fruit, leaves.

Dose : Fruits edible.

Formulation : Syrup (sherbet)-Tūta pānaka.

TŪTA (तूत)

तूत तूलश्च पूगश्च क्रमुको ब्रह्मदारु च ।
तूतं पक्वं गुरु स्वादु हिमं पित्तानिलापहम् ॥
तदेवामं गुरु सरमम्लोष्णं रक्तपित्तकृत् ।

Bhāvaprakāśa Nighaṇṭu, Āmrādīphala varga, 100.

TUVARAKA

Botanical name

Hydnocarpus laurifolia (Dennst.) Sleumer.

Syn. *Hydnocarpus wightiana* Blume.

Family : Flacourtiaceae

Classical name : Tugaraka

Sanskrit names

Tuvaraka, Kaṭukapittha, Kuṣṭhavairi

Regional names

Chalamogara, Chalmogra; Papita (Hindi); Kadukavitha, Kadukavathi (Mar.); Garudaphal (Kann.); Choulmugra (Beng.); Maravartaya (Tam.); Adavivadamu (Tel.); Kodi (Mal.); Viranjamogra (Pers.).

Description

A dioecious evergreen tree, upto 50 ft. or more in height, often with fluted stem. Bark brown, somewhat rough.

Leaves 4-9 in. long and 1.5-4 in. broad, oblong, ovate or elliptic, more or less serrate.

Flowers small, greenish-white, solitary or in fescicles. Male and female flowers on separate plants. Stamens 5.

Fruit globose, 2-4 in. diam., tomentose, mommilate; seeds 75-20 (in number); 0.8-1.0 in. long (weight 1.0-1.4 g. each), subovoid, obtusely, angular, striate.

Flowering and fruiting time**Distribution**

Plant commonly occurs in the tropical forests of Western ghats from Konkan to southwards. It is often planted on roadsides in hilly areas. Plant is abundantly found in Sri Lanka.

Kinds and varieties

Another plant known as Chalamogra, a species of *Hydnocarpus*, is almost similar to that of *Hydnocarpus laurifolia* (Dinnst) Sleumer. in regard to appearance (features) and medicinal properties, follows :

Hydnocarpus Kurzii (King.) warb. syn. *Hydnocarpus heterophylla* Kurz. non Blume, *Tarakatogenos Kurzii* King.

A tree upto 30 ft. high with tall trunk and narrow crown of hanging branches, often forming gregarious patches. Leaves oblong or elliptic, 7-8 in. long, abruptly acuminate, coriaceous; petiole slightly geniculate at the upper end. Flowers mostly dioecious, pale yellow, in axillary cymes. Fruits chocolate brown, globose, 2.5-3.0 in.

across. Seeds numerous, C. 1 in. long, faceted, with copious, albumin.

Plant commonly occurs in evergreen forests throughout upper Assam and in Tripura.

It is known as Lamtem, Dieng-solh-lap, Balibu, rosaithing (Assamese), Dalmugri, Chalmugra (Bengla) and other regional names. Plant is the source of Chalnogra (Chaulmoogra) oil.

It is the source of Chaulmoogra oil.

Chemical composition

Pharmacodynamics

Rasa	: Kaṭu, tikta
Guṇa	: Tikṣṇa, snigdha
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma.

Properties and action

Karma	: Kuṣṭhaghna
	Kanḍūghna-tvagdoṣahara
	Raktaprasādana
	Jantughna
	Vraṇaśodhana-vraṇaropana
	Raktotkleśaka-lekhana
	Vedanāsthāpana
	Vāmaka-recaka
	Arśoghna
	Kṛmighna
	Pramehaghna
	Rasāyana
Roga	: Kuṣṭha-kanḍu-tvagvikāra
	Vraṇa-nāḍivraṇa-asthivraṇa-
	kṛmivraṇa
	Āmavāta-vātarakta-vātaroga-
	nāḍīśūla (śoṭha-vedanā janya vikṛti)
	Netraroga-timira
	Prameha-madhumeha
	Udararoga-amāha
	Arśa
	Yonidurgandha.

Therapeutic uses

The drug Tuvaraka is an important Kuṣṭhaghna (anti-leprotic) herbal agent, and it is anthelmintic, antiseptic, anodyne and cathartic. It is blood diseases, glandular diseases, leprosy, rheumatism and scrofula.

Tuvaraka taila (hydnocarpus oil) is mainly used in the treatment of lepromatous leprosy and is found to be effective in early cases, in decreasing the size of nodules, anaesthetic patches and skin lesions. It is used in leprosy both externally as well as internally. Seeds oil and seeds powder are used in medicine.

The drug is used in leprosy (Kuṣṭha) and other diseases belonging to group of Kuṣṭha roga, skin diseases, eczema (pāma), itch (kandū), scabies, ulcers (vraṇa), sinus (nāḍivraṇa), asthivraṇa and various other similar complaints.

It is useful in neuralgia, gout, rheumatic arthritis, abdominal complaints, blood (impurity) diseases, prameha (urinary anomalies), worms (krmi roga), and eye diseases (netra vikāra).

The oil of chalmugra or chalmogra (Oleum Chalmooegrae), obtained from Hydnocarpus Kurzie (King.) warb. is official in I.P. (Indian Pharmacopoeia); it was once official in B.P. (British Pharmacopoeia) but later has been replaced by hydnocarpus oil obtained from Hydnocarpus laurifolia (Dennst.) Sleumer.

Parts used : Seeds, seeds oil.

Dose

Seeds powder 1-3 gm., Seeds oil 10 ml. (purgation-emesis); 5-10 minims - 30-60 minims (saṁśamana).

Formulation : Tuvarakādi taila.

TUVARAKA (तुवरक)

पत्रैस्तु केसरकारैः कलायसदृशैः फलैः ॥
वृक्षस्तुवरको नाम पश्चिमार्णवतीरजः ।

कलामसंमितफलः सद्रुशच्छदः ॥

गुणैरुष्कर समो वृक्षस्तुवरकः स्मृतः ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 502-503.

तौवरं कटुकं पाके कषायोष्णं कफापहम् ॥

कृमिकुष्ठ ज्वरानाह मेहाशौ व्रणशोफजित् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 504-505.

तुवरस्तु वरश्चोष्णौ रसे पाके च तिक्तकः ।

कफव्रणकृमिमेह कुष्ठज्वर विनाशनः ॥

आनाहमर्शः शोफश्च नाशयेदिति ते जगुः ॥

Nighaṇṭu Ratnākara.

तुवरक प्रयोग विधानम्

कुष्ठे मधुमेहे च

पञ्चकर्मगुणातीतं श्रद्धावन्तं जिजीविषम् ।

योगेनानेन नातिमान् साधयेत् कुष्ठिनं नरम् ॥

वृक्षास्तुवरका ये स्युः पश्चिमारणव भूमिषु ।

बीचीतरंग विक्षेपमारुतोद्धूत पल्लवाः ॥

तेषां फलानि गृह्णीयात् सुपक्वान्यम्बुदागमे ।

भज्जस्तेन्योऽपि संहृत्य शोषयित्वा विचूर्ण्य च ॥

तिलवत् षोडशेत् द्रोण्यां स्नावयेद्वा कुसुम्भवत् ।

तत्तैलं बृंहणं वृष्यं पचेदातोय संशयान् ॥

अवतार्य करीषे च पक्षमात्रं निधापयेत् ।

स्निग्धः स्विन्नो हृतमलः पक्षादूर्ध्वं प्रयत्नवान् ॥

चतुर्थ भक्तान्तरितः शुक्लादौ दिवसे शुभे ।

मन्त्रपूतस्य तैलस्य पिबेन्मात्रां यथाबलम् ॥

तेनास्योदूर्ध्वं मथाश्चापि दोषा यान्त्यसकृत्ततः ।

अस्नेहलवणां सायं यवागू शीतलां पिबेत् ॥

पक्काहं प्राक्षयेत्तैलम् अनेन विधिना नरः ।

पक्षं परिहरेच्चापि मुद्गयूषोदनाशनः ॥

पञ्चभिदिवसैरेव सर्वकुष्ठैः विमुच्यते ।

तदेव खदिरकाथे त्रिगुणे साधु साधितम् ॥

निहन्ति पूर्ववत् पक्कं पिबन्मासमतन्द्रितः ।

तेनाभ्यक्तशरीरश्च कुर्बीताहारमीरितम् ॥

भिन्नस्वरै रक्तनेत्रं विशीर्णं कृमिभक्षितम् ।
 अनेनाशु प्रयोगेण साधयेत् कुष्ठिनं नरम् ॥
 सर्पिः मधुयुतं पीतं तदेव खदिराम्बुना ।
 पक्षिमांसं रसाहारं करोति द्विशतायुषम् ॥
 तदेव नस्ये पञ्चाशद्विसानुपयोजितम् ।
 वपुष्मन्तं श्रुतिधरं करोति त्रिशतायुषम् ॥
 शोधयन्ति नरं पीता मज्जानस्तस्य मात्रया ।
 महावीर्यं स्तुवरकः कुष्ठमेहापहः परः ॥

Suśruta Samhitā, Cikitsā, 13.

नान्तर्धूमस्तस्य मज्जातु दग्धः क्षितः तैलेसैन्धवं चाञ्जनं च ।
 पैल्ल्यं हन्यादर्मनक्तान्ध्यकाचात्रीलोरोगं तैमिरं चाञ्जनेन ॥

Suśruta Samhitā, Cikitsā, 14.

कुष्ठरोगे

‘रसायनप्रयोगेण तुवरास्थीनि शीलयेत् ।’

Āṣṭāṅga Hṛdaya, Cikitsā, 19-53.

रसायने

तुवरकरसायनम् ।

Āṣṭāṅga Hṛdaya, Uttara, 39-84/85.

मधुमेहे

‘महावीर्यस्तुवरकः कुष्ठमेहामहः परः ।’

Suśruta Samhitā, Cikitsā, 13-20/24.

योनिदुर्गन्धापनयनार्थम्

‘दुर्गन्धानां कषायः स्यात् तोवरः कल्क एव च ।’

Caraka Samhitā, Cikitsā, 30-124.

TVAK

Botanical name : Cinnamomum zeylanicum Breyn.

Family : Lauraceae

Classical name : Tvak-Dārusitā

Sanskrit names

(a) Tvak, Dārusitā, Utkāṣa, Varāṅga, (b) Patraka, Tamāla, Patra (Ka), Tamālapatra, Tvakpatra, (c) Tāpiccha,

Kālaskandha, Amitadruma, Lokaskandha, Nīladvaja, Nīlatāla, Mahābala.

Regional names

Dalchini (Hindi); Daruchini (Beng.); Taj (Mar., Guj.); Karuya (Tam.); Manaliphu (Tel.); Dvarasini, Kirpha (Arabic); Darachini (Pers.); Cinnamon (Eng.).

Common names

Tejpat, Tejpatta (leaves-patra), Dalchini (bark-tvak).

Description

Small, evergreen tree, sometimes attaining a height of 20-25 ft. and sometimes 60 ft.

Leaves opposite, leathery, 4-7 in. long, on petiole 1.5-2.5 cm. long; upper surface bright, nerves 3-5, odorous, pungent in taste. Lvs. spicy odour when bruised.

Flowers on long peduncles, clustered, foetid (disagreeable smell); brown, in lax panicles.

Fruits .5-1 in. long, oval, deep violet coloured, bell-shaped; ellipsoidal berry 0.5-1 in. long, dark-purple; terebinthine odour when opened, taste somewhat similar to that of the juniper berry.

Flowering and fruiting time

Plant flowers in January and fruits in May-August.

Bark Drug : Bark of tender shoots and stem is smooth and pale, while bark of old and aged branched is rough and brown. Based on the characteristics of the bark five different forms are recognized in Ceylon viz. Peni, Rasa, Pengsri, Tittha and Kahata-Kuriendu. Bark of the tree is the well-known Ceylon cinnamon.

Leaves of only the pungent and bitter types are collected for distillation. Leaves are also for other purposes.

Bark drug consists of single or double compound quills 6 to 10 mm. diam. and of varying length. Thickness of good quality bark is restricted to 0.5 mm. The external surface shows a yellow-brown colour with longitudinal shining, wavy lines and occasionally scars and holes. Inner surface somewhat darker and longitudinally striated. Bark with a splitting fracture. Odour fragrant, taste warm, sweet, aromatic.

Kinds and varieties

Practically speaking, the plant drug may be categorised into three kinds based on distribution, occurrence and native regions etc. viz. Chinese, Sinhalese and Indian.

The leaves are known as Tejpat (and other regional names) and bark is named as Dalchini (and other regional names) in commercial trade of spice and crude drug material which form market raw drugs of Tamāla (Patraka) and Dārusitā (Tvak) respectively.

Important species of *Cinnamomum* which are worth mentioning in present context follow :

***Cinnamomum tamala* Nees. & Eberm.**

A moderate-sized tree attaining a height upto 25 ft. and girth of about 4 ft.; leaves glabrous, usually 10-13 cm. long, very variable in breadth, opposite, rarely alternate, shining above, leathery, rarely elliptical and obtuse, 3-nerved from the base; flowers unisexual numerous 0.5-0.6 cm. long; fruit 1.25 cm. long, peduncle and calyx small, 1.25 cm. and the later usually 0.6 cm. diam. with truncate lobes; drupes ovoid, globose, black when ripe, seated on persistent base of perianth.

Plant coming in flowering and fruiting stages during the period from December to August. Flowering in February-March.

Habitat of trees suitable in shady forests especially bordering streams of the tropical and sub-tropical Himalayas. Plant is occurring in the Himalayas at altitudes of 1,000-2,000 meters from Kumaon to Bhutan.

***Cinnamomum zeylanicum* Blume**

A small aromatic tree. Bark reddish brown with watery exarecences, rough 1-9 cm. thick, soft, inner blaze brown aromatic. Wood light red, moderately hard, somewhat scented, coarse. Leaves sub-opposite, variable, large oblong low levels, small and oval at high levels with intermediate sizes and forms, 7-6, 2.5-4 × 3.8-10 cm. ovate or oblong, coriaceous, glabrous above, dull below, prominently 3-5-nerved bright pink when young; petiole 1.3-2.5 cm. stout, flattened above; panicles about as long as leaf,

Flowers grey or pale yellow. Fruit dark purple, 1.9 cm. long, oblong, ovoid, supported by ribbed accrescent, perianth.

Plant is bearing flowers in December-March and fruits in September-December.

Plant is wildly grown and it is cultivated almost all parts of the country, especially in tropical and subtropical region.

Cinnamomum cassia (Nees) Nees ex Blume.

Plant commonly known as Chinese Cinnamon or Cassia. Similarly it is also commonly known as cassia lingnea while dried flowers is traded under the name 'Cassia Buds'. The separated stalks, leaves, young twigs alongwith various refuse products are used for oil purpose. Cassia leaf is distilled for the oil. Cassia bark is ground in powder form is a widely used spice. Leaf stalk and other parts are medicinally useful.

Cinnamomum verum Presl.

It is bushy evergreen tree usually 10-15 meters high, sometimes 18 meters (in Sri Lanka) and gives well known commercial Cinnam. However, in cultivation it is tree is coppiced to be developed in bush. It is reported to occur wild as also on plantation scale in Southern costal regions Western India. Leaves have spicy odour and hot taste.

Chemical composition

Bark yields oil 1.5-1% which contains cinnamaldehyde 10% and eugenol 60-75%. Leaves yields oil 11% which contains clove-like eugenol, Root-bark 3% colourless comphoraneous oil. Seeds yields 33% fixed oil.

Bark also contains tannin, mucilage, sugar, starch and other substances.

Pharmacodynamics

Rasa	: Kaṭu, tikta, madhura
Guṇa	: Laghu, rūkṣa, tikṣṇa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma Pittavardhaka Pittaśāma (madhura rasa, if sweat)

Properties and action

Karma	: Chedana-śleṣmahara Kāsaḡhna-śvāsahara-yakṣmāhara Hṛdayottejaka-ojovardhana Raktaśodhaka Vṛkkottejaka-mūtrajanana Garbhāśaya saṅkocaka-vājīkaraṇa Raktotkleśaka-uttejaka Vedanāsthāpana Lekhana-medohara Jantughna Nāḍībalyottejaka Mukhaśodhana-dourgandhyahara Dīpana-pācana-vātānulomana-grāhī Yakṛduttejaka Dantya-dantadārḍhyakara.
Roga	: Kāsa-śvāsa-yakṣmā Aruci-agnimāndya-āmadeśa Udaraśūla-grahaṇī Āntrikajvara Hṛddourbalya Mūtrakṛcchra-pūyameha Rajorodha-garbhāśaithilya Kṣayaja vṛṇa Śoṭha Dantaśūla-dantakrimi Nāḍīdourbalya-pakṣāghāta Vamana-hṛllāsa-utkleśa Carmavikāra-nyaccha-vyaṅga Nāḍīśūla-śīraḡśūla Dhvajabhaṅga.

Therapeutic uses

The drug Tamāla is śleṣmahara or Chhedana (expectorant and anti-cough, and it is anthelmintic, aromatic, carminative and diuretic. It is used in anorexia, urinary bladder disorders, dryness of mouth, coryza, diarrhoea, haemorrhoids, nausea and spermatorrhoea.

The drug is effectively given in coryza, bronchitis, cough, asthma, bronchial asthma, and allied disorders of

respiratory system; it is used in pulmonary tuberculosis (T. B.) and kṣayaja kāsa etc. It alleviates śleṣma doṣa.

It is useful in heart troubles (hr̥ddourbalya), blood impurities (bacteriogenic complaints), dysuria, , enteric fever, abdominal colic, āmadoṣa, grahaṇī, gonorrhoea, dysmenorrhoea, uterine disorders (garbhāśaya śaithilya), impotency (sexual weakness), neuralgia; paralysis, poisons (rat and spider), śīroroga (pittaja), foul taste of mouth (mukha vairasya) and kṛmighna jantughna (germicide). Besides its value as medicine, the bark and leaves are major spice carrying commercial importance as aromatic raw material in drug and spice trade.

Parts used : Bark, leaves, oil.

Dose

Bark powder 1-3 gm., Leaves powder 1-3 gm., Oil 2-5 drops.

Formulations

Sitopalādi cūrṇa, Tvagādi leham, Tvagādi tailam.

Groups

Elādi (Suśruta Samhitā), Trijāta (Āṣṭāṅga Hṛdaya).

TVAK (त्वक्)

वराङ्गम्

वराङ्गं कटुकं तिक्तं तीक्ष्णोष्णं मधुरं लघु ।
पित्तलं कफवातघ्नं हृद्वस्तिगदजन्तुजित् ॥
पीनसारुचिककण्डूवामवातदुर्नामशुकरहतः ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1137-1138.

पत्रकम्

पत्रकं मधुरं किञ्चित् तीक्ष्णोष्णं पित्तलं लघु ॥
निहन्ति कफवातार्शोहृल्लासारुचिपीनसान् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1139-1140.

दारुसिता-त्वक्

उक्ता दारुसिता स्वाद्वी तिक्ता चानिलपित्तहृत् ।

सुरभिः शुक्रला बल्या मुखशोषतृषापहा ॥

Bhāvaprakāśa Nighaṇṭu, Karpūrādi varga, 67.

त्वक्पत्र-त्वक्

त्वचं लघूष्णं कटुकं स्वादु तिक्तञ्च रूक्षकम् ॥
पित्तलं कफवातघ्नं कण्डूवामारुचिनाशनम् ।
हृद्वस्तिरोगवातार्शःकृमिपीनसशुक्रहत् ॥

Bhāvaprakāśa Nighaṇṭu, Karpūrādi varga, 64-65.

पत्रकम् तमालपत्रम्

पत्रकं मधुरं किञ्चित्तीक्ष्णोष्णं पिच्छिलं लघु ।
निहन्ति कफवातार्शोहृल्लासरुचिपीनसान् ॥

Bhāvaprakāśa Nighaṇṭu, Karpūrādi varga, 68.

त्वचस्तु कटुकं शीतं कफकासविनाशनम् ।
शुक्रामशमनं चैव कण्ठशुद्धिकरं लघु ॥

Rāja Nighaṇṭu, Pippalyādi varga, 172.

पत्रकं तु तिक्तोष्णं कफवातविषापहम् ।
वस्तिकण्डूत्रिदोषघ्नं मुखमस्तकशोधनम् ॥

Rāja Nighaṇṭu, Pippalyādi varga, 175.

कासे

त्वगेलापिप्पलीक्षीरिशर्करा द्विगुणाः क्रमात् ।
चूर्णिताः भक्षिताः क्षौद्रसर्पिषा चावलेहिताः ॥
स्वर्याः कासश्वासपार्श्वरूक्कफनाशनाः ।

Āṣṭāṅga Hṛdaya, Cikitsā, 5-33/34.

मुखशोधने रोचने च

त्वङ्मुस्तमेला धान्यानि मुस्तमामलकं त्वचम् ।
दावीत्वचो यवानी च तेजोह्वा पिप्पली तथा ॥

Caraka Saṁhitā, Cikitsā, 8-137/138.

यवानी तित्तिडीकं च पञ्चैते मुखधावनाः ।
श्लोकपादेष्वभिहिताः रोचनाः मुखशोधनाः ॥

त्वक्-पत्रं तैलञ्च गुणकर्माणि

वह्निमान्द्यानिलहरमाध्मानाक्षेपनाशनम् ।
वान्त्युत्वलेशप्रशमनं सङ्ग्राहि दशनार्त्तिहत् ॥
त्वाचं तैलं रजःस्नावि तोये क्षिप्तं निमज्जति ।

A.S.

अतिसारे त्वक्घृतम्

Caraka Saṁhitā, Cikitsā, 19-80/82.

रक्तपित्ते त्वक्-चन्दनयोगम्

Caraka Samhitā, Cikitsā, 4-75.

शिरोरोगे नस्यार्थं त्वगादितैलम्

(नस्यार्थं त्वगादिचूर्णं त्रधमनं वा)

Caraka Samhitā, Cikitsā, 26-182/184.

पित्तजशिरोरोगे त्वक्पत्रादीनाम् अवपीडनम्

Caraka Samhitā, Cikitsā, 26-178.

नूतनप्रतिश्याये नस्यार्थं त्वक्पत्रादिचूर्णयोगम्

Caraka Samhitā, Cikitsā, 26-138.

कासरोगे त्वगादिचूर्णम्

Caraka Samhitā, Cikitsā, 18-92.

मुखवैरस्यनाशाय त्वगादियोगम्

Caraka Samhitā, Cikitsā, 8-137.

मुखवैरस्यनाशकत्वगादिवटी

Caraka Samhitā, Cikitsā, 8-137.

वातपित्तजशोथे त्वगादिसिद्धक्षीरम्

Caraka Samhitā, Cikitsā, 12-25.

वातपित्तशोथचिकित्सायां त्वगादियोगम्

Caraka Samhitā, Cikitsā, 12-25.

मूषकविषे त्वगादियोगम्

त्वचं च नागरं चैव समांशं श्लक्ष्णपेषितम् ।

पेयमुष्णाम्बुना सर्वं मूषिकाणां विषापहम् ॥

Caraka Samhitā, Cikitsā, 23-205.

कासरोगचिकित्सायां त्वगादिलेहः

Caraka Samhitā, Cikitsā, 18-92.

कासे सितोपलाऽऽदिचूर्णम्

Bhāvaprakāśa, Rājyaṅgśmādhikāra, 11/48-49.

पैत्तिकशिरोरोगे

त्वक्पत्रशर्कराकल्कः सुपिष्टस्तण्डुलाम्बुना ।

कार्योऽवपीडः सर्पिश्च नस्यं तस्यानु पैत्तिके ॥

Caraka Samhitā, Cikitsā, 26-176.

लूताविषे

त्वचञ्च नागरञ्चैव समांशं श्लक्ष्णपेषितम् ।

पेयमुष्णाम्बुना सर्वे मूषिकाणां विषापहम् ॥

Caraka Samhitā, Cikitsā, 23-205.

कासे

समशर्करचूर्णम्

Āṣṭāṅga Hṛdaya, Cikitsā, 5-54-55.

TAMĀLA (तमाल)

तमालः

तमाल उक्तस्तापिच्छः कालस्कन्धोऽमितद्रुमः ।

लोकस्कन्धो नीलध्वजो नीलतालश्च स स्मृतः ॥

तमालः शीलवद्वेद्यो दाहविस्फोटहृत् पुनः ।

Bhāvaprakāśa Nighaṇṭu, Vaṭādi varga, 46.

तमालः

तमालः उक्तस्तापिच्छः कालस्कन्धः प्रकीर्तितः ॥

तमालस्तद्गुणैस्तुल्यो दाहविस्फोटरक्तजित् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 810-811.

तमालः

तमालो नीलतालः स्यात्कालस्कन्धस्तमालकः ।

नीलध्वजश्च तापिच्छः कालतालो महाबलः ॥

तमालगुणाः

तमालो मधुरो बल्यो वृष्यश्च शिशिरो गुरुः ।

कफपित्ततृषादाहश्रमभ्रान्तिकरः परः ॥

Rāja Nighaṇṭu, Prabhadrādi varga, 95-96.

पत्रम्

कासश्वासादिषु

एलादिगुडिकायाम्

Caraka Samhitā, Cikitsā, 11-21/24.

मेदोरोगे

‘पत्राम्बुलोहाभवचन्दनानि शरीरदौर्गन्ध्यहरः प्रदेहः ।’

Vṛndamādhava, 36-17.

UDUMBARA

Botanical name

Ficus glomerata Roxb.

Syn. *Ficus racemosa* Linn.

Family : Moraceae

Classical name : Udumbara

Sanskrit names

Udumbara, Jantughna, Yajñāṅga, Hemadugdhaka, Puṣpaśūnya, Jantuphala, Sadāphala, Maśakī, Śītavalkala, Jaghanaphala, Kṛmivṛkṣa, Pavitra, Kṣīravṛkṣa, Apuṣpaphala, Supratīṣṭhita.

Regional names

Umaradi Gular (Hindi); Yagyadumbara (Beng.); Umbar (Mar.); Umbari (Guj.); Ati (Tam., Mal., Kann.); Atti (Tel.); Diyarī (Uriya); Jambhaija (Arabic); Ajire adam, Anjire ahamak (Pers.); Cluster fig, Country fig (Eng.).

Description

Spreading trees, upto 20 meters tall, with few, short aerial roots; branches smooth, reddish-brown.

Leaves membranous to charataceous, triplinerved, ovate-oblong or elliptic lanceolate, up to 12 × 5 cm., petiole upto 3 cm. long, glabrous; stipule ovate-lanceolate, scarious, pubescent; lvs. dark green.

Receptacles obovoid, pubescent upto 4 cm. across, reddish at age; peduncle upto 1 cm. long; bracts lateral, at the middle of the peduncle, small. Male, female and gall flowers with perianth; together in the some receptacles. Male and gall flowers stalked; the female flowers sessile. Fruits green and turn redish when ripen. Fruits on leafless plant.

Flowering and fruiting time

All seasons. Fruits borne in great profusion; mature generally from March to July. New foliage appears in cold months.

Distribution

Plant is distributed in Indomalesian region. It is oc-

curing commonly in tropical and regions; generally planted in gardens and along avenues.

The tree is not epiphytic and is found throughout the greater part of India in moist localities e.g. along banks of streams and sides of ravines. It is found also on rocky slopes, sometimes almost gregariously. It is often cultivated round villages for its edible fruits.

Chemical composition

Analysis of the fruit gave the following values : moisture 13.6, albuminoids 7.4, fat 5.6, carbohydrates 40.0, albuminoids 7.4, fat 5.6, colouring matter 8.5, fibre 17.9, ash 6.5, silica 0.25 and phosphorous 0.91 per cent.

The latex of tree contains 4.0-7.4% caoutchouc. Bark contains 14% tannin.

The leaves (dry matter basis) contains : crude protein 12.36, ether extract 2.75, crude fibre 3.03, N-free extract 58.88, total carbohydrates 71.91 and total ash 12.98 per cent.

Analysis of the leaves gave (air-dry basis) : nitrogen 0.915, phosphorous 0.163, and lime 5.57 per cent.

Pharmacodynamics

Rasa	: Kaṣāya
Guṇa	: Laghu, rūkṣa
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśamaka.

Properties and action

Karma	: Mūtrasaṅgrahaṇīya Dāhapraśamana Garbhāśayaśothahara Śukrastambhana Raktapittaśamaka Agnisādana-stambhana Garbhapoṣaka Kṛmikāraka Śothahara-vedanāsthāpana Varṇīya Vraṇaropaṇa

Roga	: Prameha Pradara-śvetapradara-asṛgdara Śukradourbalya Raktātisāra-pravāhikā-grahaṇī Śoṭha-vedanā-vraṇa Varṇavikṛti Bālātisāra Dāharoga Raktapitta Dantodbheda (janya vikāra).

Therapeutic uses

The drug Udumbara is mūtrasaṅgrahaṇīya, stambhana and vraṇaropaṇa; it is used in prameha, raktapitta and vraṇa.

The decoction of bark is given in prameha roga (urinary anomalies) and ripe (matured) fruit is taken in urinary diseases of this group. The bark and fruit are taken in raktapitta (intrinsic haemorrhage). A decoction of bark is given in raktātisāra, pravāhikā and grahaṇī; and the un-ripe fruits are cooked as vegetable which is also used in these diseases.

Bark is astringent and a decoction of bark is used as a wash for wounds. The root is useful in dysentery. The leaves ground to powder and mixed with honey are given in bilious affections. The fruits are astringent, stomachic and carminative. The milky juice is administered in piles and diarrhoea.

The fruits when fully ripe, they have pleasant odour, resembling that of cider apples. Often they are full of maggots of the following wasp and unfit for eating. They may be dehydrated, ground into flour and taken with milk and sugar or used for preparing cold jelly. The powder from roasted fruits forms a valuable breakfast food almost similar to imported Grape Nuts.

The leaves of Udumbara are also useful as fodder for cattle and elephants. Plant is one of the recorded hosts of the Indian lac insect producing Lākṣā. Woods are of economic utility.

Externally the decoction, latex and paste of young shoots are used in ailments of ulceration, inflammation, pain and discolouration.

The decoction of bark is taken in pradara and śveta pradara (meno-metrorrhagia and leucorrhoea). A vaginal dousche (uttara vasti) is recommended to woman suffering with such kind of diseases. In condition of miscarriage (garbhasrāva-garbhapāta), the powdered śāli rice should be given with decoction of udumbara fruits sweetened with sugar and honey to check miscarriage in women. Udumbara is useful for promoting and stabilising conception and nourishing foetus (garbhassthāpana and garbhapoṣaṇa). The sesame oil bhāvita tila taila is applied (picu or paṭṭa dhāraṇa) to vagina in yoni roga.

In infantile diarrhoea and teething troubles of children, the latex of udumbar is suggested. Ripe fruit is used in burning sensation (dāha).

Parts used : Bark, fruit, latex.

Dose

Powder 3-6 gm., Decoction 50-100 ml., Latex 5-10 drops.

Formulation : Udumbarasāra.

Groups

Mūtrasaṅgrahaṇīya, Kaṣāyaskandha (Caraka Samhitā), Nyagrodhādi (Suśruta Samhitā), Kṣīrivṛksa, Pañcavalkaḥ (Bhāvaprakāśa).

UDUMBARA (उदुम्बर)

उदुम्बरः

उदुम्बरो हिमो रूक्षः कषायो मधुरो गुरुः ॥

भग्नसन्धानकृद् वण्यो व्रणशोधनरोपणः ।

उदुम्बरशलाटुः

स्तम्भनानि कषयाणि श्लेष्मज्जनानि हितानि च ॥

उदुम्बरशलाटूनि तृदपित्तास्रहराणि च ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 427-428.

उदुम्बरबालफलम्

उदुम्बरफलं बालं कषायं स्वादु शीतलम् ॥

तृणमेहपित्तहृच्छर्दिप्रदरास्रश्रुतिं जयेत् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 428-429.

उदुम्बरप्रौढफलम्

प्रौढबहुमलं तस्य फलं गुरुतरं मतम् ॥

उदुम्बरपक्वफलम्

फलमौदुम्बरं पथ्यं शीतलं मधुरं गुरु ।

क्षुतृत्तृष्णामेहहृद्यं श्लेष्मकृत् रक्तनाशनम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 429-430.

उदुम्बरो हिमो रूक्षो गुरुः पित्तकफास्रजित् ।

मधुरस्तुवरो वर्ण्यो व्रणशोधनरोपणः ॥

Bhāvaprakāśa Nighaṇṭu, Vaṭādi varga, 9.

उदुम्बरं कषायं स्यात्पक्वन्तु मधुरं हिमम् ।

कृमिकृत्पित्तरक्तघ्नं मूर्च्छादाहतृषापहम् ॥

Rāja Nighaṇṭu, Āmrādi varga, 128.

औदुम्बरं फलम्

औदुम्बरं फलमतीव हिमं सुपक्वं

पित्तापहं च मधुरं श्रमशोफहारि ।

आमं कषायमत्ति दीपनरोचनं च

मांसस्य वृद्धिकरमस्रविकारकारि ॥

Rāja Nighaṇṭu, Āmrādi varga, 129.

नारीस्तन्येन संयुक्तां पिबेदौदुम्बरीं त्वचम् ।

आभ्यां वा पायसं सिद्धं दद्यादत्यग्निशान्तये ॥

Caraka Saṁhitā, Cikitsā, 19.

औदुम्बरं कषायं स्यात् पचं तु मधुर हिमम् ।

कृमिकृत् रक्तपित्तघ्नं मूर्च्छादाहतृषापहम् ॥

Dhanvantari Nighaṇṭu.

प्रदररोगे

क्षौद्रयुक्तं फलरसमौदुम्बरभवं पिबेत् ।

असृग्दरविनाशाय सशर्करपयोऽन्नभुक् ॥

Bhāvaprakāśa, Madhyakhanda, 68-16.

पित्तजतृष्णाहरयोगः

‘पित्तजायान्तु तृष्णायां पक्कोदुम्बरजो रसः ।’

Cakradatta, Trṣṇā cikitsā, 16-5.

Āṣṭāṅga Hydaya, Cikitsā, 67.

गर्भपाते

उदुम्बरकाथयुतं सिताढ्यं सुगन्धशालिप्रमदं सितं च ।

या पिष्टमश्नाति न गर्भपातपीडामसौ विन्दति जातु नारी ॥

Śoḍhala, Gadanigraha.

Rājamārtanḍa, 31-21.

योनिरोगे उदुम्बरादि (क्षीरभाविततिल) तैलम्

उदुम्बरस्य दुग्धेन षट्कृत्वा भावितात्तिलात् ॥

तैलं क्वाथेन तस्यैव सिद्धं धार्यं च पूर्ववत् ।

Caraka Samhitā, Cikitsā, 30-77/78.

रक्तपित्ते

‘वातोल्बणे तित्तिरिः स्यादुदुम्बररसे शृतः ।’

Caraka Samhitā, Cikitsā, 4-49.

उदुम्बरचन्दनयोगः

Caraka Samhitā, Cikitsā, 4-75.

उदुम्बरतित्तिरयोगः

Caraka Samhitā, Cikitsā, 4-49.

उदुम्बरपटोलपत्रसिद्धघृतः

Caraka Samhitā, Cikitsā, 4-90.

उदुम्बरादिकषायवृक्षलेपः

Caraka Samhitā, Cikitsā, 4-104.

उदुम्बरादिघृतः

Caraka Samhitā, Siddhi, 8-36/37.

उदुम्बरादितैलम्

Caraka Samhitā, Cikitsā, 30-73/75.

उदुम्बरादिप्रदेहः

Caraka Samhitā, Cikitsā, 21-72.

उदुम्बरादिलेहः

Caraka Samhitā, Cikitsā, 26-98.

उदुम्बरत्वचागुणाः

उदुम्बरत्वचा शीता कषाया व्रणनाशिनी ।

गुर्विणी गर्भसंरक्षे हिता स्तन्यप्रदायिनी ॥

Rāja Nighaṇṭu, Āmrādi phala varga, 135.

उदुम्बरभेदाः

क. नद्युदुम्बरिका—

नद्युदुम्बरिका चान्या लघुपत्रफला तथा ।

प्रोक्ता लघुहेमदुग्धा लघुपूर्वसदाफला ॥

लघ्वाद्युदुम्बराह्वा स्याद्वाणाह्वा च प्रकीर्तिता ।

रसवीर्यविपाकेषु किञ्चिन्न्यूना च पूर्वतः ॥

Rāja Nighaṇṭu, Āmrādiphala varga, 130-131.

ख. काकोदुम्बरिका—

पिच्छिलविवृतयोनी

Rāja Nighaṇṭu, Āmrādiphala varga, 132-134.

योनिपिचुधारणार्थम् उदुम्बरादितैलम्

उदुम्बरस्य दुग्धेन षट्कृत्वा भावितात्तिलात् ॥

तैलं क्वाथेन तस्यैव सिद्धं धार्यं च पूर्ववत् ।

Caraka Samhitā, Cikitsā, 30-77/78.

तृष्णानिग्रहणार्थम्

‘पर्यागतोदुम्बरजो रसस्तु सशर्करस्तत्क्रथितोदकं वा ।’

Suśruta Samhitā, Uttara, 48-22.

नेत्ररोगे

उदुम्बरफलं लोहघृष्टं स्तन्येन धूपितम् ।

साज्यैः शमीच्छदैर्दाहशूलरागाश्रुहर्षजित् ॥

Āṣṭāṅga Hṛdaya, Uttara, 16-36.

प्रमेहपीडकायाम्

क्षीरमौदुम्बरं यन्नालकुचं वा प्रयोजयेत् ।

पिडकासु समस्तासु लेपनं सम्प्रशान्तये ॥

Gadanigraha, 4-1-118.

गर्भधारणार्थम्

वन्दाकमौदुम्बरमादरेण बन्ध्याङ्गना पुष्पविशुद्धिवारे ।

पूर्वविरिक्ता लभते कुमारं छागस्य दुग्धेन सह प्रपीय ॥

Vaidyamanoramā, 13-11.

रक्तपित्ते

उदुम्बराणि पक्वानि गुडेन मधुनापि वा ।

उपयुक्तानि निघ्नन्ति नासारक्तं नृणां ध्रुवम् ॥

Rāja mārtaṇḍa, 4-3.

‘उदुम्बरफलं पिष्ट्वा पिबेत्तदरसमेव वा ।’

Suśruta Samhitā, Uttara, 45-23.

पक्वोदुम्बरकाश्मर्यपथ्याखर्जूरगोस्तनाः ।

मधुना घ्नन्ति सलीढा रक्तपित्तं पृथक् पृथक् ॥

Vṛndamādhava, 9-19.

हिक्कायाम्

उदुम्बरशलाटूनि स्निन्नानि जलवाष्पतः ।

दध्ना वा पायसं सिद्धमद्यादत्यग्निशान्तये ॥

Caraka Samhitā, Cikitsā, 15-230.

अत्यग्नौ

नारीस्तन्येन संयुक्ता पिबदौदुम्बरीत्वचम् ।

ताभ्यां वा पायसं सिद्धमद्यादत्यग्निशान्तये ॥

Caraka Samhitā, Cikitsā, 15-230.

ग्रहणीरोगे

उदुम्बरशलाटूनि स्विन्नानि जलवाष्पतः ।

दध्ना विनीय भुञ्जीत ग्रहणीस्लापितो नरः ॥

Siddhabhaiṣajya Maṇimālā, 4-180.

अतिसारे

न्यग्रोधोदुम्बराश्चत्थप्लक्षपद्मादिपल्लवाः ।

कषायाः स्तम्भनाः शीताः हिताः पित्तातिसारसारिणाम् ॥

Caraka Samhitā, Sūtra, 27-105.

न्यग्रोधोदुम्बराश्चत्थशुङ्गानापोथ्य वासयेत् ।

अहोरात्रं जले तप्ते घृतं तेनाम्भसा पचेत् ॥

तदर्धशर्करायुक्तं लिह्याद् सक्षौद्रपादिकम् ।

अद्यो वा यदि वाप्यूर्ध्वं यस्य रक्तं प्रवर्तते ॥

Caraka Samhitā, Cikitsā, 19-99/100.

UPAKUÑCIKĀ

Botanical name : *Nigella sativa* Linn.

Family : Ranunculaceae

Classical name : Upakuñcikā-kālājāji

Sanskrit names

Upakuñcikā, Kālājāji, Kālikā, Utkuñcikā, Kāravī, Prthvī-Prthvikā, Suṣavī, Kalvāñjikā, Vāspikā, Kuñcī, Varakṛṣṇa, Upakālikā.

Regional names

Kalounji, Mangrella (Hindi); Mungrela, Kalajira (Beng.); Kalonji (Mar.); Kalounji (Guj.); Karunajiragam (Tam.); Nallajila Kair (Tel.); Karejiroga (Kann.); Karunachiragam (Mal.); Shinij (Arabic); Syahadan (Pers.); Small fennel, Black cumin, Nutmeg flower (Eng.).

Description

A pretty herb, 30-60 cm. high. Leaves 2-3-pinnatisect, 2.5-5 cm. long cut into linear or linear-lanceolate segments. Flowers 2-2.5 cm. across, pale blue on solitary long peduncles; sepals ovate, acute, clawed; petals 8; nectarial, geniculate, with a saccate-gland in the knee, one on the face and one on the apex of the each lobe; carpels 5-7, inflated, warty at the sides, united to the top; beak as long as the ovary. Seeds trigonous, rugulose-tubercular.

Seeds drug characters : Seeds small black, 3-4 angled, pointed at the macropylar end and rounded at the other end with uneven surface, dicotyledonous, mostly of the same size, measuring 2.3×1.2 mm. in diam.

Seeds black oily, 3-4 angled with uneven surface, irregular distribution of large circular and small polygonal thickwalled cells with papillate to the epidermis tegment cells with characteristic scalariform pitted wall thickenings, fatty and proteinaceous food matters present in the cotyledon cells.

Flowering and fruiting time

Distribution

Plant grows wild in forest areas. It is also an occasional wild of cultivation. Plant is cultivated under the farming practices for flavouring material, food additives and medicinal item produce in rural regions in certain states in country i.e. Bihar, Punjab, H.P., Assam and other provinces. Cultivation is suitably taken particularly in the areas generally with dry soil, increasing level of salinity in irriga-

tion water decreases the vegetative growth and seeds yield. Produce of seeds is marketed as the dried seeds are available in the market of spice, aromatic and medicinal herbal raw material. Farming is generally taken in western parts.

Kinds and varieties/Substitutes and adulterants

The market samples of the seeds of *Nigella Sativa* Linn. are often adulterated. The seeds of *Argemone mexicana* Linn. are often adulterated by mixing with black cumin seeds. According to the prevention of food Adulteration Rules, black cumin must conform to the following standard foreign organic matter 5% total ash 7%, HCL-insoluble ash 1.25% and volatile oil 0.5%. Black cumin supply needs to consists of whole seeds and not in broken or powder form and the total alcohol soluble acidity (oleic acid) should exceed 6.5% according to standards.

Chemical composition

Some non-protoplasmic cells contents like alkaloid, saponin, sugar, fat, volatile oil, protein, mucilage, lignin and cutin present in crude drug react positively with different concentrations of acids, alkalies, salts and dyes.

Chemical analysis of black cumin gave the values (in percentage) : total ash 3.8-5.3; ash insoluble HCL 0.5, volatile oil 0.5-1.6, ether soluble extractive (fatty oil) 35.6-41.6 and alcoholic acidity (as oleic acid) 3.4-6.3.

The seeds gave on steam distillation a yellowish brown volatile oil with an unpleasant odour.

The seeds contain volatile oil is the active constituent. It contain of carvone, an unsaturated ketone, terpene or d-limonene also celled carvene and cymene.

Extraction with benzene and subsequent steam-distillation of extract to remove the volatile oil gave 31% of a reddish brown and semi-drying oil. The oil has following characteristics : specific gravity (35°) 0.9152, 21°, 1.4862, acid value 42.83, saponification value 199.6, iodine value 117.6, acetylation value 89.6, R.M. value 3.9 and unsaponified matter 0.03. The fatty acids of the oil are as follow : myristic 0.26, palmitic 6.31, stearic 2.45 and linoleic 35.99.

The components of glycyrides of the oil are as follow : tridonoleine 25; oleodinoleine 25, dioleodinolein 42, palmitoleo-linolein 24 and stearo-oleolinolein 7. Glycyrides of some volatile acids are also present in the oil at the small quantities. The chemical analysis of black cumin oil has been conducted under various studies and data are reported.

A saponin was also isolated and characterized from the ethanolic extract of the seeds of *Nigella sativa*. The structure of nigellicine, an unusual alkaloid from seeds of *Nigella sativa* was determined by x-ray diffraction and spectroscopic technique. Earlier chemical screening isolated and characterised two isomeric octadecenoic acids (Petroselinic acid) and oleic acid which occur in black cumin seed fat.

Chromatographic studies have been carried out on the seeds *Nigella sativa* Linn. (Upakuñcikā) and results are shown in the data in detail on record. From the spectral data it was indicated that nigellicine, the crystalline alkaloid, was highly conjugated molecule of an unfamiliar structural type. Nigellicine could be recrystallized from aqueous methanol or ethanol in a form suitable for X-ray diffraction analysis. In addition to nigellicine, two alkaloids have been isolated from *Nigella sativa* Linn. in very small quantity.

The ethanol extract of the seeds of Upakuñcikā or *Nigella sativa* Linn. afforded a fraction containing saponin after partition between HCL and n-butanol. A saponin was isolated from this fraction. The saponin was analysed by H and CNMR spectroscopy which showed that it contained triterpenoic acid and six sugars. Acid hydrolysis of the saponin yielded hederagenin. The monosachrides released were also analysed as their alcohol acetate (by GC MS) and their absolute configuration (by GC) after reaction with (-)-2-butanol and trimethylation L-Rhamnose, D-Glucose, D-xylose and L-Asobinose on the relative portions 2:2:1:1 were the only sugar detected. The linkages by which the sugar residues are connected were determined by methylation analysis. Alkaline hydrolysis of the saponin followed by

reduction yielded a prosapogenin and a reduced trisacchride analysed by sugar and methylation analysis.

Mainly the chemical profile of seeds of drug Upakuñcikā or Kālājāī contains an yellowish brownish volatile oil 0.5-1.6% and a brownish-reddish fixed oil 31% and they also contain albumin, sugar, carbonic acid, toxic saponin, melanthin, arohic acid, a bitter principle nigellin, resin, tannin and ash 7%. Volatile oil consists of carvone 45-60%, d-cymine and nigelione which is brancho-dilator.

Pharmacodynamics

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, rūkṣa, tikṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma Pittavardhana.

Properties and action

Karma	: Garbhāśayaśāntoka-aparāpātana Stanyajanana Dourgandhyahara Rocana-dīpana-pācana-anulomana Grāhī Kṛmighna Arśoghna Kaphaniḥsāraka Mūtrala Svedajanana Jvaraghna Śītapraśamana Lekhana-śothahara- vedanāsthāpana-uttejaka
Roga	: Aruci-agnimāndya-ajīrṇa-ādhmāna Udaraśūla-udara-roga-gulma Kṛmīroga-gaṇḍūpadakrimi Vātavyādhi-sandhiśoṭha Kaṣṭhāprasava-prasavottara vikāra- makkalāśūla (aparāpātana) Yonīśūla Rajorodha

Mūtrāghāta-aśmarī
 Tvagdoṣa-carmavikāra
 Khālitya
 Śiraḥśūla
 Kāsa-śvāsa-pārśvaśūla
 Pratiśyāya
 Viṣamajvara-śītajvara
 Raktapittapitta.

Therapeutic uses

The seeds of black cumin are bitter with a sharp and pungent taste. The seeds used as drug Upakuñcikā or Kālājāji. It is aromatic, appetizer, stimulant, carminative, diuretic, emmenagogue, galactagogue, anthelmintic and used in the treatment of mild cases of puerperal fever. The powdered seed mixed with sesame oil as often externally applied on the eruptions of the skin. The seeds of black cumin in combination with other drugs are suggested for the treatment of snake-bite as per classical texts and also in scorpion-sting.

The seeds are considered as hot and dry, slightly bitter, with a sharp taste and they are used as diuretic, emmenagogue, abortifacient, vermifuge or anthelmintic. Seeds are useful in ascites, lung complaints, cough, jaundice, hydrophobia, tertian fever, paralysis and eye-sores. They are used as a good adjunct to purgative and for piles.

The antibacterial activity of alcoholic extracts of the seeds of drug Kālājāji has been observed. Similarly antibacterial activity of the essential oil of seeds drug has also been found. The drug Upakuñcikā has been indicated as an antibacterial agent. Upakuñcikā bija taila (black cumin seeds oil) has been microbiologically studied and the results find that the seeds oil is effective against gram positive and gram negative bacteria. The lowest minimum inhibitory concentration (0.50 mcI/disc) was found against *Bacillus polymyxa*. According another investigation on antibacterial aspect of the drug, the essential oil from the seeds of Upakuñcikā (*Nigella sativa* Linn.) was found to potentiate pentobarbitone induced sleeping time, increase ambulation scores in open field arena test with no appre-

cial effect on rearing and grooming increase immobility time of rats in PST and exhibited significant analgesic activity in rats and mice. Fertility of male rat was inhibited by treatment for 20 days with 25 mg. of ethanol extract of the seeds of drug plant on alternate days. Alcoholic extract of the seeds of Upakuñcikā showed cytotoxic activity in a concentration of 25 mg. which is equivalent to dry powder against Dalton lymphoma ascites cells. Alcoholic extracts of the seeds show antibacterial activity against *micrococcus pyogenes* var. *aureus* and *Escherichia coli*. Antibacterial efficacy of drug is useful therapeutic utility in different ailments.

Therapeutically the seeds of Upakuñcikā are administered in different diseases; and the seeds of drug show pharmacological action against some ailing conditions and effect on human body variously.

In stage of difficult labour or abnormal delivery (mūḍha garbha), the seeds decoction or powder is given to expecting mother. Seeds are similarly recommended for oral administration during puerperal period (sūtikā kāla) in view of its galactagogue, protective and health promoting action on uterus, genital organs, reproduction system and woman body as a whole. The paste of Upakuñcikā seeds mixed with Elā (Lesser cardamomum) and Devadaru (*Cedrus deodara*) is classically prescribed to be applied for expelling placenta (aparāpātana rtham) in process of complete delivery (prasava), in view of drug's action on uterus (garbhāśaya saṅkocaka and garbhāśaya viśodhana). In cases of female genitals (yonisūla), the drug seeds with Vacā (*Acorus calamus*) etc. may be pounded with clear wine and fried with ghee. This recipe is prescribed to be taken for removing pain in female genitals and the medicine also checks cardiac disorders, gulma and piles (hṛdroga gulmārśa). The seeds are orally used in females in menstrual disorders (rajaṛodha-kaṣṭārtava) in view of its emmenagogue action.

The fine powder of seeds is snuffed in jaundice and headache. Seeds oil is locally applied to affected joints and organs in vāṭavyādhi and sandhiśoṭha, and the paste of

seeds is also topically applied to inflamed and painful joints. The seeds are burnt for using their smoke medicinally as fumigation is suggested in cases of haemorrhoids and coryza. Seeds are externally applied to skin affections and baldness (khālitya).

In malarial fever (viṣamajvara), the seeds powder with gur is given orally. Seeds are suggested in scanty urine (mūtrāghāta). Seeds are useful in cough, chest pain and asthma as the seeds have expectorant properties. Seeds are useful in various ailments of digestive system such as dyspepsia, loss of appetite, foul smell of mouth, flatulence, abdominal colic, diarrhoea and worms affections. Seeds are suggested to be used in round worms affection (gaṇḍūpada kṛmi). specially seeds are mixed with other anthelmintic and purgative medicine in order to check gripping.

In treatment of gulma, arśa and udararoga the compound formulations (yoga) of Kṣārāgada, Takrāriṣṭa and udaravikāra are respectively prescribed; these all formulations contain seeds of drug Upakuñcikā. Drug is useful in Kaphavātaroga in general. In irregular fever, Upakuñcikā or Kālājāi seeds are taken. The seeds of drug 2.5 gm. mixed with double quantity sugar in intrinsic haemorrhage (raktapitta) with condition of metallic smell appearing in breath and erucations.

Besides therapeutic utility of drug Upakuñcikā, the seeds are commonly used as household aromatic and flavouring item and particularly in Achar and other dietetic preparations.

In Unani system of medicine, the drug known as Habbutusouda and Syahdan etc. is recommended as a potent medicine and used in various diseases owing to medicinal properties of seeds and seeds oil of drug.

Parts used : Seeds.

Dose : 1-3 gm.

Formulations : Nārāyaṇa cūrṇa, Kṣārāgada, Takrāriṣṭa.

Group (gaṇa) : Caturbija.

UPAKUṆCIKĀ-KĀRAVĪ (उपकुञ्जिका-कारवी)

पृथ्वीका कटुतीक्ष्णोष्णा वातगुल्मामदोषनुत् ।

श्लेष्माध्मानहरा जीर्णा जन्तुघ्नो दीपनी परा ॥

Rāja Nighaṇṭu, Pippalyādi varga, 64.

तीक्ष्णोष्णं कटुकं पाके रुच्यं पित्ताग्निवर्धनम् ।

कटु श्लेष्मानिलहरं गन्धाढ्यं जीरकद्वयम् ॥

कारवी करवी तद्वत् विज्ञेया सोपकुञ्जिका ॥

Suśruta Samhitā, Sūtra, 46.

कल्वञ्जिका पाचनदीपनी परा सन्धानयोग्या कफवातहारिणी ।

प्रवर्तयस्यार्तवमुष्णवीर्या भक्तेऽपि भक्तिं बहुलीकरोति ॥

Siddha Bhaiṣajyamaṇimālā.

कालिका कारवी पृथ्वी पृथ्वीका चोपकुञ्जिका ।

सुषवी वाष्पिका कुञ्जी वरकृष्णोपकालिका ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1183.

जीरकत्रितयम् (शुक्लकृष्णजीरके कारवी च)

जीरकं कटुतिक्तोष्णं रूक्षं पाकोषणं लघु ।

रुच्यं सङ्ग्राहि चक्षुष्यं गर्भाशयविशोधनम् ॥

पित्तलं दीपनं मेध्यं हृद्यं वातकफापहम् ।

सुगन्धि पाचनं छर्दिगुल्माध्मानातिसारजित् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1187-1188.

अपरापातनार्थम्

‘तथा सूक्ष्मैलाकिलिमकुष्ठनागरविडङ्गिपिप्यलीकाला-

गुरुचव्यचित्रकोपकुञ्जिकाकल्कं पाययेदेनाम् ।’

Caraka Samhitā, Śārīra, 8-41.

रक्तपित्ते

लोहगन्धिनि निःश्वास उद्गारे धूमगन्धिनि ।

पृथ्वीकां शाणमात्रं च खादेद् द्विगुणशर्कराम् ॥

Vṛndamādhava, 9-25.

अश्मर्याम्

उत्कुञ्जिका हिङ्गुसेवतसाम्लं स्वादूद्देवृहत्यौ हपुषा वचा च ।

चूर्णे पिबेदश्मरीभेदपक्वं सर्पिश्च गोमूत्रचतुर्गुणं तैः ॥

Caraka Samhitā, Cikitsā, 26-61.

प्रतिशयाये

घ्रेयाश्च रोहिषाजाजीवचातर्कारिचोरकाः ।
त्वक्पत्रमरिचैलानां चूर्णा वा सोपकुञ्चिकाः ॥

Caraka Samhitā, Cikitsā, 26-138.

गुल्मे

क्षारागदः

Āṣṭāṅga Hṛdaya, Cikitsā, 14-102/106.

अर्शसि

तक्रारिष्टः

Āṣṭāṅga Hṛdaya, 8-45/47.

उदरे

नारायणचूर्णम्

Caraka Samhitā, Cikitsā, 13-125/132.

योनिशूले

वृषकं मातुलङ्गस्य मूलानि मदयन्तिकाम् ।
पिबेत् मद्यैः सलवणैस्तथा कृष्णोपकुञ्चिकैः ॥

Āṣṭāṅga Hṛdaya, Uttara, 34-32.

वचोपकुञ्चिकाजाजीकृष्णावृषकसैन्धवम् ।
अजमोदायवक्षारशर्कराचित्रकान्विताम् ।
पिष्ट्वा प्रसन्नयाऽलोड्य खादेत् घृतभर्जितम् ।
योनिपार्श्वार्तिहृद्रोगगुल्माशौ विनिवृत्तये ॥

Āṣṭāṅga Hṛdaya, Uttara, 34-30/31.

UPODIKĀ

Botanical name : *Basella rubra* Linn.

Family :

Classical name : Upodikā

Sanskrit names

Amṛtavallārī, Upodakā, Kanṭaki, Ūrdhvagavallī,
Upodikā, Potakī, Vṛttapatrā, Picchilachadanā, Matsyakalā,
Turangī, Kalambikā, Raktadaṇḍā, Sthirā.

Regional names

Poi, Poy, Poi shak (Hindi); Poi (Beng., Mar.); Batsala (Tel.); Basale (Kan.); Basala (Mar.).

Description

A perennial twining herb with leaves upto 5 in. by 3 in., broadly ovate and pointed at the apex. Young stems and leaves are markedly fleshy. Plant grown as pot-herb.

Basella alba and *B. cordifolia* have been described as distinct species but are generally considered to be only varieties of *Basella rubra* Linn.

Flowering and fruiting time**Distribution**

Plant is grown as a pot-herb in almost every part of India except the hills.

Kinds and varieties

The red-leaved and green-leaved varieties are equally common in Bengal, Assam and South India, while the green-leaved ones are found more often Uttar Pradesh and adjacent states and Punjab. The plants can be raised either from seeds or from roots or stem cuttings, and a spacing of 3" is given between them. They are often made to grow on shades and are ready for picking within three months (80-90 days).

Chemical composition

The plant is reported to contain protein 1.2, calcium 15%, iron 1.4 mg., vitamin A, 3.250 I.U., vitamin B₁, 40 I.U., vitamin B₂, 10; Sherman U/100 g. Leaves contain high amount of mucilage. Red variety is reported to contain colouring matter and the fruits of some races contain a deep violet colouring matter.

Pharmacodynamics

Rasa	: Madhura
Guṇa	: Picchila, snigdha
Virya	: Śīta
Vipāka	: Madhura
Doṣakarman	: Vātapittaśāmaka Kaphavardhana,

Properties and action

Karma	: Vraṇa pācana-vimlāpana Sara-anulomana-bhedana Dāhapraśamana
Roga	: Śītapitta Vibandha Vraṇaśoṭha Dāha.

Therapeutic uses

The pounded or ground leaves, on account of the presence of mucilage, are used as poultice. The juice of leaves is prescribed in cases of constipation, particularly in children and pregnant women. the colouring matter of the red variety is reported to be useful as a dye seals as well as for rouge. It can serve for mounting jellies but it is not considered good for use much of it. The addition of a little lime juice brighten the colour. The ripe fruits of some races contain a deep violet colouring matter which is sometimes used to colouring food etc.

Upodikā is edible herb. The tender stems and leaves make a very wholesome spinach. Upodikā is useful as one of the vegetable herbs (śaka vanaspati) of domestic utility. The vegetable is considerably medicated and potential for certain ailments as remedy as well as wholesome diet or vegetable suitable to some particular ailing conditions.

The herb or leaves of Upodikā are cooked with curd (dadhi) and (pomegrenate) seeds (dāḍima bīja) and fried in ghee and oil. It is spiced with coriander (dhānyaka) and ginger (ārdraka) are used as a vegetable. It acts as laxative in piles. Similarly the herb Upodikā cooked with sour badara fruits and butter milk is useful. The gruel cooked with Upodikā and curd is given for pacifying nacrois (mada). The leaves of Upodikā cooked with curd and pomegrenate seeds with ghee are used as vegetable (siddha śāka), in dysentery associated with pain and tenesmus due to retention of faeces. Upodikā is useful as plain vegetable and food in piles and bleeding haemorrhoids.

Externally, the plant drug Upodikā is used in various ailments. The leaves of Upodikā pounded with sour

juice or vinegar are applied externally as paste. Upodikā taila (Baṅgasen, Kṣudraroga, 85) is prescribed for local applicaiton in cracks of feet (pādādāri). A poultice prepared with leaves of Upodikā pounded with sour gruel and buttermilk and mixing of salts, and the same recipe is applied on tumour (arbuda). The leaves of Upodikā are used to cover the boils (pīdikā) and tumour (arbuda) which are also annointed with the juice of Upodikā.

Parts used : Whole plant, leaves.

Dose : 1-3 gm.

Formulation : Upodikā tailam.

UPODIKĀ (उपोदिका)

मधुरा मधुरा पाके भेदिनी श्लेष्मवर्धिनी।

वृष्या स्निग्धा च शीता च मदघ्नी चाप्युपोदिका ॥

Caraka Samhitā, Sūtra, 27.

- क. उपोदक्यूर्ध्वगा वल्ली पिच्छिलच्छदना स्थिरा।
वृत्तपत्रा रक्तदण्डा रक्तबीजा च सा स्मृता ॥
- ख. स्वादुपाकरसा वृष्या वातपित्तमदापहा।
उपोदिका सरा स्निग्धा बल्या श्लेष्महरी हिमा ॥

Suśruta Samhitā, Sūtra, 46.

पोतकी

- क. पोतक्यूपोदिका सा तु मालवाऽमृतवल्लरी।
- ख. पोतकी शीतला स्निग्धा श्लेष्मला वातपित्तनुत् ॥
अकण्ठ्या पिच्छिला निद्राशुक्रदा रक्तपित्तजित्।
बलदा रुचिकृत्पथ्या बृंहणी तृप्तिकारिणी ॥

Bhāvaprakāśa Nighaṇṭu, Śāha varga, 8-9.

उपोदका

- अ. पोतक्यूपोदका मत्स्यकाली सुतुङ्गिसङ्कटी ॥
कलम्बिका वृकान्त्री च तुरङ्गी कण्टकी तथा।
मदघ्नी पिच्छिला ज्ञेया वृत्ता मदलिका मता ॥
- ब. उपोदका हिमा स्निग्धा स्वादुपाकरसा सरा।
सक्षारा श्लेष्मला बल्या निद्राशुक्रातिपुष्टिदा ॥

अकण्ठ्या पिच्छिला हन्ति रक्तपित्तमदानिलान् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 656-659.

मर्मगतार्बुदानां शमनार्थम् उपोदिकोपनाहः

उपोदिका काञ्जिकतक्रपिष्टा तथोपनाहो लवणेन मिश्रः ।

दृष्टोऽर्बुदानां प्रशमाय कैश्चिद्दिनेदिने रात्रिषु मर्मजानाम् ।

Vṛndamādhava, 41-43.

Cakradatta, Galagaṇḍādi Cikitsā, 41-58.

पीडिकाऽर्बुदचिकित्सायाम् उपोदिकारसप्रयोगः

उपोदिकारसाभ्यक्तास्तत्पत्रपरिवेष्टितः ।

प्रणश्यन्त्यचिरान्नुणां पिडिकाऽर्बुदजातयः ॥

Vṛndamādhava, 41-42.

Cakradatta, Galagaṇḍādi cikitsā, 41-57.

क्षुद्रोगान्तर्गतं पाददारीनाशनायोपोदिकादिक्षारतैलम्

उपोदिकासर्षपनिम्बमोक्षककर्कारुकैर्वारुभस्म तोये ।

तैलं विपक्वं लवणांशयुक्तं तत् पाददारीं विनिहन्तिलेपात् ॥

Cakradatta, Kṣudraroga cikitsā, 55-13.

पाददार्याम्

उपोदिकादितैलम्

Baṅgasena, Kṣudraroga, 85.

दाहज्वरे

अम्लपिष्टैः सुशीतैश्च फेनितापल्लवैस्तथा ।

अम्लपिष्टैः सुशीतैर्वा पलाशतरुजैर्दिहेत् ॥

Suśruta Samhitā, Uttara, 39-284.

मदे

‘उपोदिकादधिभ्यां तु सिद्धा मदविनाशिनी ।’

Caraka Samhitā, Sūtra, 2-33.

सुखप्रसवार्थम्

पोतकीमूलकल्केन तिलतैलयुतेन च ।

योनेरभ्यन्तरं लिप्त्वा सुखं नारी प्रसूयते ॥

Bhāvaṇṭakāśa, Cikitsā, 70-108.

प्रवाहिकायाम्

उपोदिकाया....शुष्कशाकेन वा पुनः ।

दधिदाडिमसिद्धेन बहुस्नेहेन भोजयेत् ॥

Caraka Samhitā, Cikitsā, 19-31/33.

अशंसि

‘तक्रेणोपोदिकां सबदरात्मम्।’

Caraka Saṃhitā, Cikitsā, 14-204.

उपोदिकां.... ।....

दधिदाडिमसिद्धानि यमके भर्जितानि च ।

धान्यनागरयुक्तानि शाकान्येतानि दापयेत् ॥

Caraka Saṃhitā, Cikitsā, 14-133/135.

URUMĀṆA

Botanical name

Prunus armenica Linn.

Syn. Prunus vulgaris Lam.

Family : Rosaceae

Classical name : Urumāṇa

Sanskrit name : Urumāṇa

Regional names

Khumani, Khubani, Jardalu (Hindi); Iser (Kash.); Zardalu (Punj.); Khumani, Chola, Chuaru, Gurulu, Sari (U.P. hills); The Apricot (Eng.).

Description

A moderate-sized deciduous tree. Trees attain height of 30-35 feet and 5-6 feet girth.

Leaves nearly glabrous, petioles of young leaves pubescent. Leaves convolute in bud, broadly ovate, usually ovate, nearly as broad as long, acuminate, crenate; petiole glandular, half the length of leaf; stipules lanceolate.

Flowers pinkish-white, solitary or fasciculate, appearing before or with the leaves from scale buds on the previous years wood; peduncles generally short, included in buds. Calyx campanulate.

Drupe downy or smooth with a tender, succulent, rapid pericarp, the stone smooth, with a thickened sulcate margin.

Flowering and fruiting time

Summer season to winters tree are flowering during the period from summers to winters which varies to locali-

ties at different elevations as the fruits ripen within period from the summer season or rains to autumn and onwards.

Distribution

It is commonly cultivated in the north-west Himalayas, in the plains and other higher of areas Himachal Pradesh. It is also found seemingly wild in the Himalayan regions.

Kinds and varieties

Apricot (*Prunus armeniaca*) includes a mainly *Prunus dasycarpa* Ench. and number of botanical varieties and cultivated types, some of them often considered as distinct species or sub-species. All these types yield fruits either small or of an inferior quality than *Prunus armeniaca* Linn. Apricot fruit being commercial importance carries several varieties in India and various countries.

Chemical composition

Fruit (fresh apricot), yields 86 per cent of edible matter which contains : moisture 85.3, protein 1.0, fat (ether extr.) 0.3, fibre 1.1, other carbohydrates 1.6 and mineral matter 0.7 per cent; calcium 26 mg., phosphorous 25 mg., iron 2.2 mg., vitamin A value 3.66 I.U., thiamine 0.04 mg., ascorbic acid 6 mg. and calories 553/100 g. Fruit contain iodine.

Fruits contain good amount of sugar, vitamin C and A, iron and thiamine. Average ascorbic acid values of some important types of apricot (U.P hills) range from 4.6 to 6.9 mg./100 g. which may vary to type of fruits and areas of production.

Pharmacodynamics

Rasa	: Madhura
Guṇa	: Guru, snigdha
Virya	: Uṣṇa
Vipāka	: Madhura
Doṣakarma	: Tridoṣahara, Pittasāraka.

Properties and action

Karma	: Śothahara
	Vedanāsthāpana
	Raktastambhana
	Dīpana

	Kṛmighna
	Snehana-anulomana
	Sāraka-virecana
	Vṛṣya-vājīkaraṇa
	Aśmaribhedana
	Mūtrala
	Jvarahara
	Balya-pouṣṭika
	Dāhapraśamana
	Tṛṣṇānigrahaṇa
	Rocana-susvādu.
Roga	: Agnimāndya-aruci
	Vibandha-ānāha
	Śotha-vedanā
	Dāha
	Tṛṣṇā
	Mūtrakṛcchra-mūtrāghāta
	Aśmarī
	Kṛmiroga
	Karṇaroga
	Raktasrāva-raktapitta
	Śukravikāra-kāmaśaitya
	Dourbalya-dhātukṣaya.

Therapeutic uses

The drug Urumāṇa is stomachic, tonic, aphrodisiac, diuretic, anthelmintic, demulcent, laxative and haemostatic.

The fruits are useful in constipation, debility, sexual or seminal debility, burning sensation, excess thirst, oedema, raktapitta, dysuria, calculus, loss of appetite, fever and worms.

The fruit are suggested as wholesome (pathya or hitatama) in various diseases. They are rich in nutritive values.

Urumāṇa is one of the ingredients of Jivaniya ghr̥ta, incorporated in Caraka Saṁhitā (Cikitsā, 29-65), alongwith other dry fruits; this yoga is prescribed in management of vātarakta.

Urumāṇa (apricot) fruit is a good source of sugars and vitamin A and it has appreciable amounts of thiamine and iron. They are medicinally potent.

Urumāṇa (apricot or Khumani) is used as a table fruit in the region where it is grown. It is highly perishable and is preserved for use in a number of ways. Dried apricot (śuṣka urumāṇa), Kernel (bija majjā) and kernel oil (sweet-morpankha and bitter-chuaru or chawaru prevalent in U.P. hills) are also useful medicinally as well as they are carrying other uses and also aconomic important.

Urumāṇa taila (apricot kernel oil) is medicinally used and it has utility in food, cosmetics and pharmaceutical preparations.

Parts used : Fruits, seeds-kernel, Oil, flowers, leaves.

Dose : Fruit (ripe) edible., 10-20 gm.

URUMĀṆA (उरुमाण)

‘गुरुष्णाः स्निग्धमधुराः सोष्मणा बलप्रदाः ।’

Caraka Saṁhitā, Sūtra, 27.

‘उरुमाणप्रभृतीनि ।

पित्तश्लेष्मकराण्याहुः स्निग्धोष्णानि गुरुणि च ।’

Suśruta Saṁhitā, Sūtra, 46

वातरक्ते

जीवनीयघृते

Caraka Saṁhitā, Cikitsā, 29-65.

ŪṢAKA

Botanical name : Dorema ammoniacum D. Don.

Family : Apiaceae (Umbelliferae)

Classical name : Ūṣaka

Sanskrit name : Ūṣaka

Regional names

Ushak, Usava (Hindi, Arab.); Usha (Pers.); Kandal (Afghani); Gum Amonic (Eng.).

Description

Plant, belonging to a small genus of resiniferous perennial herbs, is the source of the oleo-gum resin, known under the name Ammoniacum or Gum Ammoniac (Ushak) and the drug Ūṣaka.

Milky resinous juice exudes profusely from the flowering and fruiting stems as a result of insect injury and dries into tears on the stems or falls to the ground and hardens into lumps. Tears are likely to be free from gross extraneously impurities and are preferred in the trade. They are 5-25 mm. in diam., opaque, yellowish on the surface and white within, breaking with a conchoidal, shining, waxy fracture. the resin has a balsamic odour and a bitter, somewhat acrid taste.

Distribution

Plant *Dorema ammoniacum* D. Don. (source of oleo-gum resin Ammoniacum) is a native of Persia surrounding regions. It is imported into India. Plant is occurring in Iran, Afghanistan and Europe.

The source plant belongs to a small genus of resiniferous perennial herbs distributed in south-west Asia.

Chemical composition

It contains volatile oil 0.1-1.0, resin 85-70, gum C 20, moisture 2-12, ash 1.0 and insoluble residue 3.5 per cent; and salicylic, valeric and butyric acids are present.

Pharmacodynamics

Rasa	: Tikta, kaṭu
Guṇa	: Rūkṣa, laghu
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma

Properties and action

Karma	: Chhedana-śleṣmahara Śleṣmasthajīvāṇughna- kaphadourgandhyahara Vātaśāma-nāḍibalya Dipana-pācana-anulomana Kṛmighna Yakṛtphliḥśothahara

	Mūtrajanana
	Ārtavajanana
	Svedajanana
	Śothaghna-lekhana.
Roga	: Jirṇakāsa-śvāsa-pārśvaśūla
	Sandhivāta-sandhiśoṭha
	Gaṇḍamālā
	Arśa-carmaroga
	Vraṇa-vidradhi
	Pācanavikṛti-ajirṇa-vibhandha
	Agnimāndya
	Udaravikāra
	Kṛmiroga
	Medoroga
	Apasmāra-pakṣāghāta-ardita-
	vātavikāra
	Mūtrakṛcchra
	Rajaḥvikāra-rajahkṛcchra-kaṣṭārtava
	Kaṣṭaprasava-prasavavikṛti.

Therapeutic uses

The drug Uṣaka is expectorant, stimulant and anti-spasmodic. It is used in catarrh, asthma, chronic bronchitis and enlargement of liver and spleen. Externally it is applied and it acts as a slight irritant.

The drug Uṣaka is in the form of oleo-gum resin known under the name Ammoniacum or Gum Ammoniac. The milky juice exudes profusely from the flowering and fruiting stems as a result of insect injury and dries into tears on the stems or falls to the ground and hardens into lumps. The tears are likely to be free from gross extraneous impurities and are preferred in the trade. They are 5-25 mm. in diam. opaque, yellowish on the surface and white within, breaking with a conchoidal, shining, waxy fracture. The resin has a balsamic odour and a bitter somewhat acrid taste.

The root of drug plant (uṣaka mūla is also medicinal and used as incense. They vary in size (the largest being C. 3 inches in diam. at the crown and more or less forked). A dark coloured ammoniacum is obtained by the extrac-

tion of the powdered root, with boiling obtained by the extraction of the powdered root, with boiling water.

Parts used : Gum-resin.

Dose : 500 mg.-1 gm.

Gaṇa : Ūṣakādi gaṇa, Suśruta Saṁhitā.

ŪṢAKA (ऊषक)

ऊषकारि कफं हन्ति गणो मेदोविशेषणः ।

अश्मरीशर्करामूत्रकृच्छ्रगुल्मप्रणाशनः ॥

Suśruta Saṁhitā, Sūtra, 38.

ऊषकः तिक्तकटुकः लघुरुष्ण कफप्रणुत् ।

वातघ्नो दीपनश्चैव जन्तुघ्नो लेखनो सरः ॥

वातव्याधौ कृमौ जीर्णे कासे श्वासे त्वगामये ।

पार्श्वे शूले मूत्रकृच्छ्रे मेदोरोगे च शस्यते ॥

Dravyaguna Vigyana, Part II, p. 263.

UŚĪRA

Botanical name : *Vetiveria zizanioides* (Linn.) Nash.

Family : Poaceae (Graminae)

Classical name : Uśīra

Sanskrit names

Uśīra, Nalada, Sevyā, Amṛṇāla, Samagandhaka, Jalavāsa.

Regional names

Khas (Hindi); Bala (Ma.); Khaskhas (Beng.); Valo (Guj.); Venaghas (Saurashtra); Vettivel (Tam.); Vettivellu (Tel.); Khaskhas grass, Vetiver khas-khas, Khus-khus (Eng.).

Description

A densely tufted grass, Culms arising from an aromatic rhizome, stout, up to and over 2 meters tall, in dense tufts, with stout spongy, aromatic roots.

Leaves narrow, erect, keeled, glabrous, margins

scabrid. Inflorescence a panicle (15-40 cm. long) of numerous slender racemes in whorls on a central axis, spikelets grey green or purplish, 4-6 mm. long in pairs, one sessile, the other pedicelled, those of each pairs more or less alike in shape and size, different in sex, 2-flowered; lower floret reduced to a lemma, upper bisexual in the sessile, male in the pedicelled spikelets, glumes armed with short, tubercle-based spines, lemmas awnless palea minute.

Flowering and fruiting time

Plant flowers during rainy season and fruiting begins afterwards.

Distribution

Plant is found throughout the plains and lower hills of India, particularly on the river-banks and in rich mashy soil, ascending to an altitude of C. 1,200 meters.

It occurs wild in southern India, Bengal, Central India, Rajsthan, Chhota Nagpur and other various regions in country. Plant occurs in wild state in different states (other than indicated) such as Uttar Pradesh, Bihar, Haryana, Kerala, Tamilanadu, Andhra Pradesh, Gujarat, Assam, Orissa, Madhya Pradesh and other provinces.

The yield of cultivated crop of vetiver however, meets a small quantum of the requirement of khus in the country, as the bulk of the roots used for cooling purposes and for extraction of the oil is obtained from the wild formations of Khus (uśīra) in natural habitat.

Kinds and varieties

There are apparently two types of the grass flowering and (b) non-flowering type. Generally the wild-growing type, commonly found in north India, is mostly of the former type, whereas in South India, both the types are found. Further sub-types or types based on some other features may also be found. For the instance, two types are distinguishable by their difference in the characters of the stem and root, one type has a medium-thick stem with more branching root, and the other a thick stem and less branching roots; the latter type is more common. With regard to the quality and yield of the oil, the plants of certain

have been reported to contain more or higher and also with superior aroma.

Chemical composition

The vetiver oil is one of the most complex of the essential oils (rather its chemistry is very complicated and subject of interesting phytochemical screening). Chemical texts data in detail are on record on different aspects.

It contains a volatile oil, a bitter dark red-brown resinous matter, a colouring matter, free acid, calcium salts, iron, ash and woody substance.

Diextrorotatory vetiver oil and laevorotory vetiver oil are rich sources of several chemical constituents. Vetiver resinoid has specific characteristics.

Pharmacodynamics

Rasa	: Tikta, madhura
Guṇa	: Rūkṣa, laghu
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāma

Properties and action

Karma	: Svedāpanayana Dāhapraśamana-tvagdoṣahara- varṇya Mastiṣkanāḍiśāma Dīpana-pācana Trṣṇānigrahaṇa Chardinigrahaṇa Stambhana Raktaprasādana Hṛdayaśāma-balya Raktarodhaka Kaphaniḥsāraka Mūtrajanana Svedajanana- svedadourgandhyahara Kuṣṭhaghna Jvaraghna Kaṭupouṣṭika Viśaghna.

Roga	: Dāha-atidourgandhya-atisveda- svedadourgandhya Carmavikara Mada-mūrcchā Mastiṣka-vikāra Agnimāndya-ajīrṇa-trṣṇā-vamana Atisāra Raktapitta-raktavikāra- hṛddourbalya Kāsa-hikkā-śvāsa Mūtrakṛcchra Jvara-dāhatṛṣṇādhikya jvara Śoṣa Viṣa Dourbalya.

Therapeutic uses

The drug Uśīra is svedāpanayana that checks over sweating of body; it is varṇya or promoting complexion and skin pigmentation and health as a whole and the drug alleviates burning sensation and cutaneous affections. It is externally applied on skin.

The uśīra jala, uśīra kaṣāya-kvātha, uśīra śrta śīta kaṣāya and other similar therapeutic uses (kalpanā) are made.

The drug is useful in syncope, unconsciousness, brain complaints, dyspepsia, excess thirsts, vomiting, diarrhoea, intrinsic haemorrhage (raktapitta), cough, hic-cough, asthma, bronchial asthma, dysuria, foul (smell) of body-sweatening (deha-sveda dourgandhya), fever (with complications of thirst, burning sensation, vomiting etc.), consumption, general debility and poison (viṣa) and also other ailments.

A decoction of the leaves is recommended as a dia-phoretic. When locally applied in rheumatism, lumbago and sprain, it is a good ambrocatation and affords relief. The plant is used as an anthelmintic for children. External application of Uśīra destroys boils caused by excessive perspiration (svedaja pīdikā).

The vetiver oil (Uśīra taila) is one of the most valuable and important raw materials in perfumery. It is widely used in perfumes and cosmetics, and for scenting soaps. The vetiver oil is used as carminative in flatulence, colic and obstinate vomiting. It is regarded as a stimulant, diaphoretic and refrigerant.

Besides the medicine, the dried roots are utilised in various other purposes; and the young rachis and leaves are useful.

Parts used : Roots.

Dose

Powder 3-6 gm., Infusion 50-100 ml., Aqua, cold infusion 25-50 ml.

Formulations

Uśīrāsava, Uśīrādi kvātha, Uśīrādi cūrṇa, Uśīrādy taila, Śaḍaṇagapānīya.

Groups

Sanyajanana, Chardinigrahaṇa, Dāhapraśamana, Tiktakandha (Caraka Saṁhitā), Sārivādi, Pittasaṁśamana (Suśruta Saṁhitā).

UŚĪRA (उशीर)

उशीरं शीतलं रूक्षं स्वादु तिक्तं हिमं लघु ॥

पाचनं स्तम्भनं हन्ति दोषदाहमदञ्चरान् ।

तृष्णास्त्रविषदौर्गन्ध्यकृच्छ्रकुष्ठवमिब्रणान् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1369-1370.

उशीरं पाचनं शीतं स्तम्भनं लघु तिक्तकम् ॥

मधुरं ज्वरहृद्धान्तिमदनुत्कफपित्तहृत् ।

तृष्णाऽस्त्रविषवीसर्पदाहकृच्छ्रव्रणापहम् ॥

Bhāvaprakāśa Nighaṇṭu, Karpūrādi varga, 87-88.

उशीरं शीतलं तिक्तं दाहश्रमकरं परम् ।

पित्तज्वरार्तिशमनं जलसौगन्ध्यदायकम् ॥

Rāja Nighaṇṭu, Candanādi varga, 154.

वीरणम्

वीरणस्य तु मूलं स्यादुशीरं नलदं च तत् ।

अमृणालं च सेव्यं च समगन्धकमित्यपि ॥

Bhāvaprakāśa.

‘लामज्जकोशीरं दाहत्वग्दोषस्वेदापनयनप्रलेपनानाम् ।’

Caraka Samhitā, Sūtra, 25.

मुस्तपर्पटकोशीरचन्दनोदीच्यनागरैः ।

शृतशीतं जलं देयं पिपासाज्वरशान्तये ॥

Caraka Samhitā, Cikitsā, 3.

उशीरकालीयकलोध्रपद्मकप्रियङ्गुकः कट्फलशङ्ख गैरिकाः ।

पृथक् पृथक् चन्दनतुल्यभागिकः सशर्करास्तण्डुलधावनाप्लुताः ।

रक्तं सपित्तं तमकं पिपासां दाहं च पीताः शमयन्ति सद्यः ।

Caraka Samhitā, Cikitsā, 4.

उशीरजलप्रयोगः

Caraka Samhitā, Cikitsā, 4-102.

उशीरादिकषायः

Caraka Samhitā, Cikitsā, 6-30.

उशीरादिकषायः

Caraka Samhitā, Cikitsā, 12-69.

उशीरादिशीतशृतकषायः

Caraka Samhitā, Cikitsā, 4-87.

स्वेदजपीडिकायाम्

‘उशीरं बहुशो लिम्पेन्नश्येत् श्वेतमसूरिका ।’

Vaidya Manoramā, 11-24.

रक्तपित्ते

उशीरकालीयकलोध्र..... ।

दाहं च पीताः शमयन्ति सद्यः ।

Caraka Samhitā, Cikitsā, 4-73/74.

छर्द्याम्

सेव्यं पिबेत् काञ्चनगैरिकं वा सबालकं तण्डुलदावनेन ।

धात्रीरसेनोत्तमचन्दनं वा तृष्णावमिघ्नानि समाक्षिकाणि ॥

ज्वरे

मुस्तपर्पटकोशीरचन्दनोदीच्यनागरैः ।

शृतं शीतं जलं दद्यात् पिपासाज्वरशान्तये ॥

Caraka Samhitā, Cikitsā, 3-145.

USTAKHADDUSA— USTAKHUDUSA

Botanical name : *Lavandula stoechas* Linn.

Family : Lamiaceae (Labiateae)

Classical name/Common name : Ustakhaddusa.

Regional names

Dharu (Hindi); Ustakhaddusa, Ustukhudusa, Ustakhadusa (Indian trade); Anisulasvah (Pers.) Flowers : Zaram Jaram; Jahar jajaram; Alphajan (Bomb.); Tuntuna (Beng.); Arabian or French Lavender, *Lavandula* (Eng.).

Description

A fragrant herb, 0.6-0.9 meters high, native of the mediterranean region, grown in some gardens in Western India. Leaves sessile, oblong-linear. Flowers small, dark, purple, in dense short-peduncled spikes; lavender fragrance.

Herb 2-3 feet tall, harsh camphoraceous aroma.

Leaves sessile, oblong-linear.

Flowers small, dark, purple, in dense short-peduncled spikes, minute hairy or glabrous, with camphoraceous odour.

Seeds minute, flat, black-yellow coloured.

Flowering and fruiting time

August-November or around.

Distribution

Plant occurs in Mediterranean region. It is planted in gardens in Western India. Dried plant and flowers are reported to be imported from Persian Gulf.

Kinds and varieties

There are two other medicinal plants which are considered botanical sources or Indian substitutes of Ustakhaddusa viz. *Prunella vulgaris* Linn. syn. *Brunella vulgaris* L. and *Lavandula burmani* Benth. syn. (*oustakhaddus* Punj.) *Lavandula bispinosa* O. Kuntze., commonly known as Kashmiri Ustakhadus and Jangli Lavender (Sarpano Chharro-Guj.) respectively.

Lavandula bipinnata Kuntze. syn. *Lavandula burmanni* Benth. An erect or slender erect herb, 0.6-1.0 m. high, found in Bihar, Chhota Nagpur, Orissa, Madhya Pradesh, Rajasthan, Sourashtra, Deccan and Konkan south ward to Kerala. Leaves sessile or nearly so, pinnatipartite or deeply pinnatisect, segments linear, entire, cut or toothed. Flowers small blue or white, fragrant in axillary or panicle spikes. Nutlets minute, oblong-ellipsoid, black, smooth, mucilaginous when wet.

Plant flowers in October-November. Plant is occurring in different states in India.

Chemical composition

Dried flowering tops (on steam-distillation) yield 0.75% of a volatile oil possessing a strong camphoraceous, somewhat harsh, odour suggestive of lavender-spike and rosemary oils.

The characteristics of French oil are as follow : specific gravity 0.945-0.962, acid valency 0.93-5.16, ester valency 18.1-7.74 (after acetylation 47-14), sol. in 5 vols. and more of 60% alcohol. The oil contains 80% Ketones (d. ceneophor and d-frenchone), cineole and fenchyl alcohol and probably terpineol are present.

Pharmacodynamics

Rasa	: Kaṭu, Tikta
Guṇa	: Rūkṣa, laghu, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarman	: Vātakaphasāmakā.

Properties and action

Karma	: Medhya-smṛtidāyaka Nāḍībalya-tamodoṣa (āvaraṇa)- nivāraka-mastiṣkamalaśodhaka Vedanāsthāpana-ākṣepahara Śothahara (śvayathuvilayana) Dīpana-anulomana-yakṛdduttejaka Hṛdayottejaka- raktasamvahanottejaka Śirovirecana-kaphasamśodhaka- śleṣmavirecana

	Kāśahara-svāsahara
	Balya
	Pramāthi
	Paittikprokopajanaka (constant or excess use in higher dose).
Roga	: Manodourbalya-mānasāvasāda
	Unmāda-apasmāra-smṛtīvibhramśa
	Pakṣāghāta-ardita-nāḍīśūla-
	pakṣavadha
	Agnimāndya-udaraśūla-ādhmāna-
	ānāha
	Yakṛdvikāra-yakṛcchotha
	Udaravikāra-jalodara
	Hṛdroga-hṛddourbalya-
	hṛdrogajaśoṭha
	Kāsa-śvāsa-pratiśyāya-uroroga
	Kaphavātika vikāra.

Therapeutic uses

The drug Ustakhaddūsa is medhya that is brain tonic, it tones up nervous system general and promotes medha; and it is analgesic and anti-convulscent. It is useful stomachic, carminative and liver stimulant, cardiac stimulant and stimulating the blood circulation. It is śirovirecana and useful in cough and bronchial asthma.

The drug is used in neurologia, paralysis, hemiplegia, heart problems, oedema (caused by heart disorder), catarrhal affection, coryza, cough, bronchial asthma and diseases caused by kapha vāta aggravation (doṣa prakopa). It is also used externally; it is applied on swelling.

The dried plant and flowers are medicinally useful. The flowers are used in perfumes, medicated pillow or cushion, herb sachets and fumigating powders.

The oil ustakhaddus (*Lavandula stoechas* Linn or French Lavender) is prescribed in colic and chest affections and for relieving biliousness and nervous headaches. It is also used as mouth repellent. Fomentation with flowers give relief in rheumatism and neuralgic pains.

Parts used : Flowers and leaves.

Dose : Powder 3-6 gm.

Formulation : Syrup (pānaka) Aqua (arka).

UṢṬRAKĀṆṬAKA

Botanical name : *Echinops echinatus* Roxb.

Family : Asteraceae (Compositae)

Classical name : Uṣṭrakāṇṭaka

Sanskrit names

Uṣṭrakāṇṭaka,	Utkāṇṭaka,	Kāṇṭaphala,
Karamādana,	Kāṇṭālu,	Tikṣṇāgra,
Śrgālaśūna,	Uṣṭrakāṇḍī,	Raktapuṣpī,
Lohitapuṣpī,	Karabhavarūṇī,	Raktā.

Regional names

Untakatora, Utakantaka (Hindi), Kaderchubak, Utanti (Mar.); Bhuliya, Utkanto (Guj.).

Description

Annual, prostrate or procumbent-ascending, herbs, 30-70 cm. high, clothed with white cottony pubescence..

Leaves upto 15 cm. long, pinnatifid, sessile, oblong, 7-12 cm. long, pinnatifid, lobes triangular, spinescent; spines 2-3 cm. long, pale, scabrobes above, white, arachnoid beneath. Heads with solitary floret, subtended by 3 whorls of involucre bracts; all united into a compound, densely, bearded ball upto 4 cm. across; involucre bracts upto 1.5 cm. long, cuspidate, sharp-spinose white, receptacle minute. Anthers with imbricate tail. Style arms recurved, flat, glabrous. Heads compounds, forming a spherical ball, having single bisexual white float. Corolla 15 mm. long, white, tubular, 5-lobed.

Achenes 5-angled, elongate, glabrous bristly and deciduous; pappus bristly; achenes Ca 4 mm. long, obconic, densely villous.

Flowering and fruiting time

Plant flowers and fruits in February-April or March-May. Generally within the period from spring to summer season.

Distribution

Plant occurs in Afghanistan and India. It is commonly growing on ridges, in waste land along roads, railways tracts and boundaries of cultivated fields. This species is found practically throughout India, ascending to 5,000 ft. on the hill.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Rūkṣa, laghu
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka-tridoṣahara

Seeds (bīja)

Rasa	: Madhura
Virya	: Śīta
Vipāka	: Madhura

Properties and action

Karma	: Kāsaghna
	Dīpana-pācana
	Nāḍībalya
	Mūtrala
	Cakṣusya
	Jantughna
	Balya
	Ropāṇa (vraṇa).
Roga	: Kāsa
	Yoṣāpsmāra
	Netraroga
	Vraṇa-apacī
	Dourbalya
	Agnimāndya
	Mūtrakṛcchra
	Mukhadanta roga

Therapeutic uses

The drug Uṣtrakaṇṭaka is bitter, tonic and diuretic. It is used in harse cough, hysteria, dyspepsia, scrofula and ophthalmia. The root is powdered and applied to wounds on cattle to destroy maggots. Mixed with acacia gum, it is applied to the hair for destroying lice.

The seeds are considered as sweet and aphrodisiac. Herb is regarded useful in ailments of mouth and teeth (vocal cavity including dental).

The root of Uṣṭrakāṇṭaka are used in masūrika as a major ingredient of Uṣṭrakāṇṭak-mūlādi prayoga (Cakradatta, 54-7); and it is used (under the name Karabha vāruṇī-uṣṭrakāṇṭaka) externally as a paste for promoting or strengthening erection of penis (maithune liṅgastambha-nārthaṁ : Cakradatta, 66-56) during coitus, as prescribed in therapeutic text.

Parts used : Root, seeds, herb.

Dose : 1-3 gm.

UṢṬRAKĀṆṬAKA (उष्ट्रकण्टक)

उत्कण्टकः

उत्कण्टकः कण्टफलः करमादन एव सः ।
उष्ट्रकण्टोऽथ कण्टालुः शृगालशुनकाशनः ॥
तीक्ष्णाग्रो वृत्तगुच्छश्च मुखदन्तरुजापहः ।

Śodhala.

उष्ट्रकाण्डी

उष्ट्रकाण्डी रक्तपुष्पी ज्ञेया करभकाण्डिका ।
रक्ता लोहितपुष्पी च वर्णपुष्पी षडाह्वया ॥

उष्ट्रकाण्डीगुणाः

उष्ट्रकाण्डी तु तिक्तोष्णा रुच्या हृद्रोगहारिणी ।
तद्वीजं मधुरं शीतं वृष्यं सन्तर्पणं स्मृतम् ॥

Rāja Nighaṇṭu, Karavīrādi varga, 139-140.

मसूरिकारोगे उष्ट्रकण्टकमूलादिप्रयोगः

उष्ट्रकण्टकमूलं वाप्यनन्तामूलमेव वा ।
विधिगृहीतं ज्येष्ठाम्बु पीतं हन्ति मसूरिकाम् ॥

Cakradatta, Masūrikā Cikitsā, 54-7.

मैथुने लिङ्गस्तम्भनार्थं करभवारुणी (उष्ट्रकण्टक) मूलप्रलेपः

सप्ताहं छागसलिलसंस्थं करभवारुणीमूलम् ।
गाढोद्वर्तनविधिना लिङ्गस्तम्भरतौ कुरुते ॥

Cakradatta, Vṛṣyādhikāra, 66-56.

UṬAṄGAṆA-UTAṄGAṆA

Botanical name : *Blepharis edulis* Pers.

Family : Acanthaceae

Classical name/Common name : Uṭaṅgaṇa

Regional names

Utangana, Utanjana (Hindi); Utangana (Mar.);
Utingana (Guj.).

Description

Spiny herb; stem about 1 feet tall, branched. Leaves 2.5-5 cm. long (1.8 in. or more), linear, ovoid or oblanceolate, but narrower (lesser broad), dentate sharply. Minute spines over (throughout) leaves and stems. Herb causes irritation, itch and burning sensation (more or less) when it comes in contact with skin. Flowers in spikes, blue in colour. Fruit small, almond colour, a capsule, bright, two-seeded. Seeds heart-shaped, flat, hairy seeds mucilaginous when soaked in water.

Flowering and fruiting time

Plant occurs and it is mostly (imported) supplied from Iran and Afghanistan. It also found in Sind and Punjab.

Kinds and varieties

Blepharis linariaefolia Pers. syn. *Blepharis sindica* T. Anders. is another species of *Blepharis*.

Chemical composition

Seeds contain allantoin 2.1% and blepharin, a glucoside. The benzene extract gave 3.8% of a fatty oil (specific gravity 0.0332, sap. val. 186.5 and val. 90.8).

Pharmacodynamics

Rasa	: Madhura, tikta
Guṇa	: Guru, snigdha, picchila
Virya	: Uṣṇa
Vipāka	: Madhura
Doṣakarma	: Vātahara

Properties and action

Karma	: Śukrajanana-śukrastambhana- kāmottejaka Mūtrala.

Roga : Śukrakṣaya-dhātukṣaya
Klaibya
Mūtravikāra-mūtrakṛcchra

Therapeutic uses

The drug Uṭāṅgana is an aphrodisiac herbal agent; it is stimulating sexual desire or instinct (praharṣa-kāmeccā), increasing or promoting sexual power as generating semen. It is internally given in seminal and sexual disorders viz. Klaibya, dhātukṣaya-śukrakṣīṇatā (impotency and loss of semen).

The seeds are resolvent and expectorant. Seeds are used in medicine. They are diuretic and taken orally in dysuria.

Parts used : Seeds.

Dose : 3-5 gm.

UṬĀṆGAṆA-UTĀṆGAṆA (उटङ्गण-उटङ्गन)

उटङ्गनस्य बीजं तु गुरु स्निग्धं सुपिच्छिलम् ।

मधुरं तिक्तमुष्णं च वृष्यं मूत्रलमुच्यते ॥

Dravyaguṇa Vigyan, Part II, pp. 571-572.

UTASĀLAPA-CANDRĀYAṆA

Botanical name : *Paeonia emodi* wall.

Family : Ranunculaceae

Classical name : Utasālapa-candrāyaṇa

Common name : Udasaliba

Sanskrit names

Utasālapa, Candrāyaṇa, Candra, Gucchmūlā.

Regional names

Udasaliba, Udasalapa (Hindi); Udasalam (Beng.); Mamekha, Chandra (Punj.); Mida, Mahameda (Kann.); Udulasalib, Udasalib (Arabic); Himalayan Peoni (Eng.).

Description

Paeoniainn., a genus of ornamental herbs and undershrubs distributed in the north temperate zone, spe-

cially in the Meditoranean region and Asia, herbaceous peonies are preferred for ornamental purposes to the woody kinds. In delicacy of tint and fragrance they resemble the rose, the double flowered being more popular. They grow well in the cool climate of the hills, thriving in a deep rich, rather moist loamy soil. The easier method of propogation is by division of the fleshy roots. *Paeonia modi* Wall. ex Royle., one species occurs in India.

A herbaceous or a shrubby perennial, plant 1-2 feet high. (and stem 30-60 cm.) and leafy with a cluster of fleshy roots. Leaves 6-12 in. long, divided into distinct leaflets, segments, oblong or lanceolate; pointed lvs. 1.8-3.6 m. long, alternate; leaflets 3, often 3-partied.

Flowers showy, 7.5-10 cm. diam., white or red, usually solitary, sometimes in group of 2 or 3, fls. less in number, on long peduncles from axils of upper leaves, fls. quite showy; calyx lobes 5, green, persistent, roundish; petals 5-10, broad, concave, red or white.

Follicles ovoid with a few seeds; follicle 2.5 cm. or 1 in. long, seeds many.

Flowering and fruiting time

Plant flowers during summer season; May-June.

Distribution

Plant occurs in the Himalayas from Kashmir to Kumaon at altitudes of 2,000-3,000 meters. It is also grown for ornament in gardens on the hills. Plant often occurs in gregarious patches and is reported to be abundant in Liddar valley near Pahalgam (Kashmir).

Chemical composition

The roots are reported to contain an essential oil with salicyldehyde as the chief component, a fixed oil, benzoic acid and sucrose. Tubers and seeds of an allied European species *Paeonia officinalis* Linn. contain a toxic alkaloid which produces contraction of the renal capillaries and increases the coagulability of blood.

Pharmacodynamics

Rasa	: Tikta, kaṭu
Guṇa	: Rūkṣa, laghu, tikṣṇa
Vīrya	: Uṣṇa

Vipāka : Kāṭu
Doṣakarma : Kaphavātaśāmaka.

Properties and action

Karma : Ākṣepaśamana
Medhya-nāḍibalya
Vedanāsthāpana
Śūlapraśamana
Pittasāraka
Yakṛduttejaka
Vāmaka-recaka
Stambhana (puṣpa-flowers)
Mūtrajanana
Ārtavajanana-garbhāśayaśaṅkocaka
Varṇya-kuṣṭhaghna
Śothahara-lekhana.

Roga : Ākṣepaka
Apsmāra-apsmāra-apatantṛaka
Kampavāta-ardita-pakṣāghāta
Unmāda
Mastiṣkaśoṭha
Vātaroga
Abhighāta-bhagna-śoṭha
vedanā vikāra
Kṣudraroga-vyaṅga-nyaccha
Bālāpsmāra
Bastiśūla-vṛkkaśūla-aśmarī
Udaraśūla-jalodara-yakṛcchoṭha
Kāmalā
Atisāra
Kaṣṭārtava-garbhāśayavikāra
Kuṣṭha-raktavikāra.

Therapeutic uses

The drug Utaśālapa or udasaliba is ākṣepaśamana (anti-convulscent), vedanāsthāpana (analgesic), nāḍibalya (nervine tonic) and medhya (brain tonic-intellect promoting). It is anti-inflammatory (śothahara) and emaciating (lekhana). The roots are anati-colic, cholagogue and liver stimulant.

The fleshy roots are used in uterine diseases, bilious-

ness, dropsy and nervous affections; they are also prescribed as a blood purifier for children. It is generally given in powder form when used orally. External use is made as paste.

The tender shoots are cooked and eaten as vegetable. The seeds are emetic and cathartic. An infusion of the dried flowers is given to control diarrhoea. Excessive use of the roots (overdose) causes headache, confused vision and vomiting; its use may be avoided in pregnant females.

Externally, the roots alone or they are mixed with margosa leaves (nimba patra) in made into a paste form, which is applied to traumatic lesion (abhighātaja śoṭha) or swelling and fracture as well as dislocation (bhagnasandhivīślesa) in order to allay pain and inflammation. It is applied on kṣudraroga (minor skin affections). A garland of roots-pieces is used in children (māladhāraṇa).

The roots are given internally in treatment of various diseases. The drug is used in nervine complaints, insanity, epilepsy, tetanus, hysteria, convulsance, mastiṣka-śoṭha, renal colic, basti-śūla, calculus, dysmenorrhoea, uterine complaints, ascites, abdominal colic, liver inflammation, jaundice, diarrhoea (flower's infusion), kuṣṭha and diseases caused by blood impurities (as blood purifier) including cutaneous affections.

The seeds are emetic and cathartic. Flowers are astringent and stambhana. The drug is diuretic, emmenagogue and garbhāśaya saṅkocaka. It is varṇya (lusture promoting) and kuṣṭhaghna (anti-leprotic) drug.

Parts used : Roots

Dose : Powder 1-3 gm.

UTASĀLAPA-CANDRĀYANA

(उतसालप-चन्द्रायण)

बृहत्खण्डितपर्णः रम्यपुष्पस्तूदसालपः ।

बहिर्धूसरवच्चान्तश्चेतमूलः प्रकीर्तितः ॥

रूक्षस्तीक्ष्णो लघुस्तिकः कटुरुष्णो विनाशयेत् ।
 आक्षेपकार्दितोन्मादशूलोदरयकृद्भुजः ॥
 बस्तिवृक्षाश्मरी शूलं कष्टार्तवमसुग्व्यथाम् ।
 पुष्पं स्तम्भनमत्रातिप्रशस्तमतिसारिणाम् ॥

Dravyaguṇa Vigyāna, Part II, p. 78.

VACĀ

Botanical name : *Acorus calamus* Linn.

Family : Araceae

Classical name : Vacā

Sanskrit names

Vacā, Uragandhā, Ṣaḍagranthā, Golomī, Śataparvikā.

Regional names

Bach, Ghurhabach (Hindi); Vekhend (Mar.); Vaj, Gharhabaj (Guj.); Varch, Varaj (Punj.); Kini kathi (Si.); Vay (Kann.); Vas (Tel.); Vasambu (Tam.); Vaje gida (Kann.); Vavambu (Mal.); Vajj, Adulavajj (Arabic); Agare turki (Pers.); Karunak (Pers.); Sweet flag (Eng.).

Description

An aromatic marshy herb; rootstock as thick as the middle finger, creeping and branching. Leaves 0.9 × 1.8 m. × 1.7-3.8 m. bright green, acute, thickened in the middle, margins waved. Spathe 5-10 × 1.3-2 cm. diam., obtuse, slightly, curved, green; sepals as long as the ovary, scarious; anthers yellow. Fruit turbinate prismatic, top pyramidal. Seeds oblong, micropyle often fimbriate, albumen fleshly, embryo axile.

Rhizome : Rhizome is woody, branched, light brown, cylindrical to flattened and 10-15 mm. in diam. with distinct nodes and internodes. Nodal regions are broad with leaf scars and hair like fibres. Internodes 8-10 mm. in length, ridged and furrowed. Under surface provided with zigzag line of circular root scars. Tranversely cut surface cream in colour with pinkish ring and differentiated into central and peripheral regions.

रूक्षस्तीक्ष्णो लघुस्तिकः कटुरुष्णो विनाशयेत् ।
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 पुष्पं स्तम्भनमत्रातिप्रशस्तमतिसारिणाम् ॥

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Drug Morphology : The drug consists of dried rhizome which are sometimes scrapped or peeled. The rhizome is dark brown in colour, sub-spongy, cylindrical, slightly flattened and branched. It is longitudinally splitted into sub-cylindrical piece which are 7.0-10.5 cm. in length and 1.0-3.5 cm. in diam. The surface of the unpeeled drug has annulate nodes due to remanents of bud scales. Upper surface exhibits the triangular leaf scars and hair like fibres. The under surface of the rhizome has the remanents of roots which are prominent. The older rhizome is marked with alternately arranged broadly triangular large-transverse leaf scars which almost encircle the rhizome. The rhizome after drying is much shrunken and deeply wrinkled longitudinally. The peeled rhizome is cream-yellow in colour and root scars are comparatively fewer. The rhizome breaks easily with sharp, short fracture exhibiting porus, whitish interior differentiated into central and peripheral region. The freshly dissected rhizome emits aromatic odour. It is bitter and slightly acrid in taste.

Chemical composition

The rhizomes of the plant drug contain essential to the content of 1.5 per cent, a bitter glucoside acorin and an alkaloid named 'calamin' which was later found to be a mixture of methylamine and trimethylamine. Beside these chemical constituents, the rhizomes contain high percentage of starch and tannins. The fresh aerial parts yield 0.123 per cent oil, unpeeled roots give a higher yield (1.5-3.5%). the yield and physico-chemical constants are consequently the composition of calamus oil and depend upon the source from where the rhizomes of source plants are obtained.

The characteristics of calamus oil obtained from different sources (various countries) have been screened and comparative studies carried out. These observations find data showing different values and constants i.e. Specific gravity, optical rotation, acid number, saponin value, sap. value after acetylation, solubility and methoxy content. Indian calamus oil (Kashmir has composition : sp. gr. (150) 0.971, optical rotation - $14^{\circ} + 2^{\circ}$, acid number 2.4, sap. value

12.7, sap. value (after acetylation) 58.0, solubility miscible with 90% alcohol and methoxy content 2.28%. The oil from the rhizomes of Jammu (J. & K. state) area general resemble with the oil from other sources (areas of plants collection) of India and the calamus oil consists of palmitic and butyric esters, eugenol, isoeugenol, asarone, a hydrocarbon, calamol and azolene. Calamus oil obtained from rhizomes from Kashmir valley (temperate climatic regions) approached the oil of European origin in composition consisting mainly of palmitic acid and its ester, heptylic acid, eugenol, butyric ester, L-pinene, camphor, calamone, hydrocarbon, calameone, azilene and asarone.

The fractionation of the active principle from volatile oil by gas phase chromatography revealed the presence of two components isolated in pure state i.e. q-asarone and B-asarone which were trans and cisomers, respectively of 2,4,5-trimethoxy-1-propeny benzene. The essential obtained from plant rhizome was obtained in a yield of 4.5% (w/w). GC-MS examination of the oil revealed the presence of 8 known compounds, B-asarone being major (92.68%) and four unidentified sesquiterpene alcohols.

Pharmacodynamics

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, tikṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka, Pittavardhana.

Properties and action

Karma	: Medhya-śāmaka-smaraṇaśaktivardhana Sajñāsthāpana-akṣepaśamana Bala buddhivardhana-vak śakti vardhana Vedanāsthāpana-vātaghna Rasāyana-kumāra rasāyana Manodoṣahara Śothahara Dīpana-tṛptighna Arśoghna

	Kṛmighna
	Vāmaka-anulomana
	Āsthāpanopoga
	Kāsaghna-śvāsahara-kaṇṭhya-svarya
	Mūtrajanana-mūtraviśodhana
	Raktabhāraśāmaka
	Garbhāśaya saṅkocaka
	Svedajanana
	Lekhana-medohara-dhātu-
	kṣīnatākara
	Svedajanana-jvaraghna
	Rakṣoghna-jantughna
Roga	: Smṛtihrāsa-vāgvikṛti
	Unmāda-apasmāra-mānasaroga
	Bālaroga-skandāpasmāra
	Vātavikāra-pakṣāghāta-apatantraka
	Sandhivāta-āmavāta-pakṣāghāta
	Kāsa-pratiśyaya-kaṇṭhaśoṭha-
	svarabheda-vātaślaiṣmika kāsa
	Aśmarī-mūtrakṛcchra-mūtrāghāta
	Kaṣṭhāprasava-kaṣṭhārtava
	Medoroga
	Sannipāta jvara
	Dantodbheda janya vikāra
	(Jvara, kāsa, dourbalya)
	Tvagvikāra
	Agnimāndya-aruci-vibandha-
	āmājirṇa
	Udaraśūla-ādhmāna-ānāha
	Atisāra-grahāṇī
	Arśa
	Kṛmiroga
	Karṇanāda-karṇaśūla-krimikarṇa
	Dourbalya
	Kaphaja hṛdroga-ucca raktacāpa
	Mukharoga
	Vṛddhijanya śoṭha
	Viṣa-mūṣikaviṣa
	Śīroroga-sūryāvarta-

ardhāvabhedaka
Bhūtagrahavādhā

Therapeutic uses

The rhizome-drug Vacā is aromatic, antispasmodic, anthelmintic, aphrodisiac, astringent, bitter, carminative, diuretic, expectorant, emetic, emmenagogue, sedative, stomachic, tonic and tranquilizer in action. It is useful in antiperiodic fevers, calculus affections, constipation, colic, capillary bronchitis, disturbing cough, diarrhoea and dysentery, dyspepsia, epilepsy, fever, flatulence, hysteria, neuralgia, insanity, memory weakness, longevity enlarger, piles and teething problems. The drug is one of the reputed and common herbal drugs incorporated in Indian Medicine.

The rhizome of plant drug is utilised as an ingredient in various classical formulations. Some of the important classical formulations (śāstrīya yoga) are : Aravindāsava, Sārasvatāriṣṭa, Kuṭajāvaleha, Bṛhatmanjiṣṭhādi kvāth cūrṇa, Sudarśana cūrṇa, Kuṅkumādi taila, Gṛhadhūmādi lepa, Kastūryādi vaṭī, Candraprabhā vaṭī, Candrodaya vaṭī, Pradarāntaka louha and Tāmṛādi guṭikā, besides main formulations such as Medhya Rasāyana, Vacādi ghṛta, Vacādi cūrṇa, Vacāvaleha, Vacādyā taila and Vacāvaleha, using this drug as principal or major ingredient. In addition, the drug is employed in a number of other Ayurvedic or herbal preparations formulated and marketed commercially (patent or specialities formulations) on account of specific and potential medicinal efficacy of the drug.

The drug Vacā is botanically identified as *Acorus calamus* Linn. and drug mainly forms of rhizomes of plant and as usually the market drug is available in the form of dried rhizomes or their cut pieces. The botanical source is an aromatic marshy herb and its rhizomes known as Vacā and widely credited with a number of medicinal properties in various medical systems which mainly include indigenous medical systems and also in modern medicine, in crude form and alkaloidal as well as active chemically constituents (including essential oil) respectively. Basically it is an ancient drug of eminence of Ayurveda discipline in In-

dia. This drug has been incorporated as an official drug in various pharmacopoeias and formularies including Indian pharmacopoeia.

Besides the rhizomes as main medicinally useful part, the leaves of source plant and also rhizomes are employed for flavouring drinks, for perfumery and for insecticides. The rhizomes possess insecticidal activity and they are used against bed bugs, moths, lice etc. The drug is also and often adulterated with kulinjana or Mahābhārī vacā, botanically known as *Alpinia galanga* Willd. and *Alpinia officinarum* Hence. (belonging to the family Zingiberaceae).

The drug demand is mostly met in market from the source plants of drug Vacā which are natural habitats as wild population of plants in various localities in the areas of their growth in nature. The plant is cultivated on varying scales in different regions for meeting the drug requirement in pharmaceutical, medical and other fields. The source plant thrives best in marshy lands and can be propagated early in spring or autumn by cuttings of rhizome of plants. The rhizomes after full growth and maturity of plants are generally collected during autumn season.

The rhizome of drug plant Vacā is chiefly used in therapeutics in medicine. They possess various medicinal properties. They pungent, bitter, heating, emetic, laxative, voice, throat trouble and good for diseases of mouth and they are used in abdominal pain and inflammation. It is useful in fever, epilepsy, bronchitis, delirium, hysteria, dysentery, tumours, overthirst, loss of memory, rat-bite and maggot in the ears. Rhizome of plant Vacā is administered in various forms mostly powder and employed in several pharmaceutical preparations prescribed in therapeutic management.

In large doses, the aromatic rhizome or rootstock is considered emetic and it is stomachic and carminative in smaller doses. It is a simple useful remedy for flatulence, colic and pleasant adjunct to tonic or purgative medicine. Drug is also used in the treatment of remittent fever in the

native medical practice and is held in high esteem as an insectifuge particularly insecticide against fleas, and the pieces of dried rhizome are employed for insecticidal purposes.

It is commonly found useful to keep pieces of dried rhizome of *Vacā* (*Acorus calamus*) plant in the boxes of clothes or in contact with clothes, for protecting them from insect attacks and these rhizomes are employed to destroy houseflies, bed bugs and lice. The rhizomes with intense and pleasant aromatic smell are incense ingredient or aromatic material which extensively find use as aromatic agent in preparations of incensesticks (agarabatti), incense burning or smoking for worship and perfume (dhoopbatti or dhoopa) and aromatic material or specific mixture of raw incense in performing ritual (i.e. *Yajña-havana sāmagrī*).

In early times, the rhizomatic roots of *Vacā* it had been used successfully is a herbal and good remedy in intermittent fever (even after cinchona bark had failed). The rhizome is also a useful adjunct to bitter and stomachic infusions and much valued (in tribals of N. E. region) especially in the treatment of cough or sorethroat; it is chewed (by making small pieces) for relieving throat affection and tongue disorders. The powder of rhizome is rubbed over tongue and it is orally given in voice disorders specially in children or adolescents, as the drug is useful to tone up the organs responsible for voice function.

The powdered rhizomes are used in combination with *Sarpagandhā* (*Rauvolfia serpentina* Benth.) or other suitable drug (s), in treatment of neurosis, insomnia, melancholic, hysteria and other similar anomalies. The essential oil obtained from the roots is used as an ingredient of flavouring agents particularly for liquors. Besides these uses of oil the essential oil of the rhizome of plant (*Acorus calamus* Benth.) or *Vacā* taila is also useful in perfumery. The aromatic properties and contents of drug have been frequent practice of using in medicine as well as parfumary.

The pharmacological investigation of *calamus* oil finds that the oil and its fractions possess carminative prop-

erties. In moderate doses, the oil produces an anatispasmotic action on the involuntary muscles activity of asarone and essential oil was found similar to that of papavarine. Activity of asarone was greater than that of the essential oil.

Essential oil obtained from *Vacā* rhizomes has a stimulant action on the central nervous system and mild clonic convulsions are observed (in guineapigs). Toxicity studies showed the LD of the oil to be 0.275 ml. per 100 g. body weight (for guineapigs for 6 weeks), the oil did not produce any obvious toxic symptoms.

The essential oil-free-alcoholic extract of the rhizomes was found to possess sedative and analgesic properties and caused a moderate depression of blood pressure and respiration. The extract showed no significant antiepileptic activity. In the case of abino rats slightly higher dose was required to produce marked sedative effects. Thus the potent sedative and analgesic effects of rhizomes of plant (*Acorus calamus* Linn.) positively justify to potentialities of drug *Vacā* recommend in classical texts of medicine in management of various mental diseases of excitable nature and similar nervous disorders. Studies on rhizome on pharmacological aspect have also found that the sedative effect of asarone is dependant on the depression of the cryptopic division of the hypothalamus.

The protective action of the essential oil against electroshock seizures in rats was found to compare favourably with diphenyl hydantion. Pretreatment of mice with isyergic acid diethylamide (LSD) partly prevented the hypnotic potentiation of the oil of plant drug.

Neuro-pharmacological actions of the *calamus* oil have shown its sedative-tranquillizing action in the trial animals (rats, mice, cats, pigs and dogs) and forced motor activities in mice. In higher doses, the oil inhibited monoamine oxidase. Asarone produced prolonged calming effect in monkeys, and it failed to cause release of 5-HT from the brain. It also prevented the depletion of adrenal ascorbic acid of rats subjected to cold-stress. Asarone antagonised the hyper-activity and hallucinogenic effect of mescaline in rats and offered protection to aggregated mice treated

with dextroamphetamine. Further studies have also observed that aqueous extract of drug plant at a dose of 400 mg./inflammation in rat paw. Thus the pharmacological studies conducted on plant drug are showing encouraging results which further confirm to certain aspects medicinal efficacy of drug Vacā as it is therapeutically important in Indian system of medicine.

Besides insecticidal and nematocidal properties of plant (rhizome and essential oil), the drug possesses anti-bacterial properties. The oil of rhizome has marked antitubercular action and other antibacterial activities varying extents and nature.

Parts used : Roots (rhizome).

Dose

Powder 125/250-500 mg., Powder 1-3 gm. (emesis).

Formulations

Sārasvata cūrṇa, Medhya Rasāyana, Vacādi ghṛta, Vacādi cūrṇa, Vacādyā taila, Vacāvaleha.

Groups

Virecana, Lekhaniya, Arśoghna, Tr̥ptighna, Āsthāpanopaga, Śitaprasamana, Sajñāsthāpana, Tiktakandha, Śirovirecana (Caraka Saṁhitā), Pippalyādi, Vacādi, Mustādi, Ūrdhvaabhāghara (Suśruta Saṁhitā).

VACĀ (वचा)

वचा तिक्ता कटुः पाके कटुरुष्णामपाचनी ।
दीपनी वामनी मेध्या जीवनी वाक्स्वरप्रदा ॥
हन्त्युन्मादमपस्मारं रक्षोजन्तुकफानिलान् ।
शूलं विबन्धमाध्मानं शकृन्मूत्रविशोधनी ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1216-1217.

वचोग्रन्धा कटुका तिक्तोष्णा वान्तिवह्निकृत् ।
विबन्धाध्मानशूलघ्नीं शकृन्मूत्रविशोधनी ॥
अपस्मारकफोन्मादभूतजन्तवनिलानहरेत् ।

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 102-103.

वचा तीक्ष्णा कटूष्णा च कफामग्रन्थिशोथनुत् ।

वातज्वरातिसारघ्नी वान्तिकृन्मोदभूतनुत् ॥

Rāja Nighaṇṭu, Pippalyādi varga, 52.

वामनी कटुतिक्तोष्णा कासश्लेष्मरुजापहा ।

कण्ठ्या मेध्या च कृमिहृद्विबन्धाध्मानशूलनुत् ॥

Dhanvantari Nighaṇṭu.

बलबुद्धिवर्धनार्थम्

सौवर्णं सुकृतं चूर्णं कुष्ठं मधु घृतं वचा ।

....कुमाराणां वपुर्मेधाबलबुद्धिविवर्धना ॥

Suśruta Samhitā, Śarīra, 10.

स्मरणशक्तिवर्धनयोगः

गुडूच्यपामार्गविडङ्गशङ्खिनीवचाभयाकुष्ठशतावरीसमाः ।

घृतेन लीढाः प्रकरोति मानवं त्रिभिर्दिनैः श्लोकसहस्रधारिणम् ॥

Bhaiṣajya Batnāvali.

रसायने

वचाघृतम्

Suśruta Samhitā, Cikitsā, 28-8.

वचाकल्पः

Āṣṭāṅga Hṛdaya, Uttara, 39-164.

कफजह्वरो

‘वचा निम्बकषायाभ्यां वाम्यं हृदि कफोत्थिते ।’

Bangasena, Hydroga, 26.

अपस्मारे

यः खादेत् क्षीरभक्ताशी माक्षिकेण वचा रजः ।

अपस्मारं महाघोरं सुचिरोत्थं जयेद्ध्रुवम् ॥

Vṛndamādhava, 21-9.

Cakradatta, 21-11.

मुखरोगे

दिवारान्निं वचाग्रन्थिं मुखे सन्धारयेत् भिषक् ।

तेन सौख्यं भवेत्तस्य मुखरोगाद्विमुच्यते ॥

Śārṅgadharma Samhitā, 3-46-61.

वातकफजनितापस्मारे वचादिघृतम्

वचाशम्पाककैटर्कवयःस्थाहिङ्गुचोरकैः ।

सिद्धं पलङ्कषायुकैर्वातश्लेष्मात्मके घृतम् ॥

Caraka Samhitā, Cikitsā, 10-20.

अतिसारे अनुवासनार्थं वचातैलम्

वचान्तैरथवा कल्कैस्तैलं पक्त्वाऽनुवासयेत् ।

बहुशः कफवातार्तस्तथा स लभते सुखम् ॥

Caraka Samhitā, Cikitsā, 19-120.

आनाहे वचादिचूर्णम्

वचाभयाचित्रकषायशूकान् सपिप्पलीकातिविषान् सकुष्ठान् ।

उष्णाम्बुनाऽऽनाहविमूढवातान् पीत्वा जयेदाशु रसौदनाशी ॥

Caraka Samhitā, Cikitsā, 26-21.

ग्रहणीदोषे वचाद्यादिचूर्णम्

Caraka Samhitā, Cikitsā, 15-134-136.

उन्मादे

ब्राह्मीकूष्माण्डीफलषड्ग्रन्था शङ्खपुष्पिका स्वरसः ।

दृष्टा उन्मादहताः पृथगेते कुष्ठमधुमिश्रः ॥

Bhāvaprakāśa, Unmādyadidikara, 22-33.

घोरापस्मारप्रतिकारार्थं

यः खादेत् क्षीरभक्ताशी माक्षिकेण वचा रजः ।

अपस्मारं महाघोरं चिरोत्थं स जयेद् ध्रुवम् ॥

Bhāvaprakāśa, Apasmāradhikāra, 23-16.

वृद्धिजन्यशोथे

‘वचासर्षपकल्केन प्रलेपः शोथनाशनः ।’

Vyndamādhava, 40-19.

गर्भावस्थानाहे निरोधार्थम्

पक्वं वचारसोनाभ्यां हिङ्गुसोवर्चलान्वितम् ।

आनाहे तु पिबेद् दुग्धं गर्भिणी सुखिनी भवेत् ॥

Bhāvaprakāśa, Yonirogādhikāra, 70-83.

रोमान्तिकाऽऽदिहरोग्रादिधूपः

Cakradatta, 54-12.

बालानां स्मरणशक्तिवर्धनार्थम् अष्टमङ्गलघृतम्

Bhāvaprakāśa, Bālarogādhikāra, 71/39-40.

बालग्रहनिवारणार्थं धूमप्रयोगः

Bhāvaprakāśa, Bālarogādhikāra, 71/35-36.

बालायां स्कन्दापस्मारग्रहे लेपः

‘उत्सादनं वचाहिङ्गयुक्तमात्रं प्रकीर्तितम् ।’

Bhāvaprakāśa, Bālarogādhikāra, 71-60.

आमाजीर्णं वचाप्रयोगः

‘वचालवणतोयेन वान्तिरामे प्रशस्यते ।’

Cakradatta, Agnimāndya cikitsā, 6-73.

Baṅgasena, Ajīrṇa, 40.

वचाशुद्धिः (तैलकल्पना)

गोमूत्रे चालम्बुषके पक्त्वा पञ्चदलोदके ॥

पुनः सुरभितोयेन वाष्पस्वेदेन स्वेदयेत् ।

गन्धोग्रा शुद्ध्यते ह्येवं रजनी च विशेषतः ॥

Cakradatta, Vātavyādhi cikitsā, 22/287-288.

वृद्धिहरः वचालेपः

‘वचासर्षपकल्केन प्रलेपो वृद्धिनाशनः ।’

Cakradatta, 40-212.

अतिसारे

पानं त्वतिसारिणोऽम्बु वचातिविषाभ्यां कथितं ।

शुण्ठ्यतिविषाभ्यां, मुस्तपर्पटकाभ्यां, नागरधान्यकाभ्यां वा ॥

Āṣṭāṅga Saṅgraha, Cikitsā, 11-5.

‘वचाप्रतिविषाभ्यां वा मुस्तपर्पटकेन वा ।’

Caraka Saṁhitā, Cikitsā, 19-22.

Āṣṭāṅga Hṛdaya, Cikitsā, 11-5.

मुखविकारे

दिवारात्रिं वचाग्रन्थिं मुखे सन्धारयेत् भिषक् ।

तेन सौख्यं भवेत्तस्य मुखरोगात् विमुच्यते ॥

Harīta Saṁhitā, 3-46-31.

नेत्ररोगे कूकूणके

चूर्णं वचायाः सक्षौद्रो मदनं मधुकान्वितम् ।

वमनं सर्वरोगेषु विशेषेण कूकूणके ॥

Āṣṭāṅga Hṛdaya, Uttara, 9-30.

शूले

वचादिचूर्णम्

Gadanigraha, 2-23-90/91.

अम्लपित्ते

‘.....सक्षौद्रां सगुडां वचाम् ।
खादेत— ॥’

Gadanigraha, 2-38-25.

मूषिकविषे

वचां प्रातः प्रयत्नेन पच्याशी तण्डुलाम्बुना ।
पिबेदाशुविषार्तिघ्नां त्र्यहं सप्ताहमेव वा ॥

Gadanigraha, 7-6-6.

क्रिमिकर्णे

‘.....सत्रणा कर्णपालिका ।
लिप्ता पश्चात् वचाचूर्णसंयुक्ता निर्व्रणा भवेत् ॥’

Gadanigraha, 3-2-85.

अपस्मारे

उग्रमक्षमितं चूर्णं कृतञ्च मधुसर्पिषा ।
भक्षयेत् क्षीरभक्ताशी त्रिदिनेऽपस्मृतिक्षयः ॥

Baṅgasena, Apasmāra, 37.

ब्राह्मीरसवचाकुष्ठशङ्खपुष्पिभिरेव च ।
पुराणं घृतमुन्मादालक्ष्म्यपस्मारपापनुत् ॥

Caraka Samhitā, Cikitsā, 10-25.

‘ब्राह्मीरसं कुष्ठरसं वचां वा मधुसंयुताम् ।’

Caraka Samhitā, Cikitsā, 10-64.

अपस्मारचिकित्सायां वचावलेहः

गद्याणसम्मितमेकां वचां क्षौद्रेण लोलिताम् ।
प्रातः प्रातर्लिहन् मासमपस्माराद् विमुच्यते ॥

Siddhabhaiṣajya Maṇimālā, 4-455.

कुष्ठे क्षुद्ररोगे

‘लोध्रधान्यवचालेपस्तारुण्यपिटकापहः ।’

Baṅgasena, Kṣudraroga, 45.

शिरोरोग-सूर्यावर्तार्धाविभेदकयोः

अवपीडो हितश्चात्र वचामागधिकायुतः ।
मधुकेनावपीडो वा मधुना सह संयुतः ॥

Suśruta Samhitā, Uttara, 26-33.

Vṛndamādhava, 62-38.

मूत्ररोधजोदावर्त्ते

‘मूत्ररोधजनिते क्षीरवारिवचां पिबेत् ।’

Bhāvaprakāśa, Cikitsā, 31-24.

व्रणशोधने

कासीसं सैन्धवे किण्वे वचायां रजनीद्वये ।

शोधनाङ्गेषु चान्येषु चूर्णं कुर्वीत शोधनम् ॥

Suśruta Samhitā, Sūtra, 37-99.

इन्द्रलुमे

इन्द्रलुमे यथासन्नां सिरां विद्या प्रलेपयेत् ।

वचामस्तरुभ्यां वा गुञ्जामूलफलैस्तथा ॥

Āṣṭāṅga Hṛdaya, Uttara, 24-28.

VAMŚA

Botanical name

Bambusa arundinacea willd. (Retz.) Roxb.

Family : Poaceae (Graminae)

Classical name : Vamśa

Sanskrit names

(a) Vamśa, Veṇu, Tvaksāra, Tṛṇadhvaja, Śataparvā, Yavaphala (b) Vamśarocana, Vamśalocana.

Regional names

Bans (Hindi); Bانش, Ketua (Beng.); Bandu (Mar.); Bans (Guj.); Mungil (Tam., Mal.); Vungu veduru (Tel.); Kotoha (Aa.); Kasav (Arab.); Nai (Pers.); Thorny bamboo (Eng.).

Vanshalocana (Hindi); Vanshulochana, Bانشkapur (Guj.); Tavashir (Arab.-Pers.); Bamboo manna (Eng.).

Description

A gregarious, tall, thorny, sometimes attaining a height of 35 m. bamboo, girth upto 15 cm. - 20 cm., normally 21.195 - 27 meters high. with crowded culms, rising from branching root stocks, bright green, shining, varying in modes prominent lower with almost leafless branches horizontal, spinescent, internodes upto 46 cm., culm

sheaths 30-38 × 22-30.5 cm., coriaceous thickly covered outside with golden hairs when young.

Leaves upto 20.2 × 2.5 cm., linear or linear-lanceolate, glabrous above, glabrate beneath, tip sharp, stiff base, rounded or oblique, ciliate near petiole, bearing 3-7 fertile flowers, few male flowers, above the lower bisexual ones.

Flowers gregariously once at interval of approximately the clumps 30 years then die out, after producing an abundant crop of grains.

Grains 0.5-0.85 cm., shortly beaked, enclosed by persistent glumes and pales, grains resembling with barley (yava) in appearance (the similarity justifies its classical name 'Varṇśayava').

Flowering and fruiting time

Plant flowers generally during summers season, but after long intervals and at old stage of plant, particularly when the plant particularly its whole stem is covered with branched peduncles (or attached with branches).

Distribution

Plant occurs wild throughout the greater part of the country, especially in the hills forests of western and southern India, ascending upto 3,000 feet in the Nilgiris. It occurs in the warmer parts of Ceylon and Burma, and is wild on the Pegu and the Martaban hills. It is also known in other parts of India.

Kinds and varieties

There are several kinds and varieties of Bamboos about 26 species of genus *Bambusea* Sehb. occur in India, mostly at 3,000-7,000 feet elevation, but a few such as *B. balco* are restricted to the plains.

Pharmacodynamics

Rasa	: Madhura, Kaṣāya
Guṇa	: Laghu, rūkṣa, tūkṣṇa, snigdha, picchila (fruits-varṇśayava), Uṣṇa (nodes-leaf nodes)
Vīrya	: Śīta
Vipāka	: Madhura

Doṣakarma : Kaphapittaśāmaka
(vaṁśamūla-roots)
Pittavardhana
(leaf nodes and fruits)

Vaṁśolocana :

Rasa : Kaṣāya, madhura
Guṇa : Laghu, rūksa
Vīrya : Śīta
Vipāka : Madhura
Doṣakarma : Vātapittaśāmaka

Properties and action

Karma : Ārtavajanana (leaves)
Garbhāśayaśodhana (leaves)
Mūtrala (root)
Dīpana-pācana (nodes)
Kṛmighna-vidāhī (nodes)
Mūtrasaṅgrahaṇīya (fruits)
Lekhana-viśaghna (fruits)
Varṇya-kuṣṭhaghna (roots)
Śothahara (nodes)
Śāmaka-trṣṇānigrahaṇa-grāhī
(vaṁśalocana)
Hṛdya-raktastambhana
(vaṁśalocana)
Mūtrajanana (vaṁśalocana)
Jvaraghna (vaṁśalocana)
Balya-Bṛmhaṇa (vaṁśalocana)
Roga : Rajorodha-kaṣṭārtava
Mūtrakṛcchra-mūtrāghāta-prameha
Jirṇajvara-kṣayaja jvara
Dourbalya
Medoroga
Viṣa
Kukkuraviṣa
Kāsa-śvāsa-yakṣmā
Hṛdroga-raktapitta
Raktavikāra.

Therapeutic uses

The drug Vaṁśa is an emmenagogue herbal agent,

and it is astringent, diuretic, anthelmintic, aphrodisiac and urinary specially antiseptic. It is used in fever, respiratory diseases, tuberculosis, urinary and menstrual complaints i.e. scanty and painful periods. The drug is given various kinds of kidney and urinary diseases.

The decoction of the leaves is internally given in dysmenorrhoea, scanty or painful menstruation, it also given after delivery for cleaning or purification of the uterus (garbhāśaya viśodhana). This kind of oral use of *Vaṁśa patra kvātha* (leaves decoction) is made to help expulsion of placenta (*aparāpātana*) and also to alleviate post-partum pain (*makkala śūla*). Internal use of leaves-decoction in female patients is advised for its proper administration. Such decoction (in higher dose) is also reported to make for cattles in veterinary medicine almost for same purposes (hastening delivery and expelling the placenta particularly in cows and buffaloes etc.). For human use, the nodes of bamboos (*veṇuparva*) 20 gm. and *śatapuspā* 40 gm. mixed with jaggery are prescribed in texts to orally in the form of decoction which induces menses (*Siddhabhaiṣajya Maṇimāla*, 4-11-1105).

Externally, the root is applied in abnormalities of complexion and pigmentation *Patrāṅkura* are pasted over swelling and ulcers.

Internally, the *patrāṅkura* is given in dyspepsia, anorexia and worms. *Vaṁśayava* is used in prameha. Fruits (grains) are used in obesity (*medoroga*) and poison (*viṣa*). Roots mixed with *Aṅkoṭa* are given in rabies in the form of decoction.

Vaṁśalocana (bamboos manna) occupies an important place in medical system particularly pharmaceutics as it is an ingredient of various formulations prescribed in practice of indigenous medicine.

In general, *vaṁśalocana* is cardiogenic, haemostatic, *varṇya*, pacifying, astringent, expectorant, anti-asthmatic, tonic, diuretic and *dhātuvardhana* (*br̥mhāṇa*), anti-tubercular and antipyretic and restorative (*rasāyana*). It is used to alleviate the ailments caused by *vātapitta doṣa* (humors). *Vaṁśalocana* is given in several

diseases such as vomiting, diarrhoea, excess thirst, heart complaints, intrinsic, haemorrhage and general debility. It is specifically used in cough, asthma, tuberculosis (pulmonary tuberculosis, chronic fever, kṣayaja jvara and other ailments of respiratory system; it is effectively used as rasāyana drug.

Parts used

Roots, leaves, leaf-nodes, fruits, bamboos manna (vaṁśalocana).

Dose : Decoction 50-100 ml., Vaṁśalocana 1-3 gm.

Formulations : Sitopalādi cūrṇa, Tālīśādyā cūrṇa.

VAMŚA (वंश)

- क. वंशस्त्वक्मारकर्मारत्वचिसारतृणध्वजः ।
शतपर्वा यवफलो वेणुमस्करतेजनाः ॥
ख. वंशः सरो हिमः स्वादुः कषायो बस्तिशोधनः ।
छेदनः कफपित्तघ्नः कुष्ठस्रवणशोथजित् ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 153-154.

वंशस्य करीरयवयोर्गुणाः

- क. तत्करीरः कटुः पाके रसे रूक्षो गुरुः सरः ।
कषायः कफकृत्स्वादुर्विदाही वातपित्तलः ॥
ख. तद्यवास्तु सरा रूक्षाः कषायाः कटुपाकिनः ।
वातपित्तकराः उष्णाः बद्धमूत्रा कफापहाः ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 155-156.

वंशः

- अ. कीचको मस्करो वंशी सुपर्वा षट्पदालयः ।
वंशो वेणुर्यवफलस्तृणकेतुस्तृणध्वजः ॥
शतपर्वा शब्दमालः कर्मारस्त्वचिसारकः ।

वंशगुणाः

- ब. वंशस्तु शीतलः स्वादुः कषायो बस्तिशोधनः ॥
छेदनः कफपित्तास्रकुष्ठशोफव्रणापहः ।

वंशाङ्कुरगुणाः

- स. तत्करीरः कटुः पाके रसे रूक्षो गुरुः सरः ॥
कषायः श्लेष्मलः स्वादुर्विदाही वातपित्तलः ।

वंशयवाकारफलम्

- द. तद्यवास्तु सरा रूक्षाः कषायाः कटुपाकिनः ॥
उष्णाः पित्तानिलकराः बद्धमूत्राः कफापहाः ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 133-137.

वंशः

- वंशो यवफलो वेणुः कर्मारस्तृणकेतुकः ।
मस्करः शतपर्वा च कण्टालुः कण्टको तथा ॥
महाबलो दृढग्रन्थिर्दृढपत्रो धनुद्रुमः ।
धनुष्यो दृढकाण्डश्च विज्ञेयो वाणभूमितः ॥

वंशगुणाः

- वंशौ त्वम्ली कषायौ च किञ्चित्तक्ली च शीतली ।
मूत्रकृच्छ्रप्रमेहार्शः पित्तदाहास्त्रनाशनी ॥

Rajā Nighaṇṭu, Mūlakādi varga, 34-36.

वंशरोचना

- क. स्याद्वंशरोचना वांशी तुङ्गक्षीरी तुगा शुभा ।
त्वक्क्षीरी वंशगा शुक्रा वंशक्षीरी च वैष्णवी ॥
त्वक्सारा कर्मरी श्वेता वंशकर्पूररोचने ।
तुङ्गा रोचनिका पिङ्गा नवेन्दुर्वंशशर्करा ॥

वंशरोचनागुणाः

- ख. स्याद्वंशरोचना रूक्षा कषाया मधुरा हिमा ।
रक्तशुद्धिकरी ताप पित्तोद्रेकहरा शुभा ॥
तवक्षीरे तवक्षीरे क्षीरे जातं गुणोत्तरम् ।
वंशक्षीरो समं प्रोक्तं तदभावेऽन्यवस्तुजम् ॥
गवयक्षीरजं क्षीरं सुस्निग्धं शीतलं लघु ।
सुगन्धि द्रावकं शुभमन्यत् स्वल्पगुणं स्मृतम् ॥

Rajā Nighaṇṭu, Pippalyādi varga, 185-189.

वंशलोचन-वंशलोचना

- स्याद्वंशरोचना वांशी तुगाक्षीरी तुगा शुभा ।
त्वक्क्षीरी वंशजा शुभ्रा वंशक्षीरी च वैष्णवी ॥

व्रणशोथचिकित्सायाम् (कोष्ठाश्रितरक्तस्त्रावणार्थम्)

वंशत्वगादिक्वाथः

Cakradatta, 44-60.

वंशलोचनस्य गुणाः

वंशजा बृंहणी वृष्या बल्या स्वाद्वी च शीतला ।

तृष्णाकासज्वरश्वासक्षयपित्तास्रकामलाः ॥

हरेन्कुष्ठं व्रणं पाण्डुं कषाया वातकृच्छ्रजित् ।

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 116-117.

तुगाक्षीरी-वंशरोचना

क. तुगाक्षीरी तवक्षीरी त्वक्क्षीरी क्षीरिका शुभाः ।

तगाक्षीर्यपरा वांशी वंशजा वंशरोचना ॥

वंशक्षीरी तुगा शुभ्रा वंश्या वंशविवर्द्धनी ।

ख. तुगाक्षीरी हिमा स्वाद्वी बल्या वृष्या च बृंहणी ॥

रक्तपित्तरुचिश्वासकासकुष्ठज्वरापहा ।

निहन्ति कामलापाण्डुतृष्णादाहक्षयव्रणान् ॥

वांशी कषाया मधुरा रूक्षा कसनकृच्छ्रजित् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 218-221.

पलाशगन्धा-वंशरोचनाविशेषः

अन्या पलाशगन्धा च तवक्षीरी प्रकीर्तिता ।

त्वक्क्षीरी मधुरा रूक्षा कषायाऽस्त्रारुचिव्रणान् ।

त्वक्क्षीरीगुणाः

पित्तश्वासक्षयान्हन्ति कासदाहनिषूदनी ॥

तुगाक्षीरी क्षयश्वासकासघ्नी मधुरा हिमा ।

Dhanvantari Nighaṇṭu, Śatapuspādi dvitīya varga, 58.

रसायनार्थं वंशलोचनयोगः

माक्षिकेण तुगाक्षीरी पिप्पल्या लवणेन च ।

त्रिफला सितया वाऽपि युक्ता सिद्धं रसायनम् ॥

Bhāvaprakāśa, Rasāyanādhikāra, 73-7.

वंशः-वेणुः

रजःप्रवर्त्तने

ह्यक्षाणि वेणुपर्वाणि शतपुष्पा (शुक्रपुष्पा) पलोन्मिता ।

गुडेन मधुरः क्वाथः प्रवर्त्तयति वै रजः ॥

Siddha Bhaiṣajya Maṇimālā, 4-11-1105.

रक्ताभिष्यन्दे

‘वंशस्य मूलेन रसक्रियां वा वर्तकृतां ताम्रकपालपङ्काम् ।’

Suśruta Samhitā, Uttara, 12-49.

प्रमेहे

‘देयास्तथा वेणुयवा यवानां कल्पेन गोधूममयाश्च भक्ष्याः ।’

Caraka Samhitā, Cikitsā, 6-24.

अलर्कविषे

‘.....शिफापेया क्षीरेण परिपेषिता ।

अङ्कटवंशजा वापि श्वविषघ्नो प्रयत्नतः ॥’

Bhāvaprakāśa, Cikitsā, 67-88.

अर्शःसु

मूलकत्रिफलाकार्णां वेणूनां वरुणस्य च ।

अग्रिमन्थस्य शिग्रोश्च पत्राण्यश्मन्तकस्य च ।

जलेनोत्क्राथ्यशूलार्तं स्वभ्यक्तमवाहयेत् ॥

Caraka Samhitā, Cikitsā, 14-45/46.

VANAPSIKĀ

Botanical name : *Viola odorata* Linn.

Family : Violaceae

Classical names : Vanapsikā, Maṇḍūkapaṇṇā, Vanapuṣpā.

Common name : Vanfsha (vanaphsha)

Sanskrit name : Vanapsikā

Regional names

Vanfsha (Hindi); Banosha (Mar.); Bayilettu (Tam.); Vanafsha (Pers.); Banafshaj (Arabic); Wild or Sweet violet (Eng.).

Description

A glabrous or pubescent herb, rarely more than 15 cm. height, arising from a rootstock, stem very short or O.

Root stocks stout, stolons slender.

Leaves tufted, broadly ovate-cordate, crenate, 1.25-5.0 cm. in diam.; tip rounded, nearly glabrous; stipules subulate lanceolate.

Flowers nodding, deep violet inside with a bluish white base; solitary axillary and forming a central flowering rosette, sweet-scented, sepals rounded at the tip.

Capsules round, bluntly 3-angled, downy, often purplish.

Flowering and fruiting time

Summers to rainy season; autumn season and colder months.

Distribution

Plant occurs in Kashmir and other parts of Western Himalayan regions at elevation of 1,500-1,800 meters. It is frequently cultivated in gardens. Cultivation is suitable in Himachal Pradesh and Kumaon hills.

***Viola sorpens* Wall. ex Roxb.**

A glabrous or white, hairy herb. Stem often producing runners or covered with withered scales. Leaves broadly ovate, deeply cordate, crenate, serrate; sinus open or closed, shallow or deep stipules toothed or entire. Flowers lilac. Stigma 3-lobed, producing laterally in a hooked beak. Capsules often pubescent.

Plant flowers in summers, May, Autumn to winter seasons. Herb occurs throughout the hilly districts, above 2,500 meters; Kumaon and Garhwal Himalaya. It is very common in moist woods in the hilly regions. Plant is occurring wild in Himachal Pradesh and Jammu & Kashmir.

Kinds and varieties

There are some species of *Viola* genus growing wild in the hilly regions of country are known as 'Banfsha' collected and used as botanical source as well as substitute and raw material adulterant of raw material of drug Vanapsikā (vanfsha). Chiefly the species of *Viola* referred in the context of Vanfshā are : *Viola odorata* Linn. *V. serpens* W. & R., *V. cinerea* Boiss, *V. canescens* wild. *V. pilosa* Blume and *V. biflora* Linn. Usually, raw material the whole plant of *Viola odorata* Linn. forms drug 'Banfsha' (consisting pañcāṅga or all parts except fruits) and an important raw drug 'Gul Banfsha' consists only flowers of source plant or species of *Viola* procured for Vanfsha or Vanapsikā. Most occasion-

ally the roots of plant drug are known and used as 'Vikhe Banfsha' (Vanaspati or Vanipsikā mūla); the raw drug material of 'Vikhe Banfsha' consists light yellow colour roots. The whole plant, particularly stem, leaves and flowers are commonly collected and supplied from the hills, alongwith raw material of flowers separately to drug markets and consumers. Certain Viola species are also ornamental.

Chemical composition

Seeds contain salisylic acid. Flowers contain an emetic principle called violin (present in all parts of the plant) which is acrid and bitter, a volatile oil, rutin (2%), cyanin (5.3%), a colourless chromogen, a glycoside of methyl salicylate, ketones are responsible for characteristic odour of highly pleasant nature.

Leaves contain and essential oil, an alkaloid, colouring matter, fredelin (0.016%), B-sitosterol (0.033%) and a straight-chain alcohol.

They contain a delightful perfume. Root-stocks contain saponins (0.1-2.5%), a glycoside of methyl salicylate and an essential oil.

Pharmacodynamics

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, snigdha
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Vātapittaśāmaka Kaphaniḥsāraka

Properties and action

Karma	: Chhedana-śleṣmahara- kaphaniḥsāraka Jantughna-piḍāśāmaka-śothahara Pittahara-virecana-vāmaka Śodhaka Svedajanana-jvaraghna Tvacya
Roga	: Kāsa-pratiśyāya-phuphphusaśotha Jvara-vataślaiṣmika jvara Raktavikāra-raktabhārādhikya Tvagdoṣa

Yakṛdvikāra
 Vibandha
 Śoṭha
 Śirahśūla.

Therapeutic uses

The drug Vanapsikā is an effective expectorant (anti-tussive, diaphoretic and anti-pyretic) herbal agent; it is diuretic, laxative and anti-biliousness. It is used alone or in mixture with other herbs for catarrhal and pulmonary troubles and for calculus affections. Generally the cough-syrups preparations contain Vanapsikā with other ingredients.

The herb shows antimycotic and antibacterial activity, and is considered quite effective in the treatment of eczema. In experiments conducted on rats, and extract of the herb (containing an emetine-like alkaloid) was found to be effective against induced inflammation. Rootstocks are also expectorant due to presence of saponins.

The drug is generally prescribed in the form of a decoction, jam or syrup. Flowers are credited with emollient and demulcent properties and are used for the preparation of sherbet, which is used as a household remedy for coughs and sore throat, hoarseness and ailments of infants. The leaves are official in foreign pharmacopocias. The leaves are reported to relive pain due to cancerous growth, particularly in the mouth throat cancer. The roots are emetic, and are employed as an adulterant or substitute of ipecac.

The flowers are also useful in the treatment of diseases of skin and eyes, and for relief from pain in the ear. It is considered a blood purifier. In large doses, the leaves as well as the roots are cathartic. The seeds are considered poisonous or toxic; they are purgative and diuretic.

Rootstocks are reported to possess a marked hypotensive activity. In the indigenous systems of medicine (supported with modern medicine based on pharmacoclinical studies), Vanapsikā, commonly known as Banfsha, is a popular and potential remedy generally recommended in cough, catarrhal affections, fever, coryza, chest com-

plaints and allied ailing conditions relating respiratory and some other systems of in particular; it is quite useful in constipation, hypertension, liver disorders, blood impurities, cutaneous affections, fevers, biliary complaints and some other ailments.

Externally, this herbal drug is applied as a paste over lesions of skin diseases, swelling, headache and tumour and its oil is used in insomnia (as head massage).

Vanapsikā is used as a single drug in form of hot infusion (with suitable ingredients) and also in combination with other effective drugs in recipe(s).

Parts used : Whole plant, flowers.

Dose : 3-6 gm.

Formulation : Banafshādi-kvātha.

VANAPSIKĀ—VANAFSĀ (वनप्सिका-वनफसा)

वनफसा कटुतिक्तोष्णा शीतज्वरनिवारणी ।

कासश्वासहरा त्वच्या सरा वातकफापहा ॥

Dravyaguna Vigyana, part II, p. 270.

VANATRAPUṢĪ- GIRIPARPAṬA

Botanical name

Podophyllum hexandrum Royle.

Syn. *Podophyllum emodi* Wall ex Hook. f. & Thoms.

Family : Berberidaceae

Classical name : Vanatrapuṣī-Giriparpaṭa

Sanskrit names : Vanatrapuṣī, Giriparpaṭa.

Regional names

Bankakrhi, Paparha, Vanakakarhu (Hindi); Patavel, Venivel (Mar.); Kan-Bangan (Kann.); Rikhapitta (Jaunsar, U.P.); Bankakrhu (U.P. hills); Indian *Podophyllum* (Eng.).

Description

A erect succulent herb, 35-60 cm. high, with creeping perennial rhizome, bearing numerous roots. Stem 1-2 feet high, slender, smooth, fleshy.

Leaves 2 or 3, orbicular-reniform, palmate, peltate, with lobed segments. Lvs. somewhat appearing like leaves of Papaya (*Eraṇḍakarkati*) and palm, 6-10 in. diam., 3-5. Flowers solitary, white or pink, cup-shaped, lobed, dentate. Fruits resembleing *Karkaṭī* (Cucumber), 1-2 in. diam.

Fruit and oblong or elliptic berry, 2.5-5.0 cm. diam., orange or red, containing many seeds embedded in the pulp; seeds 30-50 usually. Fruits edible when ripen.

Flowering and fruiting time

Plant flowers in May-July and fruits in August-October.

Distribution

Plant occurs in the inner range of the Himalaya, from Kashmir to Sikkim at altitudes of 3,000-4,200 meters. It grows in Kashmir vally, Himachal Pradesh and Uttar Pradesh (Garhwal) in north-western Himalayas.

Plant flourishes well as an undergrowth in the fir forests, rich in humus and decayed organic matter. It is generally associated with species of *Rhododendron*, *Salix*, *Juniperus* and *Viburnum*, but it also met with in open alpine meadows, where it also met with in open alpine meadows, where its occurrence is frequent. Plant loves moist and shady localities situated between 2,500 and 4,000 meters.

Root Drug : (a) The rhizome and roots of the source plant *Podophyllum hexandrum* Royle are obtained entirely from wild plants growing throughout the Himalayas, especially from Central Himalayas where they grow luxiriantly in open meadows at elevations of 3,000-3,500 meters.

(b) The underground rhizome remain derment during winter and produce acrial shots in April or May, depanding upon the melting of snow at different altitude and aspect. The shoot bear flower and fruit during summer and die down in November. Rhizomes which bear 3-5 aerial shoots are considered suitable for collection. The

rhizome and roots are dug up in spring or autumn, cleaned, dried in the sun, sifted, packed and stored in gunny bags; sometimes they are cut into cylindrical pieces and carefully dried. It is stated that rhizome gathered in spring contain a higher resin content than those obtained in autumn. Freshly collected rhizomes are reported to contain larger quantities of active principles which are lost on prolonged storing.

(c) Rhizome of drug plant *Podophyllum hexandrum* Royle. is irregular, tortuous, knotty, about 2-5 cm. long and 1-2 cm. thick, somewhat flattened dorsiventrally; upper surface is characterized by the presence of 3 or 4 cup-shaped scars; colour is externally yellowish brown to earthy brown. Surface, when tranversely cut, appears smooth and irregularly circular in outline. Odour is slightly and characteristics; taste is somewhat bitter and acrid; powder intensely irritating to the eyes. Roots are adventitious and arise mainly from the enlarged portion of the rhizome and root is weak, brittle and even. Odour of root is slight; taste is disagreeably bitter and acrid.

Kinds and varieties

Three species of *Podophyllum* are reported from Himalayan region in India.

The species *Podophyllum hexandrum* Royle exhibits a certain amount of variation in its botanical features. Plants mostly from those of the north-insertion. They have been classified into three or four varieties viz. var. *hexandrum*, var. *axillaris*, var. *bhootanensis* and var. *jaeschkei*.

Chemical composition

Roots contain podophyllin 7-15%, a resin which as podophyllotoxin as the major active constituent, in amount ranging from 32 to 34 per cent; a number of other related compounds and their glycosides have been isolated from the resin. It also contains queratin (8%), astragalin, kaempferol, an essential oil (3-7%) responsible for the odour of the podophyllin wax (8.6%) and mineral salts.

Leaves also contain 7.8-7.9 per cent of resin. In roots and rhizomes, several polymorphic modifications and sol-

vates of podophyllotoxin with varying points, have been obtained. The roots are richer in resin than the rhizomes.

Pharmacodynamics

Rasa	: Tikta, kaṭu
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittahara-pittasānśodhana

Properties and action

Karma	: Raktārbudahara Dīpana-yakṛduttejaka-pittasāraka (parokṣa pittasāraka-Indirect cholagogue) Pittasāraka-virecana Kṛmighna Raktaśodhaka-carmarogahara
Roga	: Raktārbuda Carmaroga-carmakīla Yakṛdvikāra-jirṇavibandha Krimiroga-gaṇḍūpadakrimi Vātarakta-āmavāta Kuṣṭha.

Therapeutic uses

The drug Vanatrapuṣi or Giriparpaṭa is an anti-cancer herbal agent (raktārbudaghnoṣadhi). It possesses tumour necrotizing properties.

It is useful in cancer (raktārbuda), liver disorders, chronic constipation (jirṇa vibandha), ascariasis (gaṇḍūpadakrimi), gout (vātarakta), rheumatism (āmavāta), kuṣṭha and raktadoṣa.

The drug is useful as an indirect cholagogue, counter-irritant, emaciating, anthelmintic, emetic, alterative, purgative, bitter tonic and skin diseases.

The drug (podophyllin) has been incorporated in various pharmacopoeias and formularies, finding out dried roots and rhizomes of plant as source of the drug.

Parts used

Root, Root extract (Podophyllin); Resin (source : root and rhizomes)

Dose : Root powder 250-500 mg., Root extract 15-16 mg.

VANATRAPUṢĪ-GIRIPARPATĀ (वनत्रपुषी-गिरिपर्पट)

वनत्रपुषिका तिक्ता स्यात् तीक्ष्णोष्णा कटुका सरा ।
पित्तसंशोधनी तीव्ररेचनी कृमिनाशिनी ॥
रक्तार्बुदस्य कीलस्य नाशिनी रक्तशोधनी ॥

Dravyaguna Vinjñāna, part II, p. 832.

VĀRĀHĪ

Botanical name

Dioscorea bulbifera Linn.

Syn. Dioscorea sativa Linn.

Family : Dioscoreaceae

Classical name : Vārāhī

Sanskrit names

Vārāhī, Gṛṣṭi (ka) Vārāhikanda, Carmakārāluka, Vārāluka, Carmakanda, Śūkari, Kroḍakanyā, Senakāntā, Mādhaveṣṭā.

Regional names

Genthi, Varahikanda (Hi.); Kukarakand (Mar.); Dukarakand (Guj.); Gethalu, Mankund (Mar.); Heggenasu (Kan.); Kattu-kachil (Mal.); Banalu (Beng.)

Description

A globrous climbing herb; stem bearing numerous bulbils; large unarmed climber with stems twining to the left.

Leaves usually alternate, broadly ovate-cordate, tip prolonged into a narrow, tail like point; lvs. simple.

Flowers in drooping, clustered spikes. Perianth segments linear. Flowers rather crowded in male spikes. Stamens much shorter than the perianth. Female spikes 10-25 cm. (4-10 in. long). Male spike 2-4 in. long.

Seeds winged at the base, triwinged.

Bulbils abundant and bulbils of different sizes and shapes, in certain cultigens the tuber suppressed in favour of rather large bulbils. Bulbils contain all the reserve food; small bulbils, as a rule, warted, they may be smooth when large.

Tubers solitary, very variable, globose to pyriform, usually small and round, but large under cultivation and weighing upto 1 kg.; skin purplish. Tuber internally yellowish white. Tubers bear sense, long hard or rough hairs appearing like pig's hairs (equated with hairs on body-skin of pig or Vārāha and hence coining the drug plant name Vārāhi or Vārāhikanda).

Flowering and fruiting time

Distribution

Plant occurs in Himalayan regions ascending to 6,000 ft. It is common throughout India, but does not thrive in the drier parts of India.

Kinds and varieties

There are about 10 varieties, the chief among them a few are cultivated in India. Among important varieties, a few are indicated : var. sativa, var. virmanica, var. kacheo, var. suvior. These are cultivated in India.

It is a very variable plant and is most prolific and is widest spread of all the Dioscoreas. Morphological difference specially in regard to shape of tubers, hairs, bulbils and other features has been marked in various areas, elevation and climatic zones. Plants with male flowers, small and large are respectively are marked as var. vera and smithia. There is a difference marked in the shape of tubers, such as bulbifera, heterophylla, suvior and sativa.

In materia medica of Indigenous medicine (Nighaṇṭu), various kinds of Āluka are mentioned. Various Sanskrit names of Vārāhī (vārāhī kanda) indicate its specific macroscopic features of plant and tubers and habit and habitat in general.

Chemical composition

Analysis of tubers gave the following values (on dry

matter basis) : albuminoids 7.36-13.31, ash 3.31-7.08, fat 0.75-1.28, carbohydrates 75.11-81.39 and fibre 3.28-9.64.

Pharmacodynamics

Rasa	: Kaṭu, tikta, madhura
Guṇa	: Laghu, snigdha
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Tridoṣahara

Properties and action

Karma	: Balya
	Vṛṣya-śukrala Pramehaghna Rasāyana Raktaśodhaka Vraṇaropaṇa Dīpana-anulomana-kṛmighna Viśaghna Varṇya
Roga	: Dourbalya-kārsya-kṣaya
	Prameha
	Klaibya
	Kuṣṭha
	Upadamśa
	Tvagdoṣa
	Agnimāndya-śūla
	Kṛmiroga
	Raktavikāra
	Gaṇḍamāla
	Svarya
	Varṇavikāra.

Therapeutic uses

The drug Vārāṇi is balya and rasāyana. It is useful as tonic, restorative, stomachic, carminative, anthelmintic, blood purifier, aphrodisiac, wound healer and complexion promoter.

Externally, the oil cooked with tubers is applied for treating nāḍivraṇa (sinus). The tubers are used internally in various diseases.

Tubers are eaten and used mostly as famine food.

Those of the wild forms are bitter and acrid, but can be rendered edible by coursing with ashes and steeping in cold water; they are also somewhat hard. The bulbils are generally edible after cooking as vegetable (gr̥ṣṭika śāka) in particular. The herbal vegetable (gainthi or genthi) of household use. The bulbils vary in their edibility; some are palatable and possess a flavour similar to that of potato. It has some specific methods of cooling for preparing tasty and nutritive vegetable and food regimens.

Vārāhī is used in abdominal colic, loss of gastric power, cervical adenitis (gaṇḍamāla), blood impurities (rakta vikāra), prameha, kuṣṭha, upadānśa, skin diseases, debility (dourbalya) and pigmentation abnormalities (varṇa vikāra). It is a potent drug taken as aphrodisiac, restorative and tonic for strengthening whole body; it is favourable medicine for persons requiring sexual, physiological function and physical strength and general turning up human-body, being rasāyana, vṛṣya and balya properties.

Parts used : Tubers, Bulbils.

Dose : Powder 3-6 gm.

VĀRĀHĪ (वाराही)

- क. वाराहीकन्दसंज्ञस्तु पश्चिमे गृष्टिसंज्ञकः ।
 वाराहीकन्द एवान्यैश्चर्मकारालुको मतः ॥
 अनूपसम्भवे देशे वराह इव लोमवान् ।
 वाराहवदना गृष्टिर्वरदेत्यपि कथ्यते ॥
- ख. वाराही तु रसे स्वाद्वी तिक्ता पाके पुनः कटुः ।
 शुक्रायुःस्वरवर्णाग्निबलपित्तविवर्द्धनी ।
 कफकुष्ठमरुन्मेहे कृमिहृच्च रसायनी ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 177-179.

वाराहीकन्दः

- अ. वाराही शूकरी छागी मागधी गृष्टिका वरा ।
 गृष्टिर्विष्वक्सेनकान्ता कान्ती च वनमल्लिका ॥

चक्रालुसंज्ञककन्दः

- ब. तस्याः कन्दोऽपि चक्रालुश्चान्यः शाबरकन्दकः ।
 खरकन्दश्च वाराहीकन्दस्तु स्नुक्छदोपमः ॥
 किर्मूलकमूलाभः शौकरो वडवानलः ।

चक्रपाणिकथितो वाराहीकन्दपरिचयः

- वाराहीकन्दसंज्ञस्तु चर्मकारालुको मतः ।
 पश्चिमे गृष्टिशब्दाख्यो वराह इव लोमवान् ॥

Cakradatta, Vyādhikāra, 66-25.

वाराहीगुणाः

- स. शौकरो मधुरस्तिक्तः कटुको रसपाकतः ॥
 शुक्रायुःस्वरवर्णाग्निबलपित्तविवर्द्धनः ।
 कफकुष्ठमरुन्मेहकृमीन् हन्ति रसायनम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1596-1699.

वाराही

- क. स्याद्वाराही शूकरी क्रोडकन्या
 गृष्टिर्विष्वक्सेनकान्ता वाराही ।
 कौमारी स्याद् ब्रह्मपुत्री त्रिनेत्रा
 क्रौडा कन्या गृष्टिका माधवेष्टा ॥
 शूकरकन्दः क्रोडो वनवासी कुशनाशनो वन्यः ।
 अमृतश्च महावीर्यो महौषधिः शवरकन्दश्च ॥
 वराहकन्दो वीरश्च ब्राह्मकन्दः सुकन्दकः ।
 वृद्धिदो व्याधिहन्ता च वसुनेत्रमिताह्वयाः ॥
 ख. वाराही तिक्तकटुका विषपित्तकफापहा ।
 कुष्ठमेहक्रिमिहरा वृष्या रसायनी ॥

Rajā Nighaṇṭu, Mūlakādi varga, 85-88.

रसायने

‘वाराहीकल्पः’

Suśruta Saṁhitā, Cikitsā, 27-11.

नाड्याम्

‘वाराहिकन्दश्च तथा प्रदेयो नाडीषु तैलेन च मिश्रयित्वा ।’

Suśruta Saṁhitā, Cikitsā, 17-36.

VARUṆA

Botanical name

Crataeva nurvala Buch-Ham.

Crateva nurvala F. Ham.

Syns. *Crateva religiosa* var. *nurvala* (F. Ham.) Hook.

L. & Thoms.

Family : Capparidaceae

Classical name : Varuṇa

Sanskrit names : Varuṇa, Tiktaśāka

Regional names

Baruna, Barna (Hi.); Varuna, Varun (Beng.); Hadvarna (Mar.); Varane (Guj.); Maralingam (Tam.); Urumetti (Tel.); Three-leaved caper (Eng.).

Description

Erect or crooked trees upto 20 meters tall, branching high above the ground; moderate-sized deciduous tree.

Leaves petiole with a distinct knob, consisting of glands; leaflets 2-4-times as long as broad, top gradually acuminate with an acute tip, mid rib reddish tinged, across, nerves prominent beneath.

Inflorescence terminal on leafy twigs; pedicels having their prominent scars on it. Petals clawed. Stamens on androphore and gynophore; stigma distinct, sessile.

Berry covered with yellow greyish crust, puling off later, deep orange. Seeds dorsally crusted.

Flowering and fruiting time

Plant flowers in February-April and fruits in May-July.

Distribution

Plant is occurring in South-Asia and Indo-Malayasiana zone. Plant is commonly planted in gardens and along avenues in Uttar Pradesh, Central India. It is wild in dry deciduous forests.

Kinds and varieties

Important species of *Crateva* worth mentioning in the context of drug Varuṇa follow :

***Crateva adansonii* Dc.** syns. *Crateva odora* Buch-

Ham., *C. roxburghii* R. Br., *C. religiosa* Forst. f. var. *roxburghii* (R. Br.) Hook. L. & Thoms.

Small trees. Petiole 7-9 (-10.5) cm. long, with small glands above at the top. Leaflets with 5 (-10) mm. long, petiolules, widest about the middle, the lateral ones asymmetric; narrowed to base; abruptly narrowed to apex into 1.5-2.5 cm. long acumen, the tip acute; nerves 4-5 pairs; petiole 10-15 cm. long on vegetative shoots; leaflets upto 1 cm. long stalked, 5-6 nerved. Inflorescence producing a few flowers, sometimes 12-20 flowers; pedicels 3-5 (-7) cm. long. Sepals elliptic. Petals initially green later white-yellowish or pale pink, clawed, elliptic. Stamens 15-26, initially white, later lilac or purplish. Gynophora 2.75-5 cm. long, lilac; ovary ellipsoid. Fruits subglobose.

Plant flowers and fruits in April-June. Plant occurs in Madhya Pradesh, Central India.

***Crateva unilocularis* Buch-Ham.** syn. *Crateva religiosa* sensu Hook. L. & Thoms (non Forst. f.) var. *roxburghii* (R. Br.) Hook. L. & Thoms.

Small tree with full foliage during anthes. Petiole 5-12 cm. long, with distinct glands. Leaflets 4-12 mm. long stalked, thinly coriaceous, the lateral ones asymmetric, with a short acute acumes, midrib reddish; nerves 5-10 pairs, reticulation distinct. Inflorescence bearing 10-40 flowers; pedicels 3.5-7 cm. long. Sepals 7-12 mm. long. Petals 7-18 mm. long, clawed, the limb 12-25 mm. long. Stamens 15-20, androphore negligible. Gynophore 3.5-6.5 cm. long. Fruits globose, rough with minute flat papillae; seeds smooth, dull brown.

Plant flowers and fruits in March-June. Plant occurs in dry deciduous forests in Central Provinces.

All the three relevant species of *crateva* genus morphologically differ basis of characteristics of mainly flowers, fruits and leaflets alongwith some other features of plants (trees) habit.

Fruits grewish, anyway when dried, mostly roughish with dry flat papillae.

	<u>Fruits</u>	<u>Foliage/Tree</u>	<u>Flowers</u>	<u>Leaflets</u>
Grateva religiosa	Fruits greyish, anyway when dried, mostly roughish with dry flat papillae	Tree in full foliage during anthesis	Flowers not orange-brown (in the herbarium)	—
Grateva unilocularis	—	—	—	Leaflets very thin, even when mature, mostly sessile dull above, twigs mostly strawcoloured when dried.
Grateva religiosa	—	—	—	Leaflets subcoriaceous when mature, at least 3 mm. long stalked, less glossy above, the under surface paler, twigs mostly brownish when dried.
Grateva unilocularis	—	—	—	Leaflets subcoriaceous when mature, at least 3 mm. long stalked, less glossy above, the under surface paler, twigs mostly brownish when dried.
Grateva adunsonii ssp. odora	Fruits red-violat-brownish, tinged, anyway when dried, throughout smooth.	Tree during anthesis bone or the foliage at that time very young.	Flowers especially their basal parts, orange-brown tinged (in the herbarium)	—

Chemical composition

The bark contains tannin and also saponin.

Pharmacodynamics

Rasa	: Tikta, kaṣāya
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarman	: Kaphavātaśāmakā Pittavardhana

Properties and action

Karma	: Aśmarībhedana-mūtrajanana Dīpana-anulomana Pittasāraka-bhedana Kṛmighna-Arśoghna Raktaśodhaka-varṇya Sāṅkramaṇapratirodhi

Roga	Jvaraghna Raktotkleśaka : Medohara Aśmari-mūtrakṛcchra-mūtrāghāta Bastiśūla-mūtramārgasaṅkramaṇa Mūtra-mūtramārgavikāra-bastiroga Vṛkkaroga-vṛkkaśoṭha Vraṇaśoṭha-vidradhi-vraṇa Gaṇḍamāla-galagaṇḍa Vidradhi-antarvidradhi Agnimāndya-śūla-gulma Yakṛdvikāra Kṛmiroga Medoroga Arśa Vyaṅga-raktadoṣa-varṇavikāra Jvara Dourbalya.

Therapeutic uses

The drug Varuṇa is an effective diuretic and lithontriptic (aśmaribhedana) herbal agent; it is alterative, diuretic, anthelmintic, laxative, demulcent, carminative and stomachic. It is used in blood diseases, constipation, obesity (emaciation), calculi, flatulence, glandular and urinary diseases. The drug is used in internal abscess antar (vidradhi).

The bark is bitter, anti-periodic, tonic and demulcent, and has a stimulating action on the liver. An extract of it is given as laxative and for promoting appetite. It is used in calculus and other affections of the urinary organs. The root bark is rubefacient and counter-irritant.

The leaves are reported to have the property of reddening and even blistering the skin. They are employed in poultices. The flowers are astringent and cholagogue.

The bark of Varuṇa is frequently given in the management of U.T.I. (urinary tract infection), renal calculus, renal colic, calculus, gravels, dysuria, abnormal micturition (e.g. scanty or painful urination) and some other allied urin complaints of urinary system (or mūtravaha srotas).

Varuṇa belongs to highly active herbal drugs on urinary functions and their abnormal conditions. Its efficiency is as anti-septic (saṅkramaṇa pratirodhī) has been studied and clinically proved to be useful in patients of different diseases.

Varuṇa is useful in various other diseases such as gaṇḍamāla (cervical ademitis), vātarakta (gout), gulma, śūla, worms (kṛmi), agnimāndya and raktadoṣa.

Externally, the leaves and bark are applied as paste on vṛṇa śoṭha, vidradhi, pittasāraka and bhedana.

Parts used : Bark, leaves, root.

Dose : Decoction 50-100 ml.

Formulation

Varuṇādikvātha, Varuṇādyā taila, Varuṇādyā ghr̥ta, Varuṇādyā cūrṇa, Varuṇakṣārayoga.

Groups

Varuṇādi, Vātāśmarināśana, Kaphāśmarināśana (Suśruta Samhitā).

VARUNA (वरुण)

वरुणो मधुरस्तिक्तः कषायकटुको लघुः ।
रूक्षोष्णः पित्तलो भेदी दीपनः कफवातजित् ॥
निहन्ति कृमिवातास्त्रमूत्राघातरुहृद्गदान् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 849-850.

वरुणपुष्पं फलञ्च

पुष्पं पित्तास्त्रहृद् ग्राहि फलं स्निग्धं सरं गुरु ।
स्वादूष्णं मधुरं पाके वातघ्नं कफपित्तजित् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 850-851.

पुष्पं वरुणजं ग्राहि पित्तघ्नमामवातजित् ॥

Rājavallabha Nighaṇṭu.

वरुणः कटुरुष्णश्च रक्तदोषहरः परः ।

शीर्षवातहरः स्निग्धो दीप्यो विद्रधिवातजित् ॥

Rajā Nighaṇṭu, Prabhadrādi varga, 137.

वरुणो वरणः सेतुस्तिक्तशाकः कुमारकः ।

वरुणः पित्तलो भेदो श्लेष्मकृच्छ्राश्ममारुतान् ॥

निहन्ति गुल्मवातास्रकृमीश्चोष्णोऽग्निदीपनः ।

कषायो मधुरस्तिक्तः कटुको रुक्षको लघुः ॥

Bhāvaprakāśa Nighaṇṭu, Vatādi varga, 65-66.

वरुणोऽनिलशूलघ्नो भेदी चोष्णाश्मरीहरः ।

Rajavallabha Nighaṇṭu.

वरुणशाकम्

कफापहं शाकमुक्तं वरुणप्रपुत्राडयोः ।

Suśruta Saṁhitā.

अश्मर्यादिविकाराणां नाशनार्थं वरुणादिगणः

‘वरुणार्त्तगलौ.... ।

वरुणादिगणो ह्येषः कफमेदोनिवारणः ।

विनिहन्ति शिरः शूलं गुल्माभ्यन्तरविद्रधीन् ॥’

Cakradatta, 34/22-24.

वरुणः शीतलः वातघ्नः तिक्तो विद्रधि जन्तुजित् ।

तथा च कटुरुष्णश्च रक्तदोषहरः परः ॥

Dhanvantari Nighaṇṭu.

गण्डमालायाम्

काञ्चनारत्वचः क्वाथः शुण्ठीचूर्णेन नाशयेत् ।

गण्डमालां तथा क्वाथः क्षौद्रेण वरुणत्वचः ॥

Śārṅgadhara Saṁhitā, 2-2-126.

किक्किसनाशार्थम्

घृष्टानि गव्यशकृता प्रथमं ततश्च

पिट्टैर्जले वरुणकस्य द्रव्यैः प्रकामम् ।

उद्धर्तितानि सहसैव नितम्बिनीनां

नाशं प्रयान्ति सुमहान्त्यपि किक्किसानि ॥

Rājamārtanḍa, 31-41.

वातजवेदनायाम्

‘शिगुः सलवणः कल्को धान्याम्लेनानिलार्तिजिल्लेपात् ।’

Bhāvaprakāśa.

अश्मर्याम्

‘पिबेद्वरुणमूलत्वक्क्वाथं तत्कल्कसंयुतम् ।’

Vṛnda, 34-35.

Cakradatta, 34-27.

गण्डमालायाम्

माक्षिकाढ्यः सकृत् पीतः क्वाथो वरुणमूलजः ।

गण्डमालां हरत्याशु चिरकालानुबन्धिनीम् ॥

Vṛnda Mādhava, 41-18.

विद्रधौ

.....मूलं वरुणस्य च ।

जलेन कथितं पीतमपक्वं विद्रधि जयेत् ।

Vṛnda Mādhava, 43-12.

अश्मर्यादिमूत्ररोगे वरुणतैलम्

त्वक्पत्रफलमूलस्य वरुणस्य त्रिकण्टकात् ।

कषायेण पचेत्तैलं बस्तानाऽऽस्थापनेन च ॥

शर्कराऽश्मरिमूत्रघ्नं मूत्रकृच्छ्रात्प्रमुच्यते ।

Bhāvaprakāśa, Āsmarīrogādhikāra, 37-58.

अन्तर्विद्रधिचिकित्सायाम्

श्वेतावर्षाभुवो मूलं मूलं वा वरुणस्य च ।

जलेन कथितं पीतमन्तर्विद्रधिहृत्परम् ॥

Bhāvaprakāśa, Madhyakhanda, 46-32.

व्यङ्गेषु

व्यङ्गजिह्वरुणत्वग्वा छागीक्षीरप्रपेषिता ।

Cakradatta, Kṣudraroga cikitsā, 55-52.

अर्शःसु

....वरुणस्य

च....पत्राणि ।

जलेनोत्क्राथं शूलार्तं स्वभ्यक्तमवगाहयेत् ॥

Caraka Samhitā, Cikitsā, 14-45/46.

विसर्पे

‘गणस्तु योज्यो वरुणप्रवृत्तः क्रियासु सर्वाषु विचक्षणेन ।’

Suśruta Samhitā, Cikitsā, 17-16.

पूतनाप्रतिषेधार्थम्

....वरुणः

पारिभद्रकः ।

....योज्याः स्युः बालानां परिषेचने ।

Suśruta Samhitā, 6-32-3.

विषसंसृष्टे अञ्जने

‘अञ्जनं....निर्यासो वरुणस्य च ।’

Suśruta Samhitā, Kalpa, 1-70.

गुल्मरोगे पथ्यम्

शुष्कमूलकयूषश्च बिल्वस्य वरुणस्य च ।
....तत्रेन तैलसर्पिभ्यां व्यञ्जनान्युपकल्पयेत् ॥

Caraka Samhitā, Cikitsā, 5-166.

अश्मर्यादिविकारे

वरुणादिकाथः
वरुणादिघृतम्
वरुणतैलम्
वरुणादिगणः
वरुणगुडः
वरुणाद्यं चूर्णम्
वरुणाद्य घृतम्

Bhāvaprakāśa, Āsmārīrogādhikāra, 37-72/79, 83/87 etc..

अश्मरीरोगे वरुणकाथः

पिबेद्वरुणजं मूलं काथं तत्कल्कसंयुतम् ।
काथश्च शिग्रुमूलोत्थः कटुष्णेऽश्मरिनाशनः ॥

Bhāvaprakāśa, Āsmārīrogādhikāra, 37-65.

Cakradatta, 34-27.

अश्मरीचिकित्सायां वरुणयोगाः

वरुणघृतम्
वरुणाद्य तैलम्

Cakradatta, Āsmārī cikitsā, 34/41-44, 49.

मूत्ररोगे वरुणाद्यं चूर्णम्

पलान्यष्टौ तु कुर्वीतं क्षाराणां वरुणत्वचाम् ।
तदूर्ध्वं यावशूकन्तु ततोऽप्यूर्ध्वं गुडात्स्मृतम् ॥
एकीकृत्य विसृष्टैतत्त्रादेत्कर्षप्रमाणतः ।
घर्माम्बुपानतोऽवश्यं कृच्छ्राश्मरिविनाशनम् ॥

Bhāvaprakāśa, Āsmārīrogādhikāra, 37/72-73.

अश्मर्यादिरोगे वरुणक्षारयोगः

वरुणकभस्मपरिस्तुतसलिलं तच्चूर्णं यावशूकयुतम् ।
कथनीयं तत्तावद्यावच्चूर्णत्वमायाति ॥
तद्गुडयुक्तं हन्यात्तदुदराश्मरीं घोराम् ।
प्लीहानं गुल्मवरं श्रोण्यां कुक्षौ रुजां तीव्राम् ॥

आमचयं बस्तिगदान्कृच्छ्रं वा वातजं घोरम् ।
वह्निमदनं सुकष्टाश्मर्यश्मरीञ्चाशु ॥

Bhāvaprakāśa, Aśmarīrogādhikāra, 37/74-76.

अश्मर्याम्

क्वाथो वरुणमूलस्य तत्कल्केन सभावितः ।
पीतो निपातयेत् सद्यः शर्करामश्मरीमपि ॥
वरुणत्वक्शिलाभेदशुण्ठीगौक्षुरकैः कृतः ।
कषायः क्षारसंयुक्तः शर्करां च भिनत्यपि ॥

Vṛndamādhava, 34-24.

अश्मरीरोगे वरुणादिक्वाथः

वरुणस्य त्वचं श्रेष्ठां शुण्ठीगोक्षुरसंयुताम् ।
यवक्षारगुडं दध्वा शमयित्वा पिबेद्धिताम् ॥
अश्मरीं वातजां हन्ति चिरकालानुबन्धिनीम् ।

Cakradatta, Aśmarī cikitsā, 34-1.

Vṛndamādhava, 34-1.

वरुणत्वक्कषायस्तु पीतस्तु गुडसंयुक्तः ।
अश्मरीं पातयत्याशु बस्तिशूलविनाशनः ॥

Vṛndamādhava, 34-26.

Cakradatta, Aśmarī cikitsā, 34-25.

जीर्णगलगण्ड-गण्डमालाऽदिचिकित्सायां वरुणमूलत्वक्क्वाथः

Cakradatta, 41-17.

अपक्वान्तर्विद्रधिचिकित्सायां वरुणादिक्वाथः

वरुणादिगणक्वाथमपक्वेऽभ्यन्तरोत्थिते ।
उषकादिप्रतीवापं पिबेत् संशमनाय वै ॥

Cakradatta, Vidradhi cikitsā, 43-15.

VĀSĀ

Botanical name : Adhatoda vasica Nees.

Family : Acanthaceae

Classical name : Vāsa

Sanskrit names

Vāsā, Vāsaka, Vāsikā, Simhāśya, Ātarūśaka,
Vājidanta, Vṛṣa.

Regional names

Arhusa, Vakas (Hi.); Bakas (Beng.); Basa (Punj.); Adulasa (Mar.); Araduso (Guj.); Evadad (Tam.); Adasara (Tel.); Malabar nut (Eng.).

Description

Diffuse, foetid shrubs, upto 2 meters tall, with short internodes; small gregarious evergreen shrub.

Leaves ovate or elliptic-lanceolate, acuminate, upto 20 cm. long.

Flowers white, streaked with pink or purple. Spikes pedunculate clustered towards branch end. Bracts large, leafy, ovate, glabrous, 6-7-nerved, bracteoles 1-nerved. Corolla tube short; upper tip galeate, subentire, lower spreading and 3-lobed. Stamens 2; inserted near the mouth of corolla tube; filaments hairy near base.

Capsule clavate, pubescent. Seeds sub-orbicular, rugose.

Flowering and fruiting time

Plant flowers and fruits in December-April. Flowering during the period from February to March or around spring season.

Distribution

Plant occurs in Indomalaysian zone. It is growing wild commonly in waste places, hedges, along roadsides (outskirts) and near fences of old buildings. It is found throughout India ascending to 4,000 ft. elevation, in sub-Himalayan tracts and commonly in the plains.

Kinds and varieties

Justicia gendarussa Linn. known as Kṛṣṇa vāsā, is prevalent in Bengal. Similarly *Adhatoda beddomei* Clarke. is reported to be used in Kerala. These both species are also regarded quite potent while *Adhatoda vasica* Nees. which is commonly used in medical practice as Vāsā in general.

Chemical composition

Plant contains an aromatic volatile oil, fat, resin, a bitter alkaloid vasicine, a carbonic acid named as adhatodic acid, sugar, gum, colouring matter and salts.

Leaves also yield a yellow dye which is a colouring agent. A principal chemical constituent vasicine is present

in leaves and bark in percentage of 0.2-0.4 and 0.35 respectively. The roots contains only traces and the alkaloidal contents of the vāsa plant differ in different parts. Another active principal vasicinone is present in the leaves.

The pharmacological action and therapeutical properties of drug are attributed to alkaloidal contents including essential oil.

Pharmacodynamics

Rasa	: Tikta, Kaṣāya
Guṇa	: Rūkṣa, laghu
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka

Properties and action

Karma	: Chedana-śleṣmahara Kāsaghna-kaṇṭhya-śvāsahara Hṛdya Kṣayahara Raktaśodhaka-raktastambhana- tvagdoṣahara Stambhana Arśoghna Nāḍi (prāṇadā) avasādaka Śothahara-vedanāsthāpana Jvaraghna-kaphapittajvara Svedajanana-kuṣṭhaghna-jantughna Mūtrajanana Chardinigrahaṇa Medohara Rasāyana.
Roga	: Kāsa-śvāsa-yakṣmā-urahrkṣata Phuphphusa vikara-śvasanavikṛti Kṣayaroga Hṛdroga-raktapitta-raktārśa Raktaniṣṭhivana-raktavikāra Atisāra-pravāhikā Mūtrakṛcchra-mūtradāha-paittika prameha Carmavikāra-kuṣṭha

Āmaṣvāta-vraṇaśoṭha-naḍiśūla
Apatantraka-apasmāra
Bāhya-krimi.

Therapeutic uses

The drug Vāsā is an effective expectorant and potent anti-cough herbal agent, and it is bitter; and astringent, It is antispasmodic, alterative, anthelmintic, bacterial antiseptic and expectorant. It is used in fever, consumption, respiratory disorders, skin affections and vomiting. The drug is given frequently in cough, cough-fever anaemia and haemorrhage. It is commonly used as expectorant drug in traditional medicine. An active principle vasicinone isolated from the leaves has shown potent bronchodilator action.

Vāsa is well-known drug in indigenous systems of medicine and is generally recommended for a variety of ailments such as bronchitis, asthma, fever, jaundice and consumption. The leaves and roots are antispasmodic and efficacious in cough. It is useful in tuberculosis (pulmonary), bronchial asthma and allied diseases of thorax (chest) and respiratory system.

The classical texts of Indian medicine have appreciated the therapeutic utility of vāsā : 'In presence of vāsā why should those suffering from intrinsic haemorrhage (raktapitta), wasting (kṣaya) and cough (Kāsa) be worried if there is any hope for survival of life (Bhāvaprakāśa, 9-30; Harita Saṁhitā, 3-10-24 and Vaidya Manoramā 9-11)'.

The drug has therapeutically been recommended as useful remedy in several other diseases such as diarrhoea, dysentery (raktaja pravāhikā), meno-metrorrhagia, blood spitting (raktaniṣṭhivana), blood impurities and oedema.

The flowers (vāsā puṣpa) are given in some urinary troubles (i.e. mūtrakṛcchra, mūtradāha and paittika prameha), skin diseases (kuṣṭha and other ailments of group of cutaneous affections) and febrile conditions.

Externally, the drug plant is applied on rheumatism, arthritis, neuralgia and skin diseases. An oil prepared with plant (boiled and cooked in oil) is employed in mas-

sage in tetanus, insanity, epilepsy and rheumatic disorders etc, being an anti-inflammatory and analgesic drug. Leaves juice is used as germicidal agent.

Vāsa has been incorporated in various formulations as a major or component drug prescribed in management of these diseases particularly cough, fever, intrinsic haemorrhage, consumption wasting and asthma.

Parts used : Roots, leaves, flowers.

Dose

Leaves juice 10-20 ml., Flowers juice 10-20 ml.,
Roots decoction 40-80 ml.

Formulation

Vāsāvaleha, Vāsāriṣṭa, Vāsāpānaka, Vāsācandanādi taila, Vāsādighṛta, Vajraka ghṛtam, Vāsākhaṇḍakūṣmāṇḍa (Ka), Vṛṣamūlādi tailam, Vāsāghṛtam, Vṛṣaghṛtam.

VĀSĀ (वासा)

सिंहास्या तुवरा तिक्ता हृद्या स्वर्या हिमा लघुः ॥

वातला कफपित्तास्रश्वासकासहरा हरेत् ।

ज्वरमेहारुचिच्छर्दिक्कुष्ठतृष्णाक्षतक्षयान् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 13-14.

वासको वातकृत्स्वर्यः कफपित्तास्रनाशनः ॥

तिक्तस्तुवरको हृद्यो लघुशीतस्तुडर्तिहृत् ।

श्वासकासज्वरच्छर्दिमेहकुष्ठक्षयापहः ॥

Bhāvaṇṭakāśa Nighaṇṭu, Guḍūcyādi varga, 89-90.

वासा तिक्ता कटुः शीता कासघ्नी रक्तपित्तजित् ।

कामलाकफवैकल्यज्वरश्वासक्षयापहा ॥

Rajā Nighaṇṭu, Śatāhvādi varga, 49.

वासायां विद्यमानायामाशायां जीवितस्य च ।

रक्तपित्ती क्षयी कासी किमर्थमवसीदति ॥

Bhāvaṇṭakāśa, Raktapittādhikāra, 9-30.

‘वृषपुष्पं....कफपित्तहरं तिक्तं शीतं कटु विपच्यते ।’

Caraka Saṁhitā, Sūtra, 46.

‘वृषागस्त्ययोः पुष्पाणि तिक्तानि कटुविपाकानि क्षयकासापहानि च ।’

Suśruta Saṁhitā, Sūtra, 46.

सुखप्रसवकर-मूढगर्भापकर्षको प्रयोगः

‘नाभिबस्तिभगालेपः आटरुषकमूलतः ।’

Cakradatta, Strīroga cikitsā, 63-16.

स्थौल्यरोगे गात्रदौर्गन्ध्यहरो वासास्वरसलेपः

वासादलरसो लेपाच्छङ्खचूर्णेन संयुतः ।

....गात्रदौर्गन्ध्यनाशनः ॥

Cakradatta, 36-35, Vṛndamādhava, 36-18.

शोथरोगे सिंहास्यादिक्वाथः

सिंहास्यामृतभण्टाकीक्वाथं कृत्वा समाक्षिकम् ।

पीत्वा शोथं जयेज्जन्तुकासं श्वासं ज्वरं वमिसम् ॥

Cakradatta, 39-20.

Vṛndamādhava, 39-16.

कुष्ठे वासायोगः

‘वासा त्रिफला पाने स्नाने चोद्धर्तने प्रलेपे च ।’

Caraka Samhitā, Cikitsā, 7-128.

वासापत्रस्वेदः

Caraka Samhitā, Cikitsā, 12-17.

रक्तपित्ते वासाघृतम्

वासां सशाखां सपलाशमूलां कृत्वा कषायं कुसुमानि चास्या ।

प्रदायकल्कं विपचेद् घृतं तत् सक्षौद्रमाश्वेव निहन्ति रक्तम् ॥

Caraka Samhitā, Cikitsā, 4-88.

जीर्णज्वरे वासादिघृतम्

Caraka Samhitā, Cikitsā, 3/223-224.

श्वासकासरक्तपित्तामयानाम् आटरुषकादिक्वाथः

अटरुषकमृद्वीकापथ्याक्वाथः सशर्करः ।

मधुमिश्रः श्वासकासरक्तपित्तनिवर्हणः ॥

Caraka Samhitā, Cikitsā, 4-65.

Vṛndamādhava, 9-13.

रक्तपित्ते वासाखण्डः

Cakradatta, 9/80-82.

रक्तपित्ते अटरुषकनिर्यूहे

अटरुषकनिर्यूहे प्रियङ्गुं मृत्तिकाञ्जने ।

विनीय लोभ्रं क्षौद्रं च रक्तपित्तहरं पिबेत् ॥

Caraka Samhitā, Cikitsā, 4-66.

Cakradatta, 9-13.

राजयक्ष्मणि वासा-शतावरीयोगाः

हस्तपादाङ्गदाहेषु ज्वरे रक्ते तथोर्ध्वगे ।

वासाघृतं शतावर्यां सिद्धं वा परमं हितम् ॥

Caraka Samhitā, Cikitsā, 8-105.

रक्तपित्ते वासाखण्डकूष्माण्डकः

Cakradatta, 9/76-79.

अम्लपित्त-कामलायुक्तपित्तकफज्वरे

सपुत्रपुष्पवासाया रसः क्षौद्रसितायुतः ।

पित्तश्लेष्मज्वरं हन्ति साम्लपित्तं सकामलम् ॥

Bhāvaprakāśa, Madhya khaṇḍa, Jvarādhikāra 1/436.

ज्वरे कास्योपचारार्थम्

‘.....लिह्यान्मधुना वा वृषाद्रसम् ।’

Bhāvaprakāśa, Jvarādhikāra, 1-861.

रक्तपित्ते वासापत्रक्राथम्

वासापत्रसमुद्भूतो रसः समधुशर्करः ।

क्राथो वा हरते पीतो रक्तपित्तं सुदारुणम् ॥

Bhāvaprakāśa, Raktapittādhikāra, 8-27.

कच्छूचिकित्सायां सिंहास्यदलप्रयोगः

Cakradatta, 50-43.

रक्तपित्ते वासापुटपाकः

पिष्टानां वृषपत्राणां पुटपाकरसो हिमः ।

समधुर्हरते रक्तपित्तं कासज्वरक्षयान् ॥

Śārṅgadhara Samhitā, 2-1-34.

Bhāvaprakāśa, Raktapittādhikāra, 8-28.

रक्तपित्ते वृषपत्रस्वरसः

वृषपत्राणि निष्पीड्य रसं समधुशर्करम् ।

पिबेत् तेन शमं याति रक्तपित्तं सुदारुणम् ॥

Vṛndamādhava, Cakradatta, 9-8.

Raktapitta cikitsā, 9-12.

रक्तपित्ते वासाकषायः

वासाकषायोत्पलभृत्प्रियङ्गुलोधाञ्जनाम्भोरुहकेशराणि ।

पीत्वा सिताक्षौद्रयुतानि हन्यात् पित्तासृजो वेमुरुदीर्णमाशु ॥

Cakradatta, Raktapitta cikitsā, 9-14.

रक्तपित्ते वासास्वरसप्रयोगः

तालीशचूर्णसंयुक्तः पेयः क्षौद्रेण वासकस्वरसः ।

कफपित्ततमकश्वासस्वरभेदरक्तपित्तहरः ॥

Vṛndamādhava, Cakradatta, 9-12.

Raktapitta cikitsā, 9-15.

पित्तकफजकासे

वासास्वरसः पेयो मधुयुक्तो हिताशिना ।

पित्तश्लेष्मकृते कासे रक्तपित्ते विशेषतः ॥

Cakradatta, Kāsa cikitsā, 11-27.

Vṛndamādhava, 11-18.

कुष्ठचिकित्सायां वज्रकघृतम्

Cakradatta, 50/120-121.

कुष्ठे

वृषकुटजसप्तपर्णाः करवीरकरञ्जनिम्बखदिराश्च ।

स्नाने पाने लेपे क्रिमिकुष्ठनुदः सगोमूत्राः ॥

Caraka Samhitā, Cikitsā, 7-158.

अर्शसि

रुग्गतं कफवातेन अत्यर्थं गुदकीलकम् ।

स्वेदयेद् वा वृषापिण्डैः ।

Baṅgasena, Arśa, 77.

कासश्वासे

सिंहास्यरससंसिद्धहरिद्राखण्डचूर्णकम् ।

दुग्धसत्तानिकालीढं शुष्ककासनिबर्हणम् ॥

Siddhabhaiṣajya Maṇimālā, 4-333.

सिंहास्यामृतसिंहीनां क्वाथं मधुसमायुतम् ।

पिबेत् सपित्ते कफजे कासे श्वासे ज्वरे क्षये ॥

Baṅgasena, Kāsa, 59.

वातव्याधौ

वृषमूलादितैलम् ।

Caraka Samhitā, Cikitsā, 28-170/171.

सिंहास्यशुण्ठीकृतमालकानां पिबेत् कषायंरुबुतैलमिश्रम् ।

यो गृध्रसी नष्टगतिश्च सुप्तः स वीतरुक् स्यात्तु किमत्र चित्रम् ॥

Bhāvaprakāśa, Cikitsā, 24-140.

(पाठान्तर-शुण्ठीस्थाने दन्ती)

Baṅgasena, Vāṭavyādhi, 587.

मूढगर्भे

आटरुषकमूलेन नाभिं योनिञ्च लेपयेत् ।
नाभिलेपः प्रसिद्धोऽयं मूढगर्भापकर्षणः ॥

Gadanigraha, 6-4-28.

प्रदरे

पिबेदैणेयकं रक्तं शर्करामधुसंयुतम् ।
वासकस्वरसं पैत्ते गुडूच्या रसमेव च ॥

Vṛndamādhava, 63-2.

शोथे

जलैश्च वासार्ककरञ्जशिगुकाश्मर्यपत्रार्जकजैश्च सिद्धः ।
स्विन्नैः मृदूष्णैः रवितारतोयैः स्नातश्च गन्धैरनुलेपनीयः ॥

Caraka Saṁhitā, Cikitsā, 12-67.

छर्द्याम्

‘वृषं तु वमिकासघ्नं रक्तपित्तहरं परम् ।’

Āṣṭāṅga Hṛdaya, Sūtra, 6-80.

कासे

‘वासायाश्च हिमः कासं रक्तपित्तज्वरान् जयेत् ।’

Sārṅgadhara Saṁhitā, 2-4-7.

त्वग्रोगे

कोमलसिंहास्यदलं सनिशं सुरभीजलेन सम्मिष्टम् ।
दिवसत्रयेण नियतं क्षपयति कच्छूं विलेपनतः ॥

Vṛndamādhava, 51-40.

रसायने

वासामूलतुलाक्राथे तैलमावाप्य साधितम् ।
हुत्वा सहस्रमशनीयान् मेध्यमायुष्यमुच्यते ॥

Suśruta Saṁhitā, Cikitsā, 28-18.

मुखरोगे

पटोलविम्बयष्ट्याह्वासाजात्यरिमेदसाम् ।
खदिरस्य वरायाश्च पृथगेवं प्रकल्पना ॥

Āṣṭāṅga Hṛdaya, Uttara, 22-106.

मूत्राघाते

‘रसं दुरालभाया वा कषायं वासकस्य वा ।’

Gadanigraha, 2-28-32.

मसूरिकायाम्

‘वृषस्य स्वरसं दद्यात् क्षौद्रयुक्तं कफात्मके ।’

Baṅgasena, Masūrīkā, 65.

पित्तश्लेष्मज्वरे

वृषपुष्पच्छदरसः शर्करामाक्षिकान्वितः ।

पित्तश्लेष्मज्वरं हन्ति सासृक्पित्तं सकामलम् ॥

Āṣṭāṅga Saṅgraha, Vṛndamādhava, 1-127.

वासाक्षुद्रामृताक्राथः क्षौद्रेण ज्वरकासहा ।

कासघ्नः पिप्पलीचूर्णयुक्तः क्षुद्राशृतस्तथा ॥

Śārṅgadhara Saṁhitā, 2-2-82.

Bhāvaṇprakāśa, Cikitsā, 1-384.

विषमज्वरे

वृषघृतम्

Bhela Saṁhitā, Cikitsā, 2-17/19.

जीर्णज्वरे

‘....वृषेण च ।

जीर्णज्वरे च शोफे च पाण्डुरोगे च पूजितम् ॥’

Suśruta Saṁhitā, Uttara, 39-243.

रक्तपित्त चिकित्सायां वासाप्रयोगः

वासाघृतम्

Āṣṭāṅga Hṛdaya, Uttara, 2-40/42.

‘वृषोऽस्त्रपित्ते’

Āṣṭāṅga Hṛdaya, Uttara, 40-49.

‘पित्तासृक् शमयेत् पीतं निर्यासो वाटरुषकान् ।’

Āṣṭāṅga Hṛdaya, Cikitsā, 2-24.

शर्करामधुसंयुक्तः केवलो वा शृतोऽपि वा ।

वृषः सद्यो जयत्यस्त्रं स ह्यस्य परमौषधम् ॥

Āṣṭāṅga Hṛdaya, Cikitsā, 2-24/25.

चूर्णपञ्चास्यपुष्पाणां विशुष्काणामनातपे ।

लीढं क्षौद्रेण पित्तास्त्रशोषकासान् व्यपोहति ॥

Siddhabhaiṣajya Maṇimālā, 4-340.

वासाद्यघृते

Vṛndamādhava, 39-4.

वासकस्वरसे पथ्या सप्तधा परिभाविताः ।

कृष्णा वा मधुना लीढा रक्तपित्तं द्रुतं जयेत् ॥

Vṛndamādhava, 9-22.

वासकस्वरसः पेयो मधुना रक्तपित्तजित् ।

ज्वरकासक्षयहरः कामलाश्लेष्मपित्तहा ॥

Śārṅgadharma Saṁhitā, 2-1-8.

बहुप्रकारैरूपसेव्यमाना क्षौद्रान्विता रक्तजयाय वासा ।

सत्यं समर्था जगतां सावित्री यथैव संसारजयाय गौरी ॥

Vaidya Manoramā, 2-6.

वासाद्राक्षामयक्काथः पीतः सक्षौद्रशर्करः ।

निहन्ति रक्तपित्तार्तिश्वासकासान् सुदारुणान् ॥

Śārṅgadharma Saṁhitā, 2-2-80.

रक्तपित्तं क्षयं कासं श्लेष्मपित्तज्वरं तथा ।

केवलो वास क्काथः पीतः क्षौद्रेण नाशयेत् ॥

Śārṅgadharma Saṁhitā, 2-2-81.

गुल्मे

वासाघृतम्

Caraka Saṁhitā, Cikitsā, 5-126/127.

शोथे

वासाघृतम्

वासावलेहः

Suśruta Saṁhitā, Uttara, 41-43.

Bhāvaprakāśa, Cikitsā, 11-55/57.

VĀSTUKA

Botanical name

Chenopodium album Linn.

Chenopodium murale Linn.

Family : Chenopodiaceae

Classical name : Vāstāka

Sanskrit names

Vāstuka, Vāstūka, Kṣārapatra, Śakaraṭ.

Regional names

Bathua, Bethua, Bethu sag (Hindi); Chandan betu, Bethu sag (Beng.); Parupulkkirai (Tam.); Pappukura (Tel.); Lamb's Quarters (Eng.).

Description

Erect branched herbs upto 1 meter or sometimes more tall. Stem angular, ribbed with dark-green and red streaks densely covered with powdery vesicles or younger parts.

Leaves ovoid rhomboid coarsely dentate or lobulate in lower parts; upper leaves smaller, elliptic oblong almost entire.

Flowers 5-merous, arranged in panicked clusters. Perianth lobes connate at base, concave. Stamens slightly exerted. Ovary depressed-globose stigma 2.

Utricle enclosed by perianth lobes; finely papillate. Seeds lenticular.

Flowering and fruiting time

Plant flowers and fruits in October-April.

Distribution

Plant is of cosmopolition distribution. Plant occurs very commonly in gardens, agricultural fields and waste places. It is occurring in many forms, wild and cultivated, throughout India, upto an altitude of 14,000 ft. In the western Himalayas; it is grown as pot-herb and a grain crop. Plant is generally collected from crop-fields for domestic vegetable other grain-crop for vegetable market.

Kinds and varieties

It has various forms and varieties found in different habitats. *Chenopodium album*, *C. viride* and *C. purpureum* are commonly found. *Chenopodium abrosioides* Linn. (Mexican tea), *C. botrys* Linn. and *C. blitum* Hook. L.

Most common and edible plant used as Vāstuka (bathua and various regional names) for vegetable is *Chenopodium album* Linn.

There are some varieties in classical texts of drugs (Nighaṇṭu) viz. vāstuka and bṛhatpatra vāstuka or gouḍa vāstuka.

The growth of plant *Chenopodium album* Linn. is greatly stimulated by magnesium. The plant may serve as a field indicator for this element.

Chemical composition

Plant contains an ethereal oil, a substance resembling cholesterol and ammonia and amines both in free and combined forms.

Analysis of the seeds gave (on dry wt. basis) protein 15.4-16.8, fat 5.8-8.1, nitrogen, free extract 47.7-50.0, crude fibre 18.4-21.5 and ash 4.8-7.0 per cent. Fruits yield a fixed oil (with various constants investigated and on record).

Plant contains unsapon, matter 2.29, linolenic acid 2 per cent and traces of ascaridol. *Chenopodium album* Linn. contains carotene 7.1-9.3 mg./100 g. and vitamin C 66-96 mg./100 g.

Another species *Chenopodium ambrosioides* linn. (Mexian tea) yields chenopodium oil 0.17 per cent. Which has an ascaridol content of 40-45 per cent. All parts of the plant (specially the roots) contain saponin.

Pharmacodynamics

Rasa	: Kaṣāya, madhura (saṁśāra)
Guṇa	: Laghu, picchila
Virya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Tridoṣaghna Vātapittahara

Properties and action

Karma	: Rocana-dīpana-pācana Jvaraghna Anulomana-sara Arśoghna Hṛdya Balya Kṛmighna Malamūtraśodhaka Kāśaghna.

Roga	: Agnimāndva-arocaka Jvara Vibandha Udāvarṭta-udararoga Plīha vikāra Kṛmi Hṛdroga Pravāhikā Raktapitta Raktapradara Kāsa.

Therapeutic uses

The drug Vāstuka is carminative, digestive and laxative; it is useful in constipation piles, menorrhagia, cough and worms. Herb and leaves of vāstuka (*Chenopodium album* Linn.) which is almost odourless (and with kṣāra), is commonly used as edible food item as a vegetable (e.g. rāitā which is prepared with paste of boiled leaves mixed with curd and spices of taste and other diet-regimens).

Vāstuka allays tridoṣa especially vāta and pitta doṣa. It is useful in spleening, cardiac, abdominal and other ailments.

Entire plant of another species *Chenopodium ambrosioides* Linn. (Mexican tea) is aromatic with a comphoraceous odour.

A volatile oil of medicinal value is found in the glandular hairs, specially of the pericarp of the fruits.

Chenopodium ambrosioides Linn. is closely related to, and has been used as a substitute for the American plant *Chenopodium ambrosioides* var. *anthelminticum* Gray. (*C. anthelminticum*), the source of the commercial worm-seed oil. The plant is anthelmintic and the volatile oil obtained from, it is generally employed in medicine. This oil is active against many forms of intestinal parasites. A mixture of chenopodium oil (4 c.c.) with tetrachloroethylene) in the ratio of 1.3 has given good results in the mass treatment of hookworm infections.

Parts used : Root, leaves, seeds.

Dose : Powder 3-5 gm., Juice 10-20 ml.

VĀSTUKA (वास्तुक)

वास्तुकद्वयम्

- क. वास्तुकं वास्तुकं च स्यात्क्षारपत्रं च शाकराट् ।
तदेव तु बृहत्पत्रं रक्तं स्याद् गौडवास्तुकम् ॥
- ख. प्रायशो यवमध्ये स्याद्यवशाकमतः स्मृतम् ।
- ग. वास्तुकद्वितयं स्वादु क्षारं पाके कटूदितम् ॥
दीपनं पाचनं रूच्यं लघु शुक्रबलप्रदम् ।
सरं प्लीहास्रपित्तार्शः कृमिदोषत्रयापहम् ॥

Bhāvaprakāśa Nighaṇṭu, Śāka varga, 5-7.

भुक्त्वा वास्तुकशाकेन सतक्रं लवणं पिब ।
हरीतकीं भुङ्क्व राजन् नश्यन्तु व्याधयश्च ते ॥

Śodhala.

कटुर्विपाके कृमिहा मेधाग्निबलवर्धनः ।
स क्षारः सर्वदोषघ्नो वास्तुकः रोचनः सरः ॥

Suśruta Saṁhitā, Sūtra, 46.

वास्तुकम्

- अ. वास्तुको वीरशाकः स्यात् क्षारपत्रः प्रनालकः ।
प्रसादकः शाकवीरः चन्दिलषृङ्ग वास्तुकम् ॥
- ब. वास्तुको मधुरः क्षारः पाके स्वादुः कटुर्लघुः ।
पाचनो रोचनो हृद्यो मेधाग्निबलशुक्रकृत् ॥
त्रिदोषकृमिरक्तार्शः प्लीहोदावर्तहा सरः ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 622-623.

- क. वास्तुकं वास्तु वास्तुकं वस्तुकं हिलमोचिका ।
शाकराजो राजशाकश्चक्रवर्तिश्च कीर्तितः ॥

वास्तुकगुणाः

- ख. वास्तुकं तु मधुरं सुशीतलं क्षारमीषदम्लं त्रिदोषजित् ।
रोचनं प्वरहरं महार्शसां नाशनञ्च मलमूत्रशुद्धिकृत् ॥

Rajā Nighaṇṭu, Mūlakādi varga, 122-123.

रक्तार्शःसु

‘छागलिपयः प्रयुक्तं निहन्ति रक्तं सवास्तुकरसश्च ।’

Caraka Saṁhitā, Cikitsā, 14-194.

कासे

‘वास्तुको वायसीशाकं मूलकः सुनिषण्णकम्....शस्यते वातकासे तु- ।’

Caraka Samhitā, Cikitsā, 18-81.

रक्तप्रदरे

प्रदरं शमयति नार्याः कथितः सलिलेन वा पयसा ।

मूलं वास्तुकाब्जयोः पीतं दिवसत्रयेणैव ॥

Baṅgasena, Strīroga, 41.

रक्तपित्ते

तुरङ्गवर्चस्वरसं समाक्षिकं पिबेत् सितक्षौद्रयुतं वृषस्य वा ।

लिहेत्तथा वास्तुकबीजचूर्णं क्षौद्रान्वितं तण्डुलसाह्वयं वा ॥

Vṛndamādhava, 9-21.

प्रवाहिकायाम्

.....वास्तुकस्य वा ।

.....शुष्कशाकेन वा पुनः ।

दधिदाडिमसिद्धेन बहुस्नेहेन भोजयेत् ॥

Caraka Samhitā, Cikitsā, 19-31/33.

सामान्यव्याधिनाशने

भुक्त्वा वास्तुकशाकेन तक्रं सलवणं पिब ।

हरीतकीं भुङ्क्त्व राजन् नश्यन्तु व्याधयश्च ते ॥

Gadanigraha, 8-4-48.

VATA

Botanical name

Ficus bengalensis Linn. (*Ficus benghalensis* Linn.)

Family : Moraceae

Classical name : Vata

Sanskrit names

Vata, Nyagrodha, Bahupāda, Raktaphala, Śṛṅgi, Skandhaja, Dhruva, Kṣīri, Vanaspati, Yakṣavāsaka, Pādarohi, Yakṣataru.

Regional names

Barh, Baragad, Bar (Hindi); Vata (Beng.); Borh, Bod (Punj.); Vad (Mar.); Vad (Guj.); Ala (Tam.);

Peddamari (Tel.); Ala (Mal., Kann.); Kabikal ashlar (Arabic); Darakhterish (Pers.); Banyan (Eng.).

Description

Robust, spreading trees upto 20 meters high; branches huge, horizontally spreading, throwing columnar prop roots. It attains large dimensions, the leafy crown sometimes attaining a circumference of 1,000-2,000 ft.

Leaves alternate, orbicular to ovate, sub cordate below, up to 25 × 15 cm. stipules coriaceous.

Male, female and gall flowers borne in the same receptacle. Gall flowers perianth same as in male, style short. Female-flowers; style elongate, perianth short.

Receptacles solitary or paired, globose-ovoid, minutely pubescent, red at age.

Flowering and fruiting time

Plant flowers and fruits in April-June.

Distribution

Plant is occurring in India and Pakistan. It commonly planted in gardens, squares or way sides for-shades.

Tree occurs throughout the forests of Deccan and Southern India.

Chemical composition

Analysis of leaves gave the following values (dry basis) : crude protein 9.63, ether extr. 2.64, crude fibre 26.84, N-free extr. 51-59, calcium 2.53 and phosphorous 0.40 per cent.

The latex of plant contains 0.3-7.7% caoutchouc. An unsaturated sterol-like compound, provisionally named ficosterol and glutathione (34 mg./100 g.) are reported to be present.

Bark and shoots contain 10% tannin.

Pharmacodynamics

Rasa	: Kaṣāya
Guṇa	: Guru, rūkṣa
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarṃa	: Kaphapittaśāṃaka

Properties and action

Karma	: Mūtrasaṅgrahaṇīya-pramehaghna

Vedanāsthāpana
 Vraṇaropaṇa
 Raktarodhaka
 Śothahara
 Cakṣuṣya
 Stambhana-grāhī
 Raktaśodhaka-raktapittahara
 Garbhāśayaśothahara
 Yonidoṣahara
 Garbhassthāpana
 Puṁsavanakara
 Śukrastambhana
 Dāhapraśamana
 Varṇya
 Stanadṛḍhīkaraṇa.

Roga

: Prameha
 Pradara-asṛgdara-śvetapradara-
 garbhāśayaśotha
 Śukravikāra-śukrakṣaya-svapnadoṣa
 (śukrapāta)
 Raktavikāra-varṇavikāra
 Mukhadūṣikā-yuvānapīḍikā
 Raktapitta
 Atisāra-raktātisāra-āmātisāra-
 pravāhikā
 Chardi
 Vandhyātva (garbhassthāpana)
 Yonivyāpat
 Carmaroga
 Vraṇa-kṣata-vidradhi
 Vipādikā
 Sandhiśotha-āmavāta
 Vaṅkṣaṇāśotha-granthiśotha
 Stanaśaithilya
 Netraroga-netrābhiṣyanda-arma-
 śukra
 Karṇasrāva
 Dantaśūla
 Bhagandara.

Therapeutic uses

The drug Vaṭa is antiseptic, aphrodisiac, astringent, cooling and haemostatic. It is used in diabetes, diarrhoea, hysteria, leucorrhoea, menorrhagia, nervous disorders, sterility, tonic and vaginal complaints. Vaṭa belongs to the group of mūtrasaṅgrahaṇīya drugs.

Various parts of plant drug are used in medicine. The milky juices is externally applied for pains and bruises and as an anodyne in rheumatism and lumbago. It is also used as a remedy for toothache. The leaves are heated and applied as poultice to abscesses. The bark is astringent and is used in dysentery, diarrhoea and diabetes. An infusion of the young buds is useful in diarrhoea and dysentery.

Parts used : Bark, latex, leaves, shoots, fruits.

Dose

Decoction 50-100 ml, Powder 3-6 gm., Latex 5-10 drops.

Formulations

Nyagrodhādi cūrṇa, Nyagrodhādi ghṛta, Puṣyānuga cūrṇa.

Groups

Mūtrasaṅgrahaṇīya, Kaṣāyaskandha (Caraka Saṁhitā), Nyagrodhādi (Suśruta Saṁhitā), Kṣīrivṛkṣa, Pañcavalka (Bhāvaprakāśa).

VAṬA-NYAGRODHA (वटः-न्यग्रोधः)

क. वटो रक्तफलः शृङ्गी न्यग्रोधः स्कन्धजो ध्रुवः ।

क्षीरो वैश्रवणो वासो बहुपादो वनस्पतिः ॥

ख. वटः शीतो गुरुर्ग्राही कफपित्तव्रणापहः ।

वर्ण्यो विसर्पदाहघ्नः कषायो योनिदोषहृत् ॥

Bhāvaprakāśa Nighaṇṭu, Vaṭādi varga, 1-2.

अ. वटः क्षीरो रक्तफलो न्यग्रोधो यक्षवासकः ।

बहुपादः पादरोही शृङ्गदान्तो वनस्पतिः ॥

स्कन्धजोऽस्य फलं प्रोक्तं नैयग्रोधं च काञ्चनम् ।

ब. वटो रूक्षो हिमो ग्राही कषायो योनिदोषहृत् ॥
वर्ण्यो व्रणविसर्पघ्नः कफपित्तहरो गुरुः ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 422-424.

वटः

स्यादश्च वटो जटालो न्यग्रोधो रोहिणोऽवरोही च ।
विटपी रक्तफलश्च स्कन्धरुहो मण्डली महाच्छायः ॥
शृङ्गी यक्षावासो यक्षतरुः पादरोहिणी नीलः ।
क्षीरी शिफारुहः स्याद्बहुपादः स तु वनस्पतिर्नवभूः ॥

वटगुणाः

वटः कषायो मधुरः शिशिरः कफपित्तजित् ।

ज्वरदाहतृषामोहव्रणशोफापहारकः ॥

RajāNighaṇṭu, Āmrādīphala varga, 116-118.

वटी

नदीवटी यज्ञवृक्षः सिद्धार्थो वटको वटी ।

अमरा सङ्गिनी चैव क्षीरकाष्ठा च कीर्तिता ॥

वटीगुणाः

वटी कषायमधुरा शिशिरा पित्तहारिणी ।

दाहतृष्णाश्रमश्वासविच्छर्दिशमनी परा ॥

RajāNighaṇṭu, Āmrādī varga, 119-120.

भगन्दरचिकित्सायां (व्रणशोधनं रोपणञ्च) न्यग्रोधादिगणप्रयोगः

न्यग्रोधादिर्गणो यस्तु हितः शोधनरोपणः ।

तैलं घृतं वा तत् पक्वं भगन्दरविनाशनम् ॥

Bhāvaprakāśa, Bhagandarādhikāra, 50-20.

‘वटाङ्कुरमसूराञ्च प्रलेपाद्व्यङ्गनाशनम् ।’

Bhāvaprakāśa, Kṣudrarogādhikāra, 61-40.

आमातिसारे वटारोहप्रयोगः

वटारोहन्तु सम्पिष्य श्लक्ष्णं तण्डुलवारिणा ।

तत् पिबेत् तक्रसंयुक्तमतीसाररुजापहम् ॥

Cakradatta, Atisāra Cikitsā, 3-51.

पैत्तिकविद्रधिचिकित्सायां वटादिपञ्चवल्कललेपः

‘पञ्चवल्कलकल्केन घृतमिश्रेण लेपनम् ।’

Cakradatta, Vidradhi cikitsā, 43-6.

व्रणशोथे पञ्चवल्कल (वटादि) लेपः

न्योग्रोधोदुम्बराश्वत्थप्लक्षवेतसवल्कलैः ।

ससर्पिष्कैः प्रलेपः स्याच्छोधनिर्वापणः स्मृतः ॥

Cakradatta, Vraṇaśoṭha cikitsā, 44-6.

पित्तजविसर्पे न्यग्रोधादिलेपः

न्यग्रोधपादा गुन्द्रा च कदलीगर्भ एव च ।

बिसग्रन्थिश्च लेपः स्याच्छतधौतघृताप्लुतः ॥

Cakradatta, 53-10.

मसूरिकायामावचूर्णनप्रयोगः

पञ्चवल्कलचूर्णेन क्लेदिनीमवचूर्णयेत् ।

भस्मना केचिदिच्छन्ति केचिद् गोमयेरेणुना ॥

Cakradatta, Masūrīkā cikitsā, 54-39.

पुंसवनक्रियान्वयनार्थं वटप्रयोगः

‘गोष्ठजातवटस्य प्रागुत्तरशाखजे शुभे ।

....पुष्पपीतौ प्रतापञ्च गर्भायाः पुत्रकारकौ ॥’

Cakradatta, Yonivyapaccikitsā, 33.

गर्भस्थापनार्थम्

गर्भदं वटशुङ्गं तु पिबेद् बन्ध्या रजस्वला ।

वारिणा शुक्लपक्षे हि पुष्पेण च समाहृतम् ॥

Gadanigraha, 6-5-2.

पुंसवने

‘लब्धगर्भायाश्चैतेष्वहःसु लक्ष्मणावटशुङ्गसहदेवा-

विश्वदेवानामन्यतमां क्षीरेणाभिषुत्यत्रींश्चतुरो वा

बिन्दून् दद्याद् दक्षिणे नासापुटं पुत्रकामार्थं ।’

Suśruta Saṁhitā, Śārīra, 2-32.

उपदंशे

परिज्वलन्तं वटपर्णमर्णः क्षेपेन निर्वाप्य गृहाशभस्म ।

साव्यर्थमाषं प्रदत्तः मृदाकोर्द्विसन्ध्यमद्यादुपदंशरोगी ॥

Siddhabhaiṣajya Maṇimālā, 4-800.

ज्वरदाहे

‘जीवन्तीमूलनिर्यूहः सघृतो दाहजूर्तिजित् ।

तदु न्यग्रोधपादस्य ।’

Vaidya Manoramā, 1-20.

मुखदूषिके

‘.....प्रलेपा मुखदूषिके ।

वटपल्लवयुक्ता वा नारिकेलोत्थशुक्तयः ॥’

Āṣṭāṅga Hṛdaya, Uttara, 32-3.

‘वटाङ्कुरा मसूराश्च व्यङ्गघ्नाः मुखकान्तिदा ।’

Vṛndamādhava, 57-77.

अध्यस्थिरोगे

वटदुग्धकुष्ठरोमकलितं बद्धं वटस्य कल्केन ।

अध्यस्थि सप्तरात्रान् महदपि शमयेत् सिद्धमिदम् ॥

Baṅgasena, Arbuda, 27.

नेत्ररोगे-शुक्ररोगे

वटक्षीरेण संयुक्तं श्लक्ष्णं कर्पूरजं रजः ।

क्षिप्रमज्जनतो हन्ति शुक्रञ्चापि घनोन्नतम् ॥

Cakradatta, 59-85.

व्रणे

दुग्धं न्यग्रोधवृक्षोत्थमपि विनिहितं जन्तुजालं व्रणेषु ।

प्रातर्मध्यगतेऽर्के दिवसपरिणतौ त्वपि शास्त्रोक्तमेतत् ॥

Vaidya Manoramā, 16-11.

रक्तपित्ते

विशेषतो विट्पथसम्प्रवृत्ते पयो मतं मोचरसेनं सिद्धम् ।

वटवराहैर्वटशुङ्गकैर्वा ह्रीबेरनीलोत्पलनागरैर्वा ॥

Caraka Samhitā, Cikitsā, 4-86.

‘लिङ्गाच्च दूर्वावटजांश्च पल्लवान् मधुद्वितयान्— ।’

Suśruta Samhitā, Uttara, 45-20.

अतिसारे

गव्येन तन्त्रेण सह प्रपिष्य न्यग्रोधपादः परिपीयमाणः ।

नवोद्गतं हन्त्यतिसारमाशु यथातमिस्राणि हिमांशुमाली ॥

Rajamārtanda, 14-1.

Cakradatta, 3-51.

छर्दितृष्णयोः

जम्ब्वाम्रपल्लवोशीरवटशुङ्गावरोहजः ।

क्वाथः क्षौद्रयुक्तः पीतः शीतो वा विनियच्छति ॥

छर्दिज्वरमतीसारं मूर्च्छां तृष्णाञ्च दुर्जयाम् ॥

Āṣṭāṅga Hṛdaya, Cikitsā, 6-14/15.

वटशुङ्गं सितां लोध्रं दाडिमं मधुकं मधु।
पिबेत्तण्डुलतोयेन च्छर्दि तृष्णानिवारणम् ॥

Vṛndamādhava, 16-17.

अतिसारे-रक्तातिसारे

न्यग्रोधोदुम्बराश्वत्थशुङ्गानापोथ्य वासयेत्।
अहोरात्रं जले ताम्रे घृतं तेनाम्भसा पचेत् ॥
तदर्धशर्करायुक्तं लिह्यात् सक्षौद्रपादिकम्।
अधो वा यदि वाऽऽप्यूर्ध्वं यस्य रक्तं प्रवर्तते ॥

Caraka Saṃhitā, Cikitsā, 19-100/101.

प्रदरे

न्यग्रोधवल्कलकषायेण लोध्रकल्कं तथा पिबेत्।
आस्तावे क्षौमपट्टं वा भावितं तेन धारयेत् ॥

Caraka Saṃhitā, Cikitsā, 4-86.

काश्मर्यवटशुङ्गानि पृथग् दन्त्यास्तथैव च।
घृतं सिद्धं भवेच्छ्रेष्ठं शोणितप्रदरे पिबेत् ॥

Bhāṅgasena, Strīroga, 48.

VĀTĀDA-VĀTĀMA

Botanical name

Prunus amygdalus Satch.

Syn. *Prunus communis* Fritsch., *A. communis* Linn.

Family : Rosaceae

Classical name : Vātāda-vātāma

Sanskrit names

Vātāda, Vātavairī, Netropamaphala.

Regional name : Badam (Hi.).

Description

A tree upto 8 meters high or medium-sized tree; branches smooth and dull coloured or shade.

Leaves oblong-lanceolate, minutely serrate. Fully-grown leaves, ash-coloured, serrulate. Petiole equal to maximum broadness of leaves or slightly longer.

Flowers white, tinged with red; solitary, pink or

nearly white, 2-5 cm. across, showy and appearing before or with the early foliage.

Fruit a drupe, about 3-6 cm. long, pubescent, with tough, flesh splitting at maturity, exposing the pitted stones; endocarp thin or thick. Drupe velvety externally (outer) but becomes hard when ripens (and very hard in dried stage-hard shell). Raw or young fruit acidic or sour in taste (and suitable for cooking as vegetable). Stones or seeds flattened, long, oval, with a brownish seed coat.

Flowering and fruiting time

Distribution

Plant is cultivated in Kashmir at elevation of 700-2,400 meters elevation and it finds a place among principal (dry) fruit crop in Kashmir valley. It is also cultivated in Himachal Pradesh, Uttar Pradesh and other hilly regions.

Plant grows abundantly western and Central Asia, Baluchistan, Afghanistan, Persia and Mediterranean regions. It is cultivated throughout Europe, U.S.A., Australia and South Africa.

Kinds and varieties

There are mainly two kinds of almonds (based on taste) viz. Sweet almond and Bitter almond. Source plant species *Prunus amygdalus* Batsch. includes three varieties viz. var. *amygdalus*, var. *amara* (Dc.) Fockle. and var. *sativa* (Ludw.) Focke. The first one includes wild types found in west Asia. Greece and North Africa, the second and the third include a large number of cultivated types var. *amara*, the Sweet Almond.

Some cultivated types of almond and ornamental types of almond are in practice. Cultivated types of almond in India variable.

Chemical composition

Analysis of the kernels of Indian sweet almonds gave : moisture 5.2, protein 20.8, fat (ether extr.) 58.9, carbohydrates 10.5, fibre 1.7, and mineral matter 2.9 percent; calcium 2.30, oxalic acid 4.07, phosphorous 49.0, iron 4.5, thiamine 0.25, nicotinic acid 2.56 and riboflavin 0.15 mg. 100 g. They contain ascorbic acid and vitamin A, and also folic acid. Kernels yield fatty oil (expressed) known as Al-

mond oil which has been chemically screened and data are record which shows characteristics of fatty acid composition and constituents values.

Pharmacodynamics

Rasa	: Madhura
Guṇa	: Guru, snigdha
Vīrya	: Uṣṇa
Vipāka	: Madhura
Doṣakarma	: Vātapittahara Kaphakara

Properties and action

Karma	: Medhya-nāḍibalya Balya-Bṛmhaṇa Vṛṣya-śukrālā Vātaghna Mūtrala Uttejaka
Roga	: Mastiṣka dourbalya Śīroroga Vātarakta Vātavikāra Kṣataksīṇa Prameha Sūkrakṣaya Napurṁsakatā Dhātukṣayā Nāḍīdourbalya Mūtrakṛcchra.

Therapeutic uses

The drug Vātāda is nervine tonic, (nāḍibalya), stimulant (Uttejaka), diuretic (mūtrala); it is used to promote mental and nervine function and as a most potent nutritive medicine to dhātus specially semen (śukra dhātu). Vātāda is used in vātaroga, vātarakta, śīroroga and sexual (seminal) disorders. Vātāda phala majjā (almond kernels) are considered highly nutritious, demulcent and stimulant nervine tonic. They are also considered lithontriptic and diuretic. Their poultice is useful for irritable sores skin eruptions. The kernels are valuable in diets

for peptic ulcer. The unripe fruit is given as an astringent application on the gums and mouth.

The expressed almond oil (vātāda taila) is seldom used as food (perhaps because of its high coat). Its principal uses are in the pharmaceutical and cosmetic purposes, other than its medicinal utility. Almond oil is demulcent, nutritive and slightly laxative. It has action similar to olive oil and is used emollient purposes and in preparations including nourishing creams, skin creams and cold creams. It is employed as a vehicle for oil injections. The almond oil is official in Indian pharmacopoeia.

The kernel of fruits obtained from Vātāda (almond) is a precious and potential dry fruit which is edible as a whole singly or alongwith other similar dry fruit stuffs. The fruit kernels are mixed in a number of edible preparations and food recipes.

The kernels of almond or Vātāda (phala majjā) are rich source of protein and fat, and have a good calorific value (of 655 cal./100 g.) and the kernels are used as wholesome (hita or pathiya) in health and various diseases. The quantity (percentage) of kernel widely varies with type ranging from 33 in almonds with hard shell to 70 in those with pepery shell.

Parts used : Seed-kernel.

Dose : 3-5 gm.

Formulation

(a) Mahāmāyūtra ghṛta, Jivaniya ghṛta, Amṛtapraśa ghṛta.

(b) Bādām pāka, Almond oil (Vātāda taila).

VĀTĀDA-VĀTĀMA (वाताद-वाताम)

क. वातादौ वातवैरीं स्यान्नेत्रोपमफलस्तथा ।

ख. वातादा वृष्या सुस्निग्धो वातघ्नः शुक्रकृद् गुरः ।

ग. वातादमज्जा मधुरो वृष्यः पित्तानिलापहः ।

स्निग्धोष्णः कफकृन्नेही रक्तपित्तविकारिणाम् ॥

Bhāvaprakāśa Nighaṇṭu, Āmrāphalādi varga, 123-124.

‘वातामा....गुरुष्णस्निग्धमधुरा....बलप्रदाः ।’

Caraka Samhitā, Sūtra, 27.

‘....वातामप्रभृतीनि

च ।

पित्तश्लेष्मकराण्याहुः स्निग्धोष्णानि गुरुणि च ।

बृंहणान्यनिलघ्नानि बल्यानि मधुराणि च ॥’

Suśruta Samhitā.

शिरोरोगे

महामायूरघृते

Caraka Samhitā, Cikitsā, 26-171.

वातरक्ते

जीवनीयघृते

Caraka Samhitā, Cikitsā, 29-66.

क्षतक्षीणे

अमृतप्राशघृते

Caraka Samhitā, Cikitsā, 11-37.

VATSANĀBHA

Botanical name : *Aconitum ferox* wall. ex Seringe.

Family : Ranunculaceae

Classical name : Vatsanābha

Sanskrit names : Vatsanābha, Viṣa, Amṛta.

Regional names

Vachhanaga, Bachhanaga, Mithavish, Mithateliya (Hindi); Kalavish, Mithavish (Beng.); Vachanaga (Mar.); Vachhanaga (Guj.); Dakara (Bihar); Vasanabi (Tam.); Vasanumbhi (Tel.); Aconite, Monks hood (Eng.).

Description

A perennial 3-6 feet tall plant. Stem erect, round, with branches slender, greenish.

Leaves opposite, leaves resembling Nirguṇḍi patra (leaves of *Vitex negundo* Linn.) or 'Five-leaved chaste' plant, and also like leaves of water lemon leaves (*Kālinda patra*); 3-6 in. long; lobed; oval or ovoid, dentate.

Peduncle 1-2 in. long, fleshy on apex. Spike 6-12 in.

long, slender or branched downward, hairy. Flowers light blue or bluish; helmet double in length.

Fruit five, straight, round, smooth, dense. Seeds black, winged. Root 1-3 in. long, 1/4-1 in. thick diam., outer colour brown and inner slightly white, smooth, bright, tuberous tapering carrot-like root.

Flowering and fruiting time

Distribution

Plant occurs in the Himalayas at the elevation of 3,046 to 4,250 meters (10,000 - 14,000 ft.), from Garhwal to Sikkim.

Kinds and varieties

Aconitum chasmanthum Stapf. (Indian Napellus) occurs in the sub-alpine and alpine zones of the western Himalayas, from Chitral and Hazara to Kashmir between elevations of 7,000-12,000 feet.

The so-called '*Aconitum ferox*' of Indian commerce, so known as 'Indian aconite' or Bish is practically a mixture of mainly of *Aconitum deinorrhizum* stapf and *Aconitum befourii* Stapf. other species occasionally found in the drug *Aconitum ferox* are *Aconitum spicatum* and *A. laciniatum* Stapf., and also *Aconitum falconeri* stapf.

In drug market, two kinds raw material of Vatsanābha may be available. White kind or Saphed Bachnaga is brownish pile colour. Black kind of Vatsanābha is processed (prepared) by clouring it black (which also protect the raw drug material from attack of insects); it is generally sold in the drug markets.

The macroscopic characteristics of Vatsanābha are given in texts of Indian medicine alongwith other aspects of drug, toxicity or poisonous character, habit, habitat and other features, it belongs to Viṣa (poisonous) drugs.

Chemical composition

Roots contain pseudo-aconitine, a toxic substance (similar to that of aconitine) which is obtained approximately 4 gm. in about half kg. root material. Aconitine 0.97-1.23%, picro-aconine, benzoin-aconine and homonipoline-are also present.

Various species of *Aconitum* belonging to group of

Indian aconites have been chemically screened and data are on record.

Pharmacodynamics

Rasa	: Madhura
Guṇa	: Rūkṣa, tūkṣṇa, laghu, vyavāyi, vikāśi, yogavahi
Virya	: Uṣṇa
Vipāka	: Madhura
Doṣakarma	: Vātakaphaśāmaka-Tridoṣahara.

Properties and action

Karma	: Svedajanana Vedanāsthāpana-śothahara-nāḍi uttejaka-kṣobhaka Vyavāyi-vikāśi Lālāprasekajanana-dīpana-pācana- śūlapraśamana Yakṛduttejaka-aśodhita-śodhita Hṛdayāvasādaka (impurified- aśodhita); Hṛdayottejaka (purified-śodhita) Rasāyana-prāṇadāyī Mūtrajanana Śukrastambhana-ārtavajanana Balya-bhr̥ṇhana Madakāri Kuṣṭhaghna-svedajanana Jvaraghna Arśoghna Rasāyana
Roga	: Nāḍidourbalya-hṛddourbalya Pakṣāghāta-sandhivāta-āmavāta- śiraḥśūla Kāsa-śvāsa Ikṣumeha-bahumūtra-śaiyāmūtra- mūtraśarkarā-prameha Jvara-sannipātajvara-jirṇajvara Śothavedanā yukta vikāra-jvara Agnimāndya-udara vikarā-śūla Yakṛtplihavikāra.

Therapeutic uses

The drug Vatsanābha is an effective diaphoretic, anti-pyretic, analgesic, sedative and anti-inflammatory herbal agent. It belongs to group of poisons (vānāspatika viṣa) as discussed and used variously in Indian medicine.

Vatsanābha is used in paralysis, nāḍīdourbalya, abdominal disorders, abdominal colic, liver and splenic disorders. It is an important medicine of fever, as a active diaphoretic, and especially it is useful in inflammatory fever. It is useful in cough, asthma, heart trouble (hrddourbalya) and general debility. It is a rasāyana drug.

Externally, the roots of Vatsanābha are largely used as an external application. The root is formed into liniment (lepa) and applied to the skin in cases of neuralgia and muscular rheumatism. Vatsanābha is anti-inflammatory and analgesic. Its massage or topic use after mixing with any oily vehicle, firstly stimulate the sensory nerves and then it anaesthetizes them and irritating sensation and somewhat senselessness; the mucous membranes of all organs make its absorption speedily. The drug is locally applied on rheumatic arthritis, joints pain and swellings and headache.

The drug is useful in bahumūtra, śaiyāmūtra, ikṣumeha, śukrameha and naṣṭārtava; it checks glycosuria (urine sugar). It is useful in Kuṣṭha roga.

Vatsanābha is widely used in therapeusis for clonical management of several diseases in indigenous system of medicine; and it enters into a good number of classical formulations in pharmaceutics of Indian medicine (bhaiṣajya Kalpanā).

Indian Medicine recommends use of Vatsanābha after purification (śodhana) as per prescribed method. Normally the pieces of root are soaked in cow's urine (gomūtra) and kept in it for 3-4 days; and the pieces are washed with in water and again put into milk (godugdha) for svedana karma.

Impure Vatsanābha (aśodhita) and excess use (overdose) of Vatsanābha cause toxic signs and symptoms which are treated. Toxic symptoms and treatment.,

alongwith proper method of indication (therapeusis) etc. have been described in texts of Indian medicine and relevant works (rasaśāstra).

Parts used : Tuberous root.

Dose : Powder 10-15 mg.

Formualtions

Kaphaketu, Rāvavāṇa, Mr̥tyuñjaya rasa, Hiṅguleśvara rasa, Ānandabhairarva rasa, Jvaramurāri, Pañcavakra, Soubhāgya vaṭi.

VATSANĀBHA (वत्सनाभ)

विषं रसायनं बल्यं वातश्लेष्मविकारनुत् ।
कटुतिक्तकषायं च मदकारि सुखप्रदम् ॥
व्यवायि शीतनुद्ग्राहि कुष्ठवातास्त्रनाशनम् ।
गुल्मपाण्डुव्रणार्शसि नाशयेद्विधिसेवितम् ॥

Āyurveda Prakāśa.

विषप्राणहरं प्रोक्तं व्यवायि च विकाशि च ।

आग्नेयं वातकफहृद्गोग(हृद्गोग)योगवाहि मदावहन् ॥

तदेव युक्तियुक्तं तु प्राणदायि रसायनम् ।

योगवाहि त्रिदोषघ्नं बृंहणं कीर्यवर्धनम् ॥

Bhāvaprakāśa Nighaṇṭu.

वत्सनाभोऽतिमधुरः सोष्णो वातकफापहः ।

कण्ठरूक्सन्निपातघ्नः पित्तसंशोधनोऽपि च ॥

Rāja Nighaṇṭu, Pippalyādi varga, 127.

अतिमात्रं यदा भुक्तं तदाज्यं टङ्कणं पिबेत् ।

लिङ्गद्वया मधुसर्पिभ्यां सम्पिष्टामर्जुनत्वचम् ॥

Rasa Kāmadhenu.

वत्सनाभोऽतिमधुरः सोष्णो वातकफापहः ।

कण्ठरूक्सन्निपातघ्नः पित्तसन्तापकारकः ॥

Rāja Nighaṇṭu.

स्थावरविषम्

स्थावरे विषजातीनां श्रेष्ठो नागोग्रशृङ्गकौ ।

नागो देहकरे श्रेष्ठो लोहे चैवीयशृङ्गकः ॥

विषस्याष्टादशभिदाशतुर्वर्गाश्च यत् पृथक् ।
तदत्र नोक्तमस्माभिर्यस्मिनौरवभीरुभिः ॥

Rāja Nighaṇṭu, Pippalyādi varga, 222-223.

‘विषं रसायनं बल्यं वातश्लेष्मविकारनुत् ।
व्यवायि शीतनुद्वाहि कुष्ठशोथविनाशनम् ॥
अग्निमान्द्य श्वासकासप्लीहोदरज्वरापहम् ।
कण्ठरुक्सन्निपातघ्नं मधुमेहहरं तथा ॥
प्रलेपाच्छूयर्थं पीडामपची च विनाशयेत् ।’

Rasaratna Samuccaya, 29.

विषं युञ्जीत नित्यं हि रसायनगुणैषिणः ।
घृतोपस्कृतदेहस्य विशुद्धस्य हिताशिनः ॥
सात्विकस्योदिते भानौ योऽयं शीतवसन्तयोः ।
ग्रीष्मे चात्यधिके व्याधौ न वर्षासु न दुर्दिने ॥
न क्रोधिनि न पित्तार्ते न क्लीबे राजवेश्मनि ।
क्षुत्तृष्णाभ्रमधर्माध्वव्याध्यन्तरनिपीडिते ॥
गर्भिण्यां बालवृद्धेषु न रूक्षेषु न मर्मसु ।
अभ्यस्तेऽपि विषे यत्र र्जनीयान् विवर्जयेत् ॥
कट्वम्ललवणं तैलं दिवास्वाप्नानलातपान् ।
ब्रह्मचर्यं वरारोहे विषकाले समाचरेत् ॥
गव्ये क्षीरघृते पेये शाल्यन्नं गोधुमं तथा ।
शीतलं च पिबेत्तोयं मधुराणि च सेवयेत् ॥

Rasaratna Samuccaya, 29.

मासत्रयप्रयोगेण कुष्ठान्यष्ट हरेद्विवषम् ।
षण्मासस्य प्रयोगेण कामरूपो भवेन्नरः ॥
संवत्सरप्रयोगेण सर्वरोगान् व्यपोहति ।

Rasaratna Samuccaya, 29.

सिन्धुवारसदृक्पत्रो वत्सनाभ्याकृतिस्तथा ।
यत्पार्श्वे न तरोर्वृद्धिः वत्सनाभः स उच्यते ॥

Bhāvaprakāśa Nighaṇṭu.

यः कन्दो गोस्तनाकारो न दीर्घः पञ्चमाङ्गुलात् ।
न स्थूलो गोस्तदूर्ध्वं—‘वत्सनाभं तु पाण्डुरम् ।’

Rasaratna Samuccaya.

विषं तु कटुकं तिक्तमनुष्णं च कषायकम् ।
 योगवाहि परं चैतत्सर्वोत्कृष्टं रसायनम् ॥
 त्रिदोषघ्नं विशेषेण मतं वातबलासनुत् ।
 दीपनं शीतशमनं बृंहणं बलवर्धनम् ॥
 अग्निमान्द्यप्रशमनं प्लीहोदराग्निबर्हणम् ।
 वातरक्तापहं चैव श्वासकासविसूदनम् ॥
 गुदामयग्रहणिकागुल्मनिर्दलनं परम् ।
 कुष्ठयाण्डुज्वरहरं त्वामवातवेदनाहरमुत्तमम् ॥
 विषं विशेषतो वातवेदनाहरमुत्तमम् ।
 मूत्रलं स्वेदजननं शूलनिर्मूलनं परम् ॥
 नानारसप्रयोगेण शान्तिं यान्ति न ये गदाः ।
 विषप्रयोगेण तु ते प्रशाम्यन्ति न संशयः ॥

Rasa Tarāṅgiṇī.

समांशटङ्कणयोगेन तद्विषं मृतमुच्यते ।
 योजयेत् सर्वरोगेषु न विकारं करोति तत् ॥

Rasa Kāmadhenu.

वत्सनाभस्य विषलक्षणानि

‘ग्रीवास्तम्भो वत्सनाभे पीतविण्मूत्रनेत्रता ।’

Suśruta Saṁhitā.

सर्वकुष्ठोपचारार्थं विषादिप्रलेपः

Cakradatta, Kuṣṭha cikitsā, 50-52.

प्रमेहे

जयावटी

Rasatarāṅgiṇī, 24-99.

ज्वरे

मृत्युञ्जयरसे

Rasatarāṅgiṇī, 24-67.

जीर्णज्वरे

लोध्रचन्दनषड्ग्रन्थाशर्कराघृतमाक्षिकैः ।

क्षीरेण च विषे युक्तं जीर्णज्वरहरं परम् ॥

Āṣṭāṅga Saṅgraha, Uttara, 48-23.

रसायने

ऐन्द्ररसायने

Caraka Samhitā, Cikitsā, 1/3-25.

अमृतरसायने

Rasataranginī, 24-121.

शिरःशूले

पञ्चामृतरसः

Rasataranginī, 24-83.

A. VETASA

Botanical name : *Salix caprea* Linn.

Family : Salicaceae

Classical name : Vetasa

Sanskrit names

Vetasa, Namraka, Vānīra, Vañjula, Abhrapuṣpa, Vidula, Ratha, Śīta.

Regional names

Veda mushka, Bedmusk (Hi., Punj.); The Sallow, Goat willow (Eng.).

Description

A large shrub or a small tree, upto 1.5-3 meters high and 1.2 meters in girth. Bark dark grey or yellowish brown.

Leaves variable, broadly ovate to oblong-orbicular, alternate, dentate, pointed.

Flowers in catkins; male-catkins sweet-scented; catkins 2.5-5 cm. (1-2 in.) long, thick, cylindrical, yellow or bright-yellow; fls. with long hairs.

Flowering and fruiting time

Plant begins flowering before the appearance of new foliage. Generally leaves fall during winters and reappear in spring season and plant blooms around this stage; and fruiting after 2-2 months later.

Distribution

It is planted in north-west India. especially Punjab and Kashmir. Plant is an ornamentally found in Himachal Pradesh, Uttar Pradesh, Punjab and Kashmir.

Plant is less exacting than most willows as to its soil requirements growing on dry and even rocky ground as well as in swampy localities. Trees can easily be raised from cutting and useful for hedge and as a soil binder.

Kinds and varieties

There are two kinds of plant drug viz. Vetasa and Jalavetasa, which are botanically identified as *Salix caprea* Linn. and *S. tetrasperma* Roxb. respectively.

Chemical composition

Bark contains 8-13 per cent tannin and tannin content of the bark increases with age of the plant (normally plants of 5-6-year old plants containing adequate amount of tannin and suitable for extraction) which possesses good quality tannin.

Besides delphinidin, cyanidin and picecolic acid, the following phenol glycosides are present in the bark : fragilin, picein, salicin, salicortin, salireproside, triandrin and vimalin.

Fragrant flowers yield an essential oil. Leaves also contain an odorous oil.

Pharmacodynamics

Rasa	: Kaṣāya, tikta
Guṇa	: Laghu
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāmaka

Properties and action

Karma	: Vedanāsthāpana Dāhapraśamana Mastiṣkaśāmaka-nāḍibalya- vedanāśāmaka-medhya Grāhī Raktastambhana-hṛdaya balya Sandhāniya Śvāsahara Mūtrajanana Yonidoṣahara Kuṣṭhaghna Jvaraghna.

Roga : Mastiṣkadourbalya
 Śiraḥśūla
 Sandhivāta
 Agnimāndya-graḥaṇī
 Hṛddourbalya
 Raktapitta
 Raktaniṣṭhivana-uraḥkṣata-śvāsa
 Mūtrakṛcchra-aśmarī
 Śukradourbalya-klaibya-svapnadoṣa
 Yoniśaithilya
 Jvara-dāhajvara-pitta jvara-
 viṣamajvara.

Therapeutic uses

The drug Vetasa is vedanāsthāpana (analgesic); it is astringent (grāhī), cardiogenic (hṛdya), haemostatic (raktastambhana), anti-asthmatic (śvasahara) and antipyretic (jvarahara).

Vetasa is useful in heart complaints, intrinsic haemorrhage (raktapitta), diarrhoea, graḥaṇī, sandhivātā, headache, dysuria, calculus and impotency. A decoction of the leaves is considered to act as a febrifuge, and bark and twigs are used in the preparation of astringent application of piles. Leaves on distillation yield an oil which is used in making perfumed water and as a tonic.

The plant extract is reported to possess some pharmacological activity on the activity on the cardiovascular system. An essential oil of the fragrant flowers is also useful.

Bark is highly astringent as the tannin (content of bark is possessing good skin-penetrating property and high astringency. A decoction of bark is used for fomentation of piles. The ailing conditions inflammation, pain and burning sensation get relief by the application of bark-decoction. The local application of decoction of bark is used as haemostatic medicine. Externally, Ark Bedmushk (aqua) is employed for fomentation in conjunctivitis and headache. The decoction and juice of bark are used in medicine for various ailments. Aqua is distilled from the flowers which is known as Ark Bedmushk; and Vetasa śarkarā (Bed-anjabin) is also medicinally used.

Vetasa is useful in skin diseases such as kuṣṭha, erysepalas, blood impurities etc. It is also suggested in masūrikā. It is useful in fevers especially pittajvara, viṣamajvara and dāhajvara.

Parts used : Bark, flowers, roots, leaves.

Dose

Juice 25-50 ml., Decoction 25-50 ml., Aqua (arka) 25-50 ml.

Formulation : Arka vedamushka.

Groups

Vedanāsthāpana, Hṛdya, Śvāsahara (Caraka Saṁhitā), Nyagrodhādi (Suśruta Saṁhitā).

B. JALAVETASA

Botanical name : Salix tetrasperma Roxb.

Family : Salicaceae

Classical name : Jalavetasa

Sanskrit names : Jalavetasa, Nādeya

Regional names

Veta (Hindi); Bisa (Punj.); Valunja (Mar.); Veda, Vedaśada (Pers.); Khilaph, Saphasaph (Arabic); Yir, Vins (Kann.); Indian willow (English).

Description

A small to moderate-sized, deciduous tree, sometimes reaching C. height upto 24 in. and girth upto 3 meters, with silky pubescent shoots. Bark greyish, brown or blackish with rough vertical fissures. Trunk stout, attaining girth to 3 meters; head large and branches sub-erect.

Leaves 9-20 cm., glabrous of the young as well as the branchlets, more or less softly tomentose or silky; petiole 0.6-0.5 cm., stipules; ovate or orbicular, deciduous.

Male catkins 5-10 cm., on leafy branchlets, sweet scented, bracts obovate or spatulate, pale hairy. Female catkins 7.5-12.5 cm., bracts smaller, disk small, annular.

Capsul is hard, normally 7 mm. long, very variable in length and breadth, 0.3-0.4 cm., stipes as long or shorter. Seeds 4-6, brown-black.

Flowering and fruiting time

Plant begins blooming after the leafing. Flowering in spring and fruiting in rains.

Distribution

Plant occurs in Gujarat and Uttar Pradesh. It is found growing gregariously along the banks of rivers and streams and in wet swampy places throughout the greater part of India, ascending to an altitude of 1,800 meters in the Himalayas and 2,100 meters in the Nilgiri hills.

Chemical composition

Bark is reported to contain 6.5 per cent tannin which is used for tanning purposes.

Analysis of sun-dried mature leaves gave : ash 10.05, Calcium 2.71, Carbon 45.06 and nitrogen 2.07 per cent.

Pharmacodynamics

Rasa	: Kaṣāya, tikta
Guṇa	: Laghu
Virya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Kaphapittaśāma

Properties and action

Karma	: Vedanāsthāpana
	Dāhapraśamaṇa
	Viśaghna
	Mastiṣkaśāma-medhya
	Śvāsahara
	Kuṣṭhaghna
	Jvaraghna
	Raktastambhana
	Jalasantrāsahara.
Roga	: Vedanā-dāha
	Śiraḥśūla
	Agnimāndya
	Hṛddourbalya
	Raktapitta
	Mūtrakṛcchra
	Śukradourbalya
	Jvara-pittajvara.

Therapeutic uses

The drug Jalavetasa is antihistamic, antipyretic and febrifuge. It is used in allergic disorders and poisoning. The drug is much useful in hydrophobia.

The dried and powdered leaves are mixed with sugar and given for treatment of several diseases, such as rheumatism, epilepsy, swellings piles, venereal diseases, and stones in bladder.

In general, the medicinal properties and uses, of Jalavetasa are almost similar to that of Vetasa, it is specifically useful for countering poisons (viṣa) and hydrophobia in rabies (jalasantrāsa-kukkura viṣa).

Besides the medicine, the shoots are used as cattle fodder.

Parts used : Roots, bark, leaves.

Dose : Decoction 50-100 ml.

Groups

Vedanāsthāpana, Āsavayonisāra (Caraka Saṁhitā).

A. VETASA (क. वेतस)

क. वेतसो नम्रकः प्रोक्तो वानीरो वञ्जुलस्तथा ।

अभ्रपुष्पश्च विदुलो रथः शीतश्च कीर्तितः ॥

ख. वेतसः शीतलो दाहशोथार्शोयोनिरुक्प्रणुत् ।

हन्ति वीसर्पकृच्छ्रास्रपित्ताश्मरिकफानिलान् ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 135-136.

जलवेतसः

निकुञ्जकः परिव्याधो नदियो जलवेतसः ।

जलजो वेतसः शीतः कुष्ठहृद्घातकोपनः ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 137.

अ. नदीकूलप्रियोऽन्यः स्यान्निचुलो जलवेतसः ।

निकेतनस्तोयकामो विदुलो बन्धुवेतसः ॥

निकुञ्जकः परिव्याधो जलौका संवृताम्बुजः ।

नीरप्रियः सम्भृतोऽम्लो सुशीतः क्षीरवृक्षकः ॥

कच्छपोली गुच्छफलः सुवाको हिज्जलेज्जलौ ।

जलवेतसगुणाः

ब. कषायः शीतलो रूक्षः सङ्ग्राही जलवेतसः ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 761-763.

वेतसः

क. वेतसो वज्जुलो नम्रः कलनः पत्रमाल्यपि ।
रथाभ्रपुष्पो नादेयो जलौकाश्चैव संवृतः ॥
वानीरः पुष्पगन्धश्च सुवेणो दीर्घपत्रकः ।

वेतसगुणाः

ख. वज्जुलस्तुवरस्तिको हन्ति पित्तकफानिलान् ॥
अनुष्णो दाहशोफार्शोविसर्पाश्मरिकृच्छ्रनुत् ।
अतिसारतृषायोनिरुज्जरक्तव्रणापहः ॥

वेतसशाकम्

ग. तच्छाकमूषणं क्षारं लघु रुच्यञ्च वातलम् ।
(पत्रं तु भेदनं तिक्तं कषायं लघु शीतलम् ।
विपाके कटुकं श्लेष्मपित्तास्रघ्नं च वातलम् ॥)

वेतमफलम्

घ. फलं स्वादु कषायाम्लं रूक्षं पित्तकफास्रजित् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 757-760.

पुराणज्वरे

.....नलवेतसोर्यमूले..... ।

कषायं विधिवत् कृत्वा पेयमेतज्ज्वरापहम् ॥

Suśruta Samhitā, Uttara, 39-204.

योनिदार्ढ्यार्थम्

‘वेतसमूलानि क्वाथप्रक्षालनेन तथैव च ।’

Cakradatta, 62-19.

अतिसारे

वेतसार्जुनजम्बूनां मृणालीकृष्णगन्धयोः ।
श्रीपण्या मलयन्त्याश्च यूथिकायाश्च पल्लवम् ॥
मातुलुङ्गस्य धातक्या दाडिमस्य च कारयेत् ।
स्नेहाम्ललवणोपेताम् खण्डान् साङ्ग्राहिकान् परम् ॥

Caraka Samhitā, Cikitsā, 8-129/130.

मसूरिकायाम्

वानीरबिल्वजनितं क्वाथं पर्युषितमुत्तमं दिवसे ।

चैत्रस्य पापरोगे पिबतां न भवेद्भुजं चैतत् ॥

Baṅgasena, Masūrikā, 44.

रक्तपित्ते

करञ्जोदुम्बरवेतसत्वक्..... ।

.....रक्तं सपित्तं शमयोगाः ॥

Caraka Saṃhitā, Cikitsā, 4-75/77.

B. JALAVETASA (ख. जलवेतस)

जलसन्त्रासे अलर्कविषे

जलवेतसपत्रत्वङ्मूलं क्षुण्णं पचेज्जले ।

स क्वाथः शीतलः पीतः परं श्वविश्वभेषजम् ॥

तत्सिद्धं च घृतं पाननस्याभ्यञ्जनलेपनम् ।

जलात्रासे समस्ते च विषे तद् गरुडोपमम् ॥

Āṣṭāṅga Saṅgraha, Uttara, 46-72/73.

विषनाशनार्थम्

जलवेतसवृक्षस्य मूलं कुष्ठं पचेज्जले ।

स क्वाथः शीतलं पेयः परञ्च विषनाशनः ॥

Baṅgasena, Viṣa, 186.

VETRAKA

Botanical name : Calamus tenuis Roxb.

Family : Poaceae (Gramineae)

Classical name : Vetraka-vetra

Sanskrit names

Vetra, Vetraka, Ikṣvālīka, Romaśara, Tejasa.

Regional names

Bhandari bet (Beng.); Bet, Baint (Hindi); Jatee Bet (Assam.).

Description:

Calamus Linn., a genus with about 30 Indian species

of palms distributed in the Himalayas, Assam, Malabar, Travancore, Coorg and Ceylon. Most species are climbers, scrambling or twining over forest trees with the aid of hooked spines on the leaves and leaf-sheath and by flagellum-like prolongation of the leaf-rachis. The stems of many species of *calamus* form the common cones or Rattans of commerce.

Calamus tenuis Roxb. is common in the sub-Himalayan tracts from Dehradun to Assam, with long stems resembling those of *Calamus rotang* Lam.

Calamus rotang Linn. is occurring in central and southern India and having slender but strong stems.

Many of these climbing species of *Calamus* the stems are being long (in some cases more than 300 ft.) usually cylindrical and of uniform thickness, solid, straw-yellow in colour, and more or less elastic and strong. The outer surface is hard, smooth and shining. The varnished appearance is due to the deposition of silica at the surface; the ash of the epidermis of *Calamus rotang* contains a high percentage (C. 69) of silica. The core, however, is spongy. The internodes vary in length and thickness in different species and even in different plants of the same species.

Distribution

Plant (s) is (are) occurring in various provinces of country within the Himalayas, north-eastern, southern regions falling in tropical sub-tropical temperate and sub-temperate zones.

Kinds and varieties

There are several kinds of canes, other than *Vetraka* which is botanically identified as *Calamus tenuis* Roxb. and also *C. rotang* Linn. as a substitute or allied plant (*Chachi bet* known in Hindi and Bengla).

The stems of many species of *Calamus* from the common canes or Rattans of commerce; for the instance, *Calamus acanthospathus* Griff (*Gouri Bet*), *C. andamanicus* Kurz. (*Andamanese Bait*), *C. flagellum* Griff (*Nagegola Bet* or *Nag Bet*), *C. guruba* Buch-Ham. (*Kanta Bet*), *C. latifolius* Roxb. (*Karak Bet*), *C. pseudo-tenuis* Becc. (*Betta*), *C. thwaitlasi* Becc. (*Jeddu Betta*), and *C.*

viminalis wild var. fasciculatus (Bara bet), etc., entering into their variety of uses.

Pharmacodynamics

Rasa	: Tikta
Guṇa	: Laghu, rūkṣa
Virya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Pittakara-pittasamśamana Kaphahara-vātakara
Fruit-vetrāphala :	Kaphaghna Vātakara

Properties and action

Karma	: Kṛmighna
	Grāhī
	Rucikṛt
	Mehaghna
	Pittaghna
	Raktapittahara
	Śothahara
	Stanyaśodhana
	Jvaraghna
	Vātahara
	Madahara
Roga	: Śōtha
	Madātyaya
	Pānavibhrama
	Urustambha
	Stanyaduṣṭi
	Raktapitta
	Aruci
	Kṛmiroga.

Therapeutic uses

The drug Vetraka is anthelmintic, stomachic, galactagogue and anti-biliousness. It is useful in dyspepsia, intrinsic haemorrhage, oedema, urustambha and biliousness. It induces vomiting in fever (pitta jvara).

The root of other species (*Calamus rotang* Linn.) is considered useful remedy for dysentery and biliousness, and as tonic and febrifuge. The tender leaves *Calamus*

travancoricus Bedd. ex Hook. L. are used in dyspepsia, biliousness and ear troubles, and as anthelmintic.

The fleshy, mucilaginous, sweet-bitter pulp of its fruits of some species (e.g. *Calamus rotang* Linn.) are edible.

The fruits (*vetraphala*) are medicinally useful; they are mentioned in the texts of indigenous materia medica (*Kaiyadeva Nighaṇṭu*, *Oṣadhi Varga*, 1253) with their medicinal properties and uses. *Vetrāgra* is also medicinally useful.

The vegetable of *vetraka* (*vetraka śāka*) has been recommended for its utility in medical classics (e.g. *Caraka Saṁhitā*, *Cikitsā*. 30-258, 259 etc.); it is prescribed to use by patients suffering from oedema (*śoṭha*), intrinsic haemorrhage (*raktapitta*) and *urustambha*; and the same is suggested to be given to mothers as a galacto-purifying medicated vegetable (*stanyaśodhana*).

The stems (of many species) are common canes which are of economic utility.

Parts used : Leaves, tips.

Dose : Decoction 50-100 ml., Fruit edible (vegetable).

Formulations : *Drākṣādileha*, *Kharjūrādi pānaka*.

VETRAKA (वेत्रक)

वेत्रकः

क. इक्ष्वालिको रोमशरस्तेजनो वेत्रकः स्मृतः ॥

ख. शीतं विपाके कटुकं कृमिघ्नं तिक्तं लघु ग्राहि निहन्ति पित्तम् ।

मेहं बलासं च करोति वातं वेत्राग्रमुक्तं रुचिकृद् विशेषाद् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1251-1252.

वेत्रकस्य फलम्

वेत्रकस्य फलं दृग्ध्नं श्लेष्ममेहकृमिप्रणुत् ।

क्षारोष्णाम्लं गुरु स्निग्धं वातलं चाग्निदीपनम् ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1253.

अरोचके

द्राक्षादिलेहे

Suśruta Saṁhitā, Uttara, 57-9.

उरुस्तम्भे

वेत्रपत्रशाकम् ।

Caraka Samhitā, Cikitsā, 27-27.

पानविभ्रमे

खर्जूरादिपानके

Suśruta Samhitā, Uttara, 47-40/41.

शोथे

वेत्रशाकम्

Caraka Samhitā, Cikitsā, 12-63.

ज्वरे वमनार्थम्

पिप्पलीभिर्युतान् गात्र कलिङ्गैर्मधुकेन वा....

पटोलनिम्बकर्कोटवेत्रपत्रोदकेन वा ॥

Āṣṭāṅga Hṛdaya, Cikitsā, 1-7.

रक्तपित्ते

नेत्रशाकम्

Caraka Samhitā, Cikitsā, 4-38.

स्तन्यशोधनार्थम्

‘वंशवेत्रकलायश्च शाकार्थे स्नेहसंस्कृताः ।’

Caraka Samhitā, Cikitsā, 30-258.

निम्बवेत्राग्रकुलकवार्ताकामलकैः शृताम् ।

सव्योषसैन्धवान् यूषान् दापयेत् स्तन्यशोधनम् ॥

Caraka Samhitā, Cikitsā, 30-259.

VIḌAṅGA

Botanical name : Embelia ribes Burm. f.

Family : Myrsinaceae

Classical name : Viḍaṅga

Sanskrit names

Viḍaṅga, Kṛmighna, Citrataṇḍula.

Regional names

Bayabidanga, Vayabidang (Hindi); Bavadinga (Punj.); Vidang (Beng.); Bavading (Mar.), Bavading (Guj.); Vayu-vilang (Tam., Tel., Kann.); Vijhala (Mal.).

Description

Long scandent shrub, much-branched; branching soft, long, thin, tender. terete, and slender Nodes with space between. Lenticles on stem-bark.

Leaves elliptic-lanceolate, gland-dotted; 7.5-1.75 cm. obtusely acuminate, base cuneate or rhomboid, nerves slender; lvs. 5-7.5 cm. (2-3 in.) long and 1.875-3.75 cm. (upto 1 in.) broad; entire, both surface smooth, upper bright and lower dull; leaves gland-dotted, more prominent on young (new foliage); petiole short, 6.25-15 mm. long.

Flowers scarcely 0.02 cm. long; white, or greenish-yellow, minute, brownish-ovary ovoid, not conical upwards; pedicels 0.32 cm.; fls. 5-merous, on spikes on branch-ends.

Fruit berries, smooth, succulent, wrinkled when dry, black, 0.28 cm. diam.; fts. resembling black pepper fruits (seeds) or Marica (Kalimirsch), wrinkled, reddish to black (varifying in colour) or reddish-brown when dried, turning from reddish or blackish colour in ripen stage. Fruit pulp inside brown and with one seed white-dotted. Ft. globular (C. 4 mm. diam.), wrinkled or warty, with colour-variation from dull red to nearly black, a short pedicel often present, pericarp brittle, enclosing a single seed covered with a membrane; ft. taste slightly astringent and aromatic.

Flowering and fruiting time**Distribution**

Plant occurs wild in Assam, Meghalaya and other provinces in north-east region of country. It is found in hilly forests in India ascending to 5,000 ft. elevation.

Another kind of Vidanga is botanically known as *Embelia tsjerium-cottam* A. Dc. syn. *E. robusta* C. B. clarke which follows.

Kinds and varieties

A rambling shrub or a small tree with broadly elliptic, gland-dotted-leaves, distributed throughout the greater part of India upto an altitude of 5,000 ft. Fruits longitudinally striated, closely resembling the fruits of *Embelia ribes* and generally known by the same vernacular names. They

are used, like the fruits of *Embelia ribes*, as adulterant of black pepper.

As an adulterant of drug *Viṇṇa* and admixed in raw drug material of market, the seeds of *Myrsine africana* Linn., belonging to family *Myrsinaceae*, may be referred.

An erect shrub or small tree, 0.6-1.2 meters high, found in the outer Himalayas from Kashmir to Nepal and Khasi hills at altitudes of 3,000-2,700 meters. Leaves lanceolate or obovate, sharply toothed; flowers minute, white, in axillary cluster; fruits small, globose, fleshy, dark, purple, containing a single seed.

Chemical composition

The drug contains (dry basis) : embelin 2.5-3.1, quercitol 1.0 and fatty ingredients 5.2%; and alkaloid christembine, a resinoid, tannins and minute quantities of a volatile oil are present.

Pharmacodynamics

Rasa	: Kaṭu, kaṣāya
Guṇa	: Laghu, rūkṣa, tīkṣṇa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāma

Properties and action

Karma	: Kṛmighna Dīpana-pācana-anulomana Raktaśodhaka Rasagranthiśothahara Mūtrajanana Garbhanirodhaka Varṇya Kuṣṭhaghna Rasāyana Mastiṣkanāḍibalya Jantughna-kuṣṭhaghna Śirovirecana.
Roga	: Kṛmiroga-gaṇḍūpadakṛmi- sphītakṛmi-tantukṛmi Agnimāndya-ajīrṇa-vamana-

udaraśūla-ādhmāna
 Arśa
 Mastiṣkadourbalya-nāḍidourbalya
 Vātavyādhi-ākṣepaka-apasmāra-
 pakṣāghāta
 Kṛmidanta-dantaśūla
 Carmaroga
 Jirṇa pratiśyāya
 Kāmalā
 Śiroroga
 Raktavikāra-gaṇḍamālā
 Dourbalya (Kṣayagrasta śīśu).

Therapeutic uses

The drug Viḍaṅga is a valuable anthelmintic (kṛmighna) herbal agent; it is astringent, carminative, anthelmintic, alterative, stimulant and tonic. It is used in colic, worms, flatulence and constipation. The drug is also used as anti-fertility drug in traditional medicine. As an anthelmintic drug, the powder of fruits is orally given.

The dried fruits of Viḍaṅga are used in decoction for fevers and for diseases of the chest and skin. They are also used as an ingredient of application for ringworm and other skin diseases. Fruits are useful in roundworm, tapeworm and ascariasis in general.

The chief active principal embelin (2.5 : dihydroxy-3-lauryl-p-henzoquinone) occurs in golden yellow needles, insoluble in water and soluble in alcohol, chloroform and benzene. It is reported to be effective against tapeworm. The dark coloured, fatty oil is reported to be similar to linseed and rapeseed oil in its properties.

An infusion of the roots is given for cough and diarrhoea. Aqueous extracts of the fruits show anti-bacterial activity against *Staphylococcus aureus* and *Escherichia coli*. Dried fruits are commonly employed as adulterant of black pepper.

The tender leaves and fruits are also eaten cooked. Sometimes the raw leaves are sometimes eaten raw.

As an anthelmintic medicine, generally the drug Viḍaṅga is used in powder form as a single drug (10 gm.) in

empty stomach and followed by suitable purgative for expelling the intestinal worms out. Afterwards Viḍaṅga, Indrayava, Palāśa bija, Nimba bark and other drugs according to requirement may continue for sometime. Various recipes formulations containing Viḍaṅga are used orally in treatment of Kṛmiroga (worms affections) as prescribed in practice of indigenous medical system which finds Viḍaṅga as an excellent anthelmintic drug ('Viḍaṅga Kṛmighnānām' : Caraka Saṁhitā, Sūtra, 25-40).

The fruits of drug (Viḍaṅga phala) are given with lukewarm water in dyspepsia, loss of gastric power, flatulence, constipation and piles. In these gastro-intestinal disorders, other formulations (e.g. Viḍaṅgāriṣṭa, Viḍaṅgādi cūrṇa, etc.) are given.

Viḍaṅga fruits are taken in gaṇḍamāla, raktavikāra, kuṣṭha, skin diseases, dysuria, vātavikāra, paralysis, brain disorders, epilepsy, nerve debility and child debility.

Parts used : Fruits.

Dose : Powder 5-10 gm.

Formulation

Viḍaṅgādi cūrṇa, Viḍaṅga louha, Viḍaṅga taila, Viḍaṅgādi lepa, Viḍaṅgādi kṣāra, Viḍaṅgāriṣṭa.

Groups

Surasādi, Pippalyādi (Suśruta Saṁhitā), Kṛmighna, Kuṣṭhaghna, Tṛptighna, Śirovirecana (Caraka Saṁhitā), Trimada (Bhāvaprakāśa).

VIDAṆGA (विडङ्ग)

विडङ्गं कटुकं पाके रूक्षे तिक्तोष्णं च लघु ॥

वीर्योष्णं दीपनं रूच्यं कृमिवातकफापहम् ।

विष्टम्भमाध्मानशूलाममेदोदराणि ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1148-1149.

विडङ्गं कटु तीक्ष्णोष्णं रूक्षं वह्निकरं लघु ।

शूलाध्मानोदरश्लेष्मकृमिवातविबन्धनुत् ॥

Bhāvaprakāśa Nighaṇṭu, Haritakyādi varga, 112.

विडङ्गा कटुरुष्णा च लघुर्वातकफार्तिनुत् ।
अग्निमान्द्यारुचिम्भ्रान्ति-क्रिमिदोषविनाशिनी ॥

Rāja Nighaṇṭu, Pippalyādi varga, 50.

रूक्षोष्ण कटुकं पाके लघु वातकफापहम् ।
ईषक्तिकं विषान् हन्ति विडङ्गं कृमिनाशनम् ॥

Dhanvantari Nighaṇṭu.

विडङ्गं कृमिनाशनश्रेष्ठत्वम्

‘विडङ्गं क्रिमिघ्नानाम् ।’

Caraka Saṁhitā, Sūtra, 24-40.

‘क्रिमिषु क्रिमिघ्नम् ।’

Āṣṭāṅga Hṛdaya, Uttara, 40-49.

‘क्रिमिनाशनं विडङ्गं विशिष्यते कुष्ठहा खदिरः ।’

Caraka Saṁhitā, Cikitsā, 7-159.

कामलायाम्

‘कामलार्तस्य वैडङ्गं पिप्पल्योः नावनाञ्जनैः ।’

Sodhala, Gadani-graha, 7-3-52.

विषे

विडङ्गस्य शिफा पिष्ट्वा सम्यक् तण्डुलवारिणा ।

वासुकेरपि दुर्वारं पीता हन्याद् विषं क्षणात् ॥

Sodhala, Gadani-graha, 7-3-13.

अर्धावभेदके

विडङ्गानि तिलान् कृष्णान् समं कृत्वा तु पेषयेत् ।

नस्यकर्मणि दातव्यमर्थं भेदं व्यपोहति ॥

Baṅgasena.

कृमिकुष्ठे

‘पानाहारविधाने प्रसेचने धूपने प्रदेहे च ।

कृमिनाशनं विडङ्गं.... ।’

Caraka Saṁhitā, Cikitsā, 7-159.

कृमिषु

‘विडङ्गं कृमिघ्नानाम्.... ।’

Caraka Saṁhitā, Sūtra, 25.

श्लीपदचिकित्सायां विडङ्गाद्य तैलम्

Cakradatta, 42-32.

रसायनार्थम्

‘विडङ्गतण्डुलचूर्णमाहृत्य यष्टिमधुयुक्तं यथाबलं शीततोय-
योगेनोपयुञ्जीत शीततोयं चानुपिबेत्। एवमहरहर्मासं....। जीर्णे
मुद्गामलकयूषेनालवणेनाल्पस्नेहेन घृतवन्तमोदनमशनीयात्। एते खल्वर्शांसि
क्षपयन्ति कृमीनुपघ्नन्ति। ग्रहणधारणशक्तिः जनयन्ति। मासे मासे प्रयोगे
शतवर्षमायुषोऽभिवृद्धिः भवति।’

Suśruta Samhitā, Cikitsā, 27.

कुष्ठचिकित्सायां विडङ्गादिलेपद्वयम्

Cakradatta, Kuṣṭha cikitsā, 50/18-19.

कृमिरोगे चूर्णम्

‘लिह्याद्विडङ्गचूर्णं वा मधुना क्रिमिनाशनम्।’

Bhāvaprakāśa, Kṛmirogādhikāra, 7-21.

कृमिरोगचिकित्सायाम्

विडङ्गशृतपानीयं विडङ्गेनावधूलितम्।

पीतं क्रिमिहरं दृष्टं क्रिमिजांश्च गदाञ्जयेत्॥

Bhāvaprakāśa, Kṛmirogādhikāra, 7-20.

‘विडङ्गपिप्पलीकल्को निरुहः क्रिमिनाशनः।’

Caraka Samhitā, Siddhi, 8-10.

गर्भनिरोधे गर्भानास्थापकयोगः

पिप्पलिविडङ्गटङ्कणसमचूर्णं या पिबेत्पयसा।

ऋतुसमये न हि तस्या गर्भः सञ्जायते क्वापि॥

Bhāvaprakāśa, Yonirogādhikāra, 70-33.

क्रिमिचिकित्सायां विडङ्गतैलम्

सविडङ्गगन्धकशिला-सिद्धं सुरभीजलेन कटुतैलम्।

आजन्म नयति नाशं लिक्षासहितास्तु यूकाश्च॥

Cakradatta, Krimi cikitsā, 7-15.

अजीर्णं (लौहभस्मजन्यं) शूले विडङ्गचूर्णम्

क्रिमिरिपुचूर्णं लीढं सहितं स्वरसेन वङ्गसेनस्य।

क्षपयत्यचिरान्नितं लौहाजीर्णोद्भवं शूलस्य॥

Cakradatta, Śūla cikitsā, 26-74.

हृद्रोगं (क्रिमिज हृद्विकारं) चिकित्सायां विडङ्गादिचूर्णम्

क्रिमिजे च पिबेन्मूत्रं विडङ्गामयसंयुतम्।

हृदि स्थितः पतन्त्येवमधस्तात् क्रिमिषो नृणाम्।

यवान्नं वितरेच्चास्मै सविडङ्गमतः परम् ॥

Cakradatta, Vṛndamādhava, 31-21.

Hṛdoga cikitsā, 31-25.

यकृत्स्लीहाचिकित्सायां विडङ्गादिक्षारप्रयोगः

Cakradatta, Plīhayakṛcchikitsā, 38-3.

कामलायाम्

‘कामलार्तस्य वैडङ्गं पिप्पल्यो नावनाञ्जने ।’

Gadanigraha, 2-7-52.

शिरोरोगे-अर्धावभेदके

विडङ्गानि तिलान् कृष्णान् समं कृत्वा तु पेषयेत् ।

नस्यकर्मणि दातव्यमर्धभेदं व्यपोहति ॥

Baṅgasena, Śīroroga, 101.

विषदूषितायां भूमौ

‘सिञ्चेत् पयोभिः सुमृदन्वितैस्तं विडङ्गपाठाकटभीजलैर्वा ।’

Suśruta Samhitā, Kālpa, 3-12.

कुष्ठे

मूत्रञ्चैनं सेचयेद् भोजयेच्च सर्वाहारान् सम्प्रयुक्तान् विडङ्गैः ।

कारञ्जं वा सार्षपं वा क्षतेषु क्षेप्यं तैलं शिगुकोशाम्नयोर्वा ॥

Suśruta Samhitā, Cikitsā, 9-52/53.

रसायने

विडङ्गरसायनम् ।

Suśruta Samhitā, Cikitsā, 27-7/8.

लौहरजो वेल्लभवञ्च सर्पिः क्षौद्रद्रुतं स्थापितमब्दमात्रम् ।

सामुद्रके बीजकसारक्लृप्ते लिहन् बली जीवति कृष्णकेशः ॥

Āṣṭāṅga Hṛdaya, Uttara, 39-151.

विडङ्गभस्मातकनागराणि येऽश्नन्ति सर्पिर्मधुसंयुतानि ।

जरानदी रोगतरङ्गिणी ते लावण्ययुक्ताः पुरुषास्तरन्ति ॥

Āṣṭāṅga Hṛdaya, Uttara, 39-152.

कुष्ठे

विडङ्गत्रिफलाकृष्णाचूर्णं लीढं समाक्षिकम् ।

हन्ति कुष्ठं क्रिमीन् मेहं नाडीव्रणभगन्दरम् ॥

Siddhasāra, 12-33.

क्रिमिरोगे

दीपनीयमन्त्रमण्डं

विडङ्गव्योषसंयुतम् ।

पाययेत् कृमिनाशाय अग्निं च कुरुते भृशम् ॥

Vṛndamādhava, 7-3.

विडङ्गकौटजं बीजं तथा पलाशजम् ।

सञ्चूर्ण्य खादत् खण्डेन क्रिमिनाशयितुं नरः ॥

Bhāvaprakāśa, Cikitsā, 7-23.

‘क्रिमिहरचतुरङ्गुलयोः क्वाथः कोष्णः क्रिमिव्रणकुष्ठेषु ।’

Āṣṭāṅga Saṅgraha, Uttara, 49-96.

विडङ्गतण्डुलीयैर्युक्तमर्धशैरातपस्थितम् ।

दिनमारुष्करं तैलं पाने बरतौ च योजितम् ॥

Āṣṭāṅga Hṛdaya, Cikitsā, 20-31.

VIDĀRĪ

Botanical name : *Pueraria tuberosa* Dc.

Family : Fabaceae (Papilionaceae-Leguminosae)

Classical name : Vidārī

Sanskrit names

Vidārī, Svādukandā, Kandapalāśa, Ikṣugandhā, Gajavājipriyā, Bhumikuṣmāṇḍa.

Regional names

Vidarikand, Bilaikand, Sural, Patalkohorha, Bidarikand (Hindi); Shimiya (Beng.); Bedariya (Mar.); Bel, Bindari (Mar.); Khakharbel, Vidari (Guj.); Ghodabel (Ma.); Darigummadi (Tel.); Gumandiginda (Mal.); Indian Kudju, Kudzu (Eng.).

Description

Large woody climber; roots tuberous with several strings of tubers connected by thin roots young branches pubescent. Tubers taste like liquorice, edible.

Tubers large, 30-60 cm. long and 25-30 cm. broad, weighing upto 35 kg. Tubers often found in strings connected with the main roots by thin roots. Yield of tubers reported about 5.0-7.0 tonnes per hectare.

Leaves 3-foliolate, silky pubescent beneath; petioles 15-20 cm. long; terminal leaflets broadly ovate or rhomboid, acuminate, 10-20 × 8-17 cm.; laterals obliquely, ovate-oblong, acuminate.

Flowers when leafless, in 15-30 cm. long axillary or terminal racemes or panicles. Calyx Ca 8 mm. long, silky, teeth unequal, 2 upper teeth, connate. Corolla 1-1.5 cm. long, blue, fading to bluish-purple, often white. Stamens diadelphous, 9 + 1.

Pods 5-7.5 cm. long, constricted between seeds; densely clothed with bristly hairs, 3-6-seeded

Flowering and fruiting time

Plant flowers in February March and fruits in April.

Distribution

Plant occurs wild and climbing on shrubs and small trees in mixed forests. It grows in central India, Uttar Pradesh and other various provinces. Plant is occurring to 4,000 ft. elevation.

The dried roots (tubers) are sold as drug in the form of longitudinally cut, decorticated flat thin slices of a white colour with a characteristic odour and peculiar sweet taste.

Kinds and varieties

Kṣīravidārī is another classical kind of Vidārī. It is botanically identified as *Ipomoea digitata* Linn. which belongs to family Convolvulaceae. The plant and tubers are known as 'Bhuikoharha' (in Hindi) and other regional names.

Chemical composition

The tubers can be used for extraction of starch. Tubers contain : dry matter 85.1, total carbohydrates 64.6, crude fibre 28.4, crude protein 10.9 and ether extr. 0.5 per cent. B-sitosterol, sucrose, glucose and fructose have been identified

Pharmacodynamics

Rasa	: Madhura
Guṇa	: Guru, snigdha
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittaśāma

Properties and action

Karma	: Balya-br̥ṇhaṇa Vṛṣya

	Rasāyana
	Stanyajanana
	Kaphaniḥsāraka
	Kanṭhya
	Mūtrala
	Hṛdya
	Śonitāsthāpana
	Snehana-anulomana
	Pittasāraka
	Varṇya
	Jvaraghna
	Dāhapraśamana.
Roga	: Kṣaya-śoṣa-dourbalya
	Śukrameha
	Stanyakṣaya
	Mūtrakṛcchra-prameha
	Varṇavikāra
	Viṣamajvara
	Dāha
	Koṣṭhagata roukṣya
	Pittavikāra
	Yakṛtplihavṛddhi
	Vibandha.

Therapeutic uses

The drug Vidārī balya, vṛṣya and rasāyana. It is useful medicine as is aphrodisiac, cardiogenic, demulcent, diuretic, refrigerant, galactagogue and tonic. It is used in consumption, emaciation, enteric fever and spermatorrhoea. The drug is considered a restorative of high value in traditional medicine. The studies conducted on tubers indicate 12% proteins and aminoacids in the drug. Significant oestrogenic potentiality has been observed petroleum ether extract. Tubers are expectorant.

The tubers are used in medicine as a demulcent and refrigerant in fevers as cataplasm for swellings of joints and as lactagogue. Tubers are useful in prameha, kuṣṭha, upadamaśa, śukrakṣaya, impotency; general debility and other diseases.

The extract of tuber is active against *Helminthosporium sativum* Pamm. The green foliage and tender twigs are as nutritious and palatable as those of Kudzu (and a yield of 7.5 to 10.0 tonnes of air dry foliage per hectare has been reported). The leaves of *Vidārikanda* (*Puerariatuberosa* Dc.) afford good fodder for horses and cattles; as specially the horses like to feed the leaves of plant.

The tubers of *Vidārī* are useful in heart troubles, blood diseases, horseness (*svarabheda*), malarial fever (*viṣamajvara*), burning sensation (*dāha*), (debility) *dourbalya*, consumption (*śoṣa*), tuberculosis (*kṣaya*) and liver-spleenic enlargement (*yakṛtpliha vṛddhi*).

Parts used : Tuber.

Dose : Powder 3-6 gm.

Formulations

Vidāryādi tailam, Vidārī ghṛta, Vidārī cūrṇa.

Groups

Balya, Br̥mhaṇīya, Varṇya, Kaṇṭhya, Snehopaga, Madhuraskanda (Caraka Saṁhitā), Vidārīgandhādī, Vallipañcamūla, Pittasaṁśamana (Suśruta Saṁhitā).

VIDĀRĪ (विदारी)

- क. विदारी स्वादुकन्दा च सा तु कोट्टी सिता स्मृता ।
इक्षुगन्धा क्षीरवल्ली क्षीरशुक्ला पयस्विनी ॥
- ख. विदारी मधुरा स्निग्धा बृंहणी स्तन्यशुक्रदा ॥
शीता स्वर्था मूत्रला च जीवनी बलवर्णदा ।
गुरुः पित्तास्रपवनदाहान् हन्ति रसायनी ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 180.
Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 181-182.

विदारीकन्दः

विदारीक्षुविदारी स्यात् स्वादुकन्दा विदारिका ॥
कूष्माण्डकी कन्दवल्ली वृक्षकन्दा पलाशिका ।
गजवाजिप्रिया वृष्या वृक्षवल्ली विडालिका ॥

वल्लीपलाशिका कन्दपलाशः श्रेष्ठकन्दकः ।

शृङ्गालिका वृष्यपर्णी मृगोली कृष्णवल्लिका ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1579-1581.

क्षीरविदारीकन्दः

अन्या शुक्ला क्षीरशुक्ला क्षीरकन्दा पयिस्विनी ।

क्षीरवल्लीक्षुकन्देक्षुवल्ली क्षीरविदारिका ॥

इक्षुपर्णी शुक्लकन्दा महाश्वेतेक्षुगन्धिका ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1581-1582.

विदारीगुणाः

विदारी बृंहणी वृष्या सुस्निग्धा शीतला गुरुः ॥

मधुरा मूत्रला स्वर्या स्तन्यवर्णबलप्रदा ।

पित्तानिलास्रदाहघ्नी जीवनीया रसायनी ॥

क्षीरविदारीपुष्पम्

पयस्या कुसुमं वृष्यं मधुरं रसपाकयोः ।

पित्तघ्नं शीतवीर्यं च वातश्लेष्मकरं गुरु ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1583-1585.

विदारिका

अ. विदारिका स्वादुकन्दा सिता शुक्ला शृगालिका ।

विदारी वृष्यकन्दा च विडाली वृष्यवल्लिका ॥

भूकूष्माण्डी स्वादुलता राजेष्टा वारिवल्लभा ।

ज्ञेया कन्दफला चेति मनुसङ्ख्याह्वया मता ॥

ब. विदारी मधुरा शीता गुरुः स्निग्धाऽस्रपित्तजित् ।

ज्ञेया च कफकृत्पुष्टिः बल्या वीर्यविवर्द्धनी ॥

Rāja Nighaṇṭu, Mūlakādi varga, 99-101.

मूत्राघाते विदारीघृतम्

Bhāvaprakāśa, Mūtrāghātādhikāra, 36/47-58.

दन्तरोगे विदार्यादितैलम्

Cakradatta, Mukharoga cikitsā, 56-33.

मूत्रकृच्छ्रे

‘.....विदारीभिस्तथा मृतम् ।

घृतं पयश्च मूत्रस्य वैवर्ण्यं कृच्छ्र एव च ॥’

Caraka Samhitā, Cikitsā, 118-154.

शूले

विदारीदाडिमरसः सव्योषलवणान्वितहः ।

क्षौद्रयुक्तो जयत्याशु शूलं दोषुत्रयोद्भवम् ॥

Vṛndamādhava, 26-30.

वाजीकरणार्थं विदारीचूर्णम्

चूर्णं विदार्याः सुकृतं स्वरसेनैव भावितम् ।

सर्पिक्षौद्रयुक्तं लीढ्वा शतं गच्छेद्वराङ्गना ॥

Cakradatta, Vṛsyādhikāra, 66-3.

वृष्य-रसायनार्थञ्च विदारीकल्कम्

विदारीकन्दकल्कन्तु घृतेन पयसा नरः ।

उदुम्बरसमं खादन् वृद्धोऽपि तरुणायते ॥

Suśruta Samhitā, Cikitsā, 26-23.

Cakradatta, Vṛsyādhikāra, 66-5.

Vṛndamādhava, 70-10.

वाजीकरणे

विदार्याः सुकृतं चूर्णं स्वरसेनैव भावितम् ।

सर्पिर्मधुयुतं लीढ्वा दश स्त्रीरधिगच्छति ॥

विदारीभूलकल्कं तु मूलेन पयसा नरः ।

उदुम्बरसमं पीत्वा वृद्धोऽपि तरुणायते ॥

Suśruta Samhitā, Cikitsā, 26-23.

स्तन्यजननार्थम्

दुग्धेन घृतेनापीतं शालितण्डुलजं रजः ।

विदारीकन्दचूर्णं वा प्रभवेत् स्तन्यवृद्धये ॥

Vaidya Manoramā, 3-46.

‘विदारिकन्दं सुरया पिबेद् वा स्तन्यवर्धनम् ।’

Cakradatta, 63-51.

भूमिकूष्माण्डमूलं पिबति क्षीरेण या नारी ।

सशर्करेणैव पुष्टा ह्यतिशयदुग्धवती सा भवति ॥

Baṅgasena, Strīroga, 360.

क्षयजकासे

विदारीभिः कदम्बैर्वा तालसस्यैस्तथा शृतम् ।

घृतं पयश्च मूत्रस्य वैवर्ण्यं कृच्छ्रनिर्गमे ॥

Caraka Samhitā, Cikitsā, 18-154.

Āṣṭāṅga Hṛdaya, Cikitsā, 3-153.

रसायने

‘तद्विदार्यातिबलाबलामधुकवायसीः ।

.....उपयुञ्जीत धीमेधावयःस्थैर्यबलप्रदाः ॥’

Āṣṭāṅga Hṛdaya, Uttara, 39-60/61.

विषमज्वरे

पयः तैलं घृतञ्चैव विदारीक्षुरसं मधु ।

सम्मूर्च्छ्य पाययेदेतद् विषमज्वरनाशनम् ॥

Cakradatta, 1-218.

विसर्पे

‘शतावर्या विदार्याश्च कन्दौ धौतघृताप्सुतौ ।’

Caraka Samhitā, Cikitsā, 21-84.

VIKAṆKATA

Botanical name

Flacourtia indica (Burm. f.) Merr.

Syns. *Flacourtia ramontchi* L. Herit., *Gmelina indica* Burm. f., *F. sepiaria* Roxb.

Family : Flacourtiaceae

Classical name : Vikaṅkata

Sanskrit names

Vikaṅkata, Vikaṅtaka, Yajñapādapa, Piṇḍarohiṇa, Svādukaṅtaka, Gopakaṅṭa, Mṛduphala, Sruvataru, Kinkīṇī, Devavṛkṣa, Vṛkabīja, Sruvavṛkṣa.

Regional names

Katia, Kanker, Katai, Kantai (Hindi); Benchi (Beng.); Kaketi (Mar.); Kankod (Guj.); Katukal (Tam.); Kandrenu (Tel.); Hunmuneki (Kann.); Governor's Plum, Madugascar Plum (Eng.).

Description

Deciduous shrubs or small spiny trees with young branches and leaves pubescent; spines axillary.

Leaves ovate to almost orbicular; veins prominent, pubescent, margins crenate to serrate, apex obtuse to acute. Lvs. upto 6 cm. long.

Male flowers in short branched clustered racemes; sometimes on the thorns; calyx pubescent; stamens numerous. Female flowers on short branches, solitary or in pairs; pedicels villous; sepals villous, ovary glabrous; stigmas 5-10, bilobed.

Fruits globose; berry with 6-7 pyrenes; seeds obovoid, 2.0-2.6 mm. long.

Flowering and fruiting time

Plant flowers in March-April and fruits in April-June. Generally plant bears flowering in December-March and fruits ripen in March-July. Leaves fall in cold season and blooming during springs and it begins fruiting onwards.

Distribution

Plant occurs wild in scrub forests in Madhya Pradesh, Central India, Uttar Pradesh. It is a pantropical plant. Plant grows in Chota Nagpur, Southern and Central India and other including regions in Gujarat in country ascending to 4,000 ft. altitudes in the Himalayan regions.

Kinds and varieties

Various kinds, forms or varieties of plant particularly the species carry distinctive position (taxonomical nature on nomenclatural aspect).

Chemical composition

Analysis of the edible part (77%) of the fruit gave the following values : moisture 74.4, protein 0.37, ether extr. 0.21, total carbohydrate 24.20, reducing sugars 4.4, sucrose 5.0, fibre 0.43 and mineral matter 0.30%; Calcium 24.1 and phosphorous 12.5 mg./100 g.

Bark is used as a tanning material. [Fruits and their stages differ in taste-rasa etc.]

Pharmacodynamics

Rasa	: Madhura, amla, kaṣāya
Guṇa	: Laghu, rūkṣa
Virya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Tridoṣahara

Properties and action

Karma	: Mūtrasaṅgrahaṇīya

	Dīpana
	Yakṛdbalya
	Raktaśodhana
	Śothahara
	Tvagdoṣahara.
Roga	: Prameha
	Raktavikāra
	Agnimāndya
	Kāmalā
	Tvagvikāra
	Śotha-apaci-granthi-arbuda

Therapeutic uses

The drug Vikaṅkata is useful in anomalies of urinary system belonging to group of prameha roga. It is used in jaundice, blood impurities, skin diseases, loss of gastric power and liver disorders.

Vikaṅkata is given in cough (Kāsa). Externally, the drug is used in glandular affections, swelling, tumour, abscess and allied complaints. It is also used in spider poisoning (lūtā viṣa).

The fruits are edible and have a sharp but sweetish taste and an agreeable flavour. The fruits of some varieties are sweet enough to be eaten raw but those of others can be eaten only after stewing. Generally they are rich in pectin and sufficiently acidic, are excellent for jams and jellies.

Fruits (Vikaṅkata phala) are appetising and digestive. They are given in jaundice and enlarged spleen. The bark is astringent and diuretic.

Parts used : Bark, fruits.

Dose : Decoction 50-100 ml.

VIKAṆKATA (विकङ्कत)

विकङ्कतः

विकङ्कतो मधुश्चाम्लः कषायः शीतलो भवेत् ।

बलासपित्तशोफास्रविकारान् कामलां तथा ॥

पाककालेऽतिमधुरो दाहं शोषं च नाशयेत् ।

दीपनः पाचनश्चैव व्रणलूतार्थनाशनः ॥

Nighaṇṭu Ratnākara.

विकङ्कतफलम्

तत्फलं वातलं चाम्लं पक्वं स्वादु त्रिदोषहृत् ।

विकङ्कतं च नात्युष्णं दोषहृत् नेत्रपुष्पजित् ॥

विकङ्कतोऽम्लमधुरः पाकेऽतिमधुरो लघुः ।

दीपनः कामलास्रघ्नः पाचनः पित्तनाशनः ॥

Nighaṇṭu Ratnākara.

‘विकङ्कतफलं पक्वं मधुरं सर्वदोषनुत् ।’

Bhāvaprakāśa.

क. व्याघ्रपादः सुवतरुः स्वादुकण्टो विकङ्कतः ।

देववृक्षो गोपकण्टो ग्रन्थिलो पिण्डरोहिणः ।

वृक्षबीजो मृदुफलो किङ्किणी यज्ञपादपः ॥

ख. सुवस्तु मधुरस्तिक्तः कषायः शीतलो जयेत् ।

बलासपित्तशोफास्रं फलं पाकरसोषणम् ॥

तीक्ष्णं पित्तास्रकृत् पक्वं स्वादु तिक्तं त्रिदोषजित् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 404-407.

क. विकङ्कतः सुवावृक्षो ग्रन्थिलः स्वादुकण्टकः ।

स एव यज्ञवृक्षश्च कण्टकी व्याघ्रपादपि ॥

ख. विकङ्कतफलं पक्वं मधुरं सर्वदोषजित् ।

Bhāvaprakāśa Nighaṇṭu, Āmrādīphala varga, 88.

विकण्टकः

अ. विकण्टको मृदुफलो ग्रन्थिलः स्वादुकण्टकः ।

गोकण्टकः काकनाशो व्याघ्रपादो घनद्रुमः ॥

गर्जाफलो घनफलो मेघस्तनितोद्भवश्च सुदिरफलः ।

प्रावृष्यो हास्यफलः स्तनितफलः पञ्चदश संज्ञः ॥

गुणाः

ब. विकण्टकः कषायः स्यात् कटु रूक्षो रुचिप्रदः ।

दीपनः कफहारी च वस्त्ररङ्गविधायकः ॥

Kaiyadeva Nighaṇṭu, Āmrādī varga, 211-213.

कासे

वसिष्ठरसायने

Āṣṭāṅga Hṛdaya, Cikitsā, 3-133.

प्रमेहे

शृङ्गाटक.....विकङ्कतेषु वा

(अरिष्टनयस्कृतीर्लेहानासावांश्च कुर्बीत ।)

Suśruta Saṁhitā, Cikitsā, 11-10.

ग्रन्थौ (कफजे)

विकङ्कतारग्वधकाकणन्तीकाकादनीतापसवृक्षमूलैः ।

आलेपयेत् पिण्डफलार्कभार्गीकरञ्जकालामदनैश्च विद्वान् ॥

Suśruta Saṁhitā, Cikitsā, 18-13.

लूताविषे

हीबेरवैकङ्कतगोपकन्या.....सिन्दूवारकरहाटवराङ्गम् ।

पित्तकफानिललूताः पालाञ्जनस्य लेपसेकेन ॥

.....धारयन्त्ये ॥

Āṣṭāṅga Hṛdaya, Uttara, 37-82/85.

VĪRATARU

Botanical name

Dichrostachys cinerea wight & Arn.

Syn. Caillica cinerea Macb.

Family : Mimosae

Classical name : Vīrataru

Sanskrit names

Vīrataru, Vellantaru, Kṣudhākuśala, Dīrghamūla, Vṛddhavāta, Dīrghapatra, Vilvāntara, Bilvāntara.

Regional names

Vurtuti (Hindi); Segumakati (Mar.); Vellatur (Tel.); Viltattalai (Tam.); Outar (Kanya.); Odatare (Kann.).

Description

Much branched thorny shrub or small tree often with gnarled trunk; young branches hairy and terminating

into spines. Heartwood reddish in colour, hard, tough and heavy (wt. 70-90 lb./cu. ft.)

Leaves bipinnate, 2.5-6 cm. long; rachis with a small stalked, gland between each pair of pinnac; pinnae 8-19, 1-15 cm. long; leaflets 12-25 pairs; obtuse with hairy margins.

Flowers in dense cylindrical pedunculate axillary, 2.5 cm. long; spikes upper half of spike with bisexual yellow flowers and the lower half with neutral pink flowers. Calyx less than 1 mm. long; membranous. Corolla 2-2.5 mm. long.

Pods 5-10 mm. long, dark brown, coiled; seeds 6-10.

Flowering and fruiting time

Plant flowers and fruits in June-August. Flowering during the rains and afterwards fruiting.

Distribution

Plant is palaeotropical. Plant occurs in dry deciduous forests, various areas (Madhya Bharat) in Madhya Pradesh, Uttar Pradesh (Bundelkhand, Chambal and Jamuna ravines etc.), central India. It is growing wild in dry scrub forests and arid hills of north-western, central and southern India. It is of value as a cover plant on dry soils. Plant is one of the recorded hosts of the lac insect.

Pharmacodynamics

Rasa	: Tikta, kaṣāya
Guṇa	: Laghu, rūkṣa
Vīrya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarman	: Kaphavātaśāmaka

Properties and action

Karma	: Aśmaribhedana-mūtrala Āmadoṣahara Śothahara Yonidoṣahara Vedanāsthāpana Dīpana-grāhī Trṣṇānigrahaṇa
Roga	: Aśmari-śarkarā Mūtrāghāta-mūtrakṛcchra- mūtravikāra

Sandhiśūla
Vātābhiṣyanda
Yonidoṣa
Āmātsāra
Netraroga-anyatovāta.

Therapeutic uses

The drug *Virataru* is diuretic (*mūtravirecanīya*) and lithontriptic (*aśmarināśana*); it is quite useful and given in dysuria, urinary calculus, scanty or painful micturition, gravels and allied urinary complaints.

The tender shoots of the plant are bruised and applied to the eyes in cases of ophthalmia. The root is astringent and used in rheumatism, urinary calculi and renal troubles.

Externally, the leaves or bark are ground and the paste is applied over inflamed and painful parts and joints of body; it is useful in *sandhivāta*, *sandhiśoṭha*, *śūla* and other similar *vātaroga*, being *śothahara* and *vedanāsthāpana*.

Internally the plant is given in *vātavyādhi* e.g. *āmavāta*, *sandhiśoṭha*, particularly the ailments characterised by swelling and pain. It is useful in *agnimāndya*, *grahaṇī*, *śoṭha* (oedema), *ślipada* (filiariasis), vaginal disorders (*vātika yoniroga*). It is useful in *amadoṣa*. The roots are mainly used in medicine, and the leaves and bark are also medicinally useful.

Parts used : Roots, bark and leaves.

Dose : Decoction 20-100 ml.

Formulation : *Viratarvādi kvātha*, *Viratarvādy taila*.

Groups : *Viratarvādi*, *Vātasamśamana* (*Suśruta Saṁhitā*).

VĪRATARU (वीरतरु)

क. वेल्लन्तरो जगति वीरतरुः प्रसिद्धः

श्वेतासितारुणविलोहितनीलपुष्पः

स्याज्जातितुल्यकुसुमः शमिसूक्ष्मपत्रः

स्यात्कण्टकी विजलदेशज एव वृक्षः ॥

ख. वेल्लन्तरो रसे पाके तिक्तस्तृष्णाकफापहः ।

मूत्राघाताश्मजिद्ग्राही योनिमूत्रानिलार्तिजित् ॥

Bhāvaprakāśa Nighaṇṭu, Guḍūcyādi varga, 302-303.

वेल्लन्तरो वीरतरुः क्षुधा च बहुधाकरः ॥

दीर्घमूलो वृद्धवातो दीर्घपत्रोऽश्मकृच्छहा ।

वेल्लन्तरो रसे पाके तिक्तस्तृष्णाकफापहः ॥

मूत्राघाताश्मजिद्ग्राही योनिमूत्रानिलार्तिजित् ।

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 851-853.

विल्वान्तरः

विल्वान्तरः वीरवृक्षः क्षुधाकुशलसंज्ञकः ।

दीर्घमूलो वीरवृक्षः कृच्छ्रादिव षडाह्वयः ॥

विल्वान्तरगुणाः

विल्वान्तरः कटूष्णश्च कृच्छ्रघ्नः सन्धिशूलनुत् ।

वह्निदीप्तिकरः पथ्यो वातामयविनाशनः ॥

Rāja Nighaṇṭu, Śālmalyādi varga, 71-72.

वीरतरुः

वेल्लन्तरुर्जगति वीरतरुः प्रसिद्धः श्वेतासितारुणविलोहितनीलपुष्पः ।

स्याज्जातितुल्यकुसुमः शमीसूक्ष्मपत्रः स्यात्कण्टकी विजलदेशज एष वृक्षः ॥

(सुश्रुतटीकायां डल्हणः, भावप्रकाशोऽपि च दृश्यते ।)

Dalhana, Suśruta Samhitā.

वाताभिष्यन्दे

‘सिद्धं वा हितमत्राहु.....सक्षीरं मेषशृङ्गाया वा सर्पिः वीरतरेण वा ।’

Suśruta Samhitā, Uttara, 9-20.

मूत्राघाते

‘पिबेच्छिलाजतु क्वाथे युक्तं वीरतरादिजे ।

....पिबेन्मधुसितायुक्तं मूत्रकृच्छ्ररुजाऽपहम् ॥’

Bhāvaprakāśa, Mūtrāghātādhikāra, 36-30/31.

अश्मर्यादिमूत्रविकारे वीरतरादिगणः

Bhāvaprakāśa, Aśmarirogādhikāra, 37/17-20.

आमातिसारे

‘वृक्षादनी वीरतरुर्बृहत्यौ द्वे सहे तथा ।’

Suśruta Samhitā, Uttara, 40-41.

अश्मर्याम्

वीरतराद्यतैलम्

Bhāvaprakāśa, Cikitsā, 37-88/94.

‘अद्याद्वीरतराद्येन भावितं वा शिलाजतु ।’

Āṣṭāṅga Hṛdaya, Cikitsā, 11-39.

वीरतर्वादिरित्येष गणो वातविकारनुत् ।

अश्मरीशर्करामूत्रकृच्छ्राघातरुजापहः ॥

Suśruta Samhitā, Sūtra, 38-13.

नेत्ररोगे-अन्यतोवातमारुतपर्याये

‘सक्षीरं मेषशृङ्गा च सर्पिर्वीरतरेण वा ।’

Suśruta Samhitā, Uttara, 9-20.

VRDDHADĀRUKA

Botanical name

Argyreia speciosa Sweet.

Operculina petaloidea (Choisy) Oststr.

Syn. *Ipomoea petaloides* Choisy.

Family : Convolvulaceae

Classical name : Vṛddhadārūka

Sanskrit names

Vṛddhadārūka, Āvegī, Chāgāntī, Vṛṣyagandhikā.

Regional names

Bidhara, Ghavapatta, Samudrasosa, Samundrasokh (Hindi); Bijatarhak (Beng.); Samudrashok (Mar.); Samandersokh, Varaghora (Guj.); Samudrashok (Tam.); Samudrapala (Tel.); The Elephant creeper (Eng.).

Description

A cormatous herb, extensively climbing woody creeper; stems stout white tomentose, about 1/2 in. diam. and branches covered with white cottony hairs.

Leaves 4-12 in. long, more broader, oblong obovate or betel leaves-shaped, broad ovate, slightly cordate, acuminate; upper surface smooth and lower surface white, cottony (with cottony hairy); nerves prominent. Lvs. 7.5-30

cm. diam., glabrous above even before unfolding; petiole long.

Flowers bell-shaped; peduncles long, branched, usually 7.5-15 cm. stout, white tomentose; outer bracts 3.75, white; corolla 5-7.5 cm. tubular, funnel-shaped, rosy or purple (violet); fls. blooming in night, fragrant.

Fruits 18 cm. diam., globose, apiculate; sepals ultimately 1.6 cm., diam. ovate, coriaceous, woolly; green in raw or young stage and yellowish-brown when ripen. Seeds white-brownish, trigonos.

Flowering and fruiting time

Plant flowers during cold season and fruits afterwards.

Distribution

Plant occurs throughout India (except in the dry western region) upto an altitude of 1,000 feet.

Kinds and varieties

Some other species *Argyrea fulgens* Choisy and *Argyrea malabarica* Choisy. find almost similar medicinal uses. The roots of the latter are reported to be cathartic.

Ipomoea petaloides Choisy syn. *operculina petaloides* (Choisy) Oostrom. is new botanical source for the drug *Vṛddhadārūka*.

Root Drug : The root system consists of long (upto 1 m.) spreading cylindrical roots, 1-1.5 cm. thick. There are thicker rootlets at the distal end. Roots brown, smooth round, wood is scant, flexible and smooth. Latex oozes out at cuts. Grossly a cut across shows a zone of narrow outer bark from which latex oozes with 2-3 concentric rings of vascular tissue enclosing the yellow central woody portion.

Seeds Drug : Seeds are enclosed in a stout, pale yellow brown globose, apiculate indehiscent berry 1.2-2 cm. in diam. containing four erect curved embryo with corrugated cotyledons or two seeds embedded in a mealy pulp.

Chemical composition

Roots contain tannin and resinous acid.

Pharmacodynamics

Rasa : Katu, tikta, kaṣāya

Guṇa : Laghu, snigdha

Vīrya	: Uṣṇa
Vipāka	: Madhura
Doṣakarma	: Kaphavātaśāmaka

Properties and action

Karma	: Rasāyana
	Balya
	Medhya-nāḍībalya
	Vātaghna
	Hṛdya-śothahara
	Dipana-pācana-anulomana
	Kaphaghna-kaṇṭhya
	Śukrajanana
	Pramehaghna
	Garbhāśayaśothahara
	Prajāsthāpana
	Pramehaghna
	Arśoghna
	Vraṇapācana-dāraṇa-śodhana-ropaṇa
Roga	: Kṣaya-śoṣa
	Prameha
	Śukradourbalya-śvetapradara
	Agnimāndya-āmadoṣa-vibandha
	Arśa-koṣṭhabaddhatā
	Mastiṣka-nāḍīdourbalya
	Kāsa-svarabheda
	Vātavyādhi-urustambha
	Hṛdroga
	Vraṇa-vraṇaśoṭha.

Therapeutic uses

The drug Vṛddhadāruka is promotive (rasāyana), aphrodisiac, antiphlogistic, antiseptic, tonic and emollient. It is used in impotency, diseases of nervous system, piles and rheumatism. The drug is used for sharpening the intellect and memory. Vṛddhadāruka belongs to group of Rasāyana drugs.

The roots are regarded as alterative and tonic. They are useful in rheumatism and diseases of the nervous system. The under surface of the leaf is densely pubescent

and is and irritant. It is used to promote maturation of boils and as an rubefacient in skin diseases. It is also useful as medhya (intellect-promoting) and age-sustaining drug.

Vṛddhadāruka is used in vātavyādhi, heart diseases, cough, hoarseness, leucorrhoea, seminal disorders, prameha, consumption, āmadoṣa, haemorrhoids, constipation, loss of gastric power and filiariasis. Roots are used in urustambha and eye diseases (i.e. kukuṇaka).

The roots of Vṛddhadāruka are recommended as rasāyana medicine in classical texts of Indian medicine by incorporation of certain formulations; and the drug has also been prescribed as a potent aphrodisiac and promoting male progeny (in texts of therapeutics).

Parts used : Roots.

Dose : Powder 3-6 gm.

Formulation : Vṛddhadāruka cūrṇa.

VRDDHADĀRUKA (वृद्धदारुक)

क. वृद्धदारुक आवेगी छागान्त्री वृष्यगन्धिका ।

Bhāvaṇṇaprakāśa Nighaṇṭu, Guḍūcyādi varga, 211.

ख. वृद्धदारुः कषायोष्णः कटुस्तिक्तो रसायनः ॥

वृष्यो वातामवातार्शः शोथमेहकफप्रणुत् ।

शुक्रायुर्बलमेधाग्निस्वरकान्तिकरः सरः ॥

Bhāvaṇṇaprakāśa Nighaṇṭu, Guḍūcyādi varga, 212.

त्रिकोणकाण्डा सुबहुप्रताना फलेषु पीता कुसुमेषु रक्ता ।

पत्रैः सद्गन्धैः मृदुरोमवद्भिस्ताम्बूलतुल्यैर्धनमूलकन्दैः ॥

Āṣṭāṅga Saṅgraha.

वृद्धदारुकः

अ. वृद्धदारुक आवेगी जुङ्गको दीर्घबालुकः ।

वृद्धः कोटरपुष्पी स्यादजान्त्री छागलान्त्रिका ॥

ब. जीर्णदारुद्वितीया स्याज्जीर्णा फल्ली सुपुष्पिका ।

अजरा सूक्ष्मपत्रा च विज्ञेया च षडाह्वया ॥

वृद्धदारुकगुणाः

वृद्धदारुकं गौल्यं पिच्छिलं कफवातहृत् ।

बल्यं कासामदोषघ्नं द्वितीयं स्वल्पवीर्यदम् ॥

Rāja Nighaṇṭu, Guḍūcyādi varga, 116-118.

अर्शसि

नागरादिमोदके

Cakradatta, 5-27.

क. श्लीपदे

श्लीपद चिकित्सायां वृद्धदारुकचूर्णम्-द्वितीयवृद्धदारुकचूर्णम् ।

Cakradatta, Ślīpada cikitsā, 42/77-22.

क. वृद्धदारुकरसायनम्

वृद्धदारुमूलानि श्लक्ष्णचूर्णानि कारयेत् ।

शतावर्या रसेनैव सप्तरात्राणि भावयेत् ।

अक्षमात्रन्तु तच्चूर्णं सर्पिषा सह भोजयेत् ।

मासमात्रोपयोगेन मतिमान् जायते नरः ।

मेधावी स्मृतिमांश्चैव बलीपलितवर्जितः ॥

Cakradatta, Rasāyanādihikāra, 18-19.

ख. श्लीपदे

काञ्जिकेन पिबेच्चूर्णं वृद्धदारुकसम्भवम् ।

Vṛndamādhava, 42-14.

वृद्धदारुकचूर्णन्तु मूत्रसौवीरकादिभिः ।

शीलितं श्लीपदं हन्ति कृच्छ्रं संवत्सरोत्थिम् ॥

Baṅgasena, Ślīpada, 29.

ख. रसायने

‘वृद्धदारुकमूलं तु पिबेद् वा वृद्धदारुकम् ।’

Baṅgasena, Rasāyana, 402.

वृद्धदारुककल्पः

Vṛndamādhava, 69-13/14.

नेत्ररोगे (कुकूणके)

स्वरसं वृद्धदारुस्य माक्षिकेण समन्वितम् ।

आश्च्योतनेन बालानां कुकूणामयनाशनम् ॥

Baṅgasena, Bālaroga, 97.

वातव्याधौ

क्षीरेणैरण्डतैलं वा पिबेद् वा वृद्धदारुकम् ।

Gadanigraha, 2-39-40.

मद्यारनालगोजलसलिलस्नेहैस्तथा रसैर्युषैः ।

नानावस्थं शमयेदुपयुक्तो वृद्धदारुकः पवनम् ॥

Gadanigraha, 2-19-198.

उरुस्तम्भे

पिबेदुष्णाम्बुना वृद्धदारुकनागरचूर्णम् ।

उरुस्तम्भसमुद्भूतविकारव्यथयाऽन्वितः ॥

Gadanigraha, 2-21-31.

पुत्रकामाय

वृद्धदारुकमूलेन घृतं पक्वं पयोऽन्वितम् ।

एतद् वृष्यतमं सर्पिः पुत्रकामः पिबेन्नरः ॥

Baṅgasena, Strīroga, 174.

VRKṢĀMLA

Botanical name : *Garcinia indica* chois.

Family : Guttiferae

Classical name : Vrkṣāmla

Sanskrit names : Vrkṣāmla, Amlavrkṣaka.

Regional names

Kokam (Hindi., Mar., Guj.); Ratamba, Amsil (Maharashtra); Muragal (Tam., Kann.); Punampuli (Mal.); Kokam Butter Tree, Mangosteen oil Tree, Brindonia Tallow Tree (Eng.).

Description

A slender tree with drooping branches, slender evergreen trees.

Leaves dark green, young, red, membranous mucronate, rarely obtuse; upper surface dark green and lower surface dull; lvs. 2.5-3.5 in. long and 1-1.5 in. broad, dark green male flower 4-8 in. axillary and terminal fascicles; buds as large as pear sepals orbicular, outer smaller; petals rather larger; stamens membranous 12 to 20 forming a

short capitate column; anthers oblong, 2-celled, opening longitudinally; female flowers solitary shortly terminal, shortly and strictly peduncled; staminodes in 4 meshes; ovary 4-8 celled; stigma of so many lobes.

Fruit spherical as large as small orange, purple throughout not grooved; seeds 5-8, compressed, enclosed in an acid pulp. Fruits come in brownish violet shreds in the market.

Kokam butter as sold in market consists of egg-shaped lumps or cakes of light grey or yellowish colour with a greasy feel and a bland oily taste. It is mainly used as an edible fat; it is also an adulterant of ghee. As ordinarily met with, it contains seed particles as impurities. Refined and deodorised fat is white in colour and compares favourably with high class hydrogenated fats.

Flowering and fruiting time

Plant flowers in November-February and fruits ripen in April-May.

Distribution

Plant occurs in the tropical rain forests of western ghats, from Konkan southwards in Mysore, Coorg and Wynad. It is often planted in southern region of Maharashtra, lower slopes of Nilgiri hills and other different areas in country.

Kokam was reported to be imported into Zanzibar from India.

Chemical composition

Seeds of the fruit yield (23-26% on the wt. of seeds C. 44% on wt. of kernels) a valuable edible fat known as Kokam Butter. The characteristics of the fat with values of contents are studied and on record indicating also components fatty acids and glycerides. Fruits acid contains malic acid, tartaric acid and citric acid.

Kokam butter is rich in combined stearic and oleic acids. It contains about 75% of mono-oleo-disaturated glycerides, and possesses fairly a low melting point, and considerable brittleness.

Pharmacodynamics

Rasa	: Amla (unripe fruit); Madhurāmla (ripe fruit)
Guṇa	: Laghu, rūkṣa
Virya	: Uṣṇa
Vipāka	: Amla
Doṣakarma	: Kaphavātaśāmaka

Properties and action

Karma	: Rocana-hṛdya Dīpana-pācana Trṣṇānigrahaṇa Grāhi Yakṛduttejaka Vātānulomana Hṛdya Jvaraghna Tvagdoṣahara Snehana Sandhāniya Ropaṇa Vraṇaropaṇa
Roga	: Aruci-agnimāndya Pravāhikā Udaraśūla Gulma Arśa Hṛdroga Tagroga Jvara Trṣṇa-dāha Vraṇa-nāḍivraṇa-vipādikā Kṣaya Mukharoga.

Therapeutic uses

The drug Vṛkṣāmla is antiscorbutic, astringent, cardi-tonic; stomachic, carminative, cholagogue, cooling, demulcent and emollient. It is used in anorexia, colic, dyspepsia, heart diseases, piles, skin diseases, thirst and ul-

cers. Vṛkṣāmla belongs to group of drugs possessing trptighna effect.

The fruits of Vṛkṣāmla are anthelmintic and cardio-tonic, and they are useful in piles, dysentery, tumours, pains and heart complaints. A syrup from the fruit juice is given in bilious affections.

The fruit has an agreeable flavour and a sweetish acid taste. It is also used as a garnish to give an acid glavour to curries and also for preparing cooling syrups. Fruit is useful in mukharoga. Kokam butter is considered nutritive, demulcent, astringent and emollient. It is suitable for ointments, suppositories and other pharmaceutical purposes. It is used as local application to ulceration and fissures of lips, hands etc.

Roots bark is useful in skin diseases. Fruits are useful in fever (especially pittaja jvara) for allaying dāha (burning sensation). The oil is used in Kṣaya, in place of codliver oil.

Externally, the oil is applied to ulcers, sinus and Vipādikā.

Parts used : Fruit, rootbark, oil, butter.

Dose

Decoction (root bark) 40-80 ml., Fruit syrup (pānaka) 10-20 ml., Oil 3-5 gm.

VRKṢĀMLA (वृक्षाम्ल)

वृक्षाम्लकम् तस्य पक्वापक्वफलगुणांश्च

क. वृक्षाम्लं तिन्तिडीकञ्चचुक्रं स्यादम्लवृक्षकम् ।

वृक्षाम्लमामम्लोष्णं वातघ्नं कफपित्तलम् ॥

Bhāvaṇṇa-prakāśa Nighaṇṭu, Āmrādīphala varga, 148.

पक्वन्तु गुरु सङ्ग्राहि कटुकं तुवरं लघु ।

अम्लोष्णं रोचनं रूक्षं दीपनं कफवातकृत् ।

तृष्णाऽर्शोग्रहणीगुल्मशूलहृद्रोगजन्तुजित् ॥

Bhāvaṇṇa-prakāśa Nighaṇṭu, Āmrādīphala varga, 149.

वृक्षाम्लम्

वृक्षाम्लं ग्राहि रूक्षोष्णं वातश्लेष्मणि शस्यते ।

अम्लिकायाः फलं पक्वं तस्मादल्पान्तरं गुणैः ॥

Caraka Samhitā.

रक्तार्शःसु

‘.....सकर्बुदारफलाम्लानाम् ।

दध्नः सरेण सिद्धान्दद्याद्रवते प्रवृत्तेऽति ।’

Caraka Samhitā, Cikitsā, 9-202.

अतिसारे

‘....फलाम्लं यमके भृष्टं वा ।

....वर्चः क्षयरुजापहा ॥’

Caraka Samhitā, Cikitsā, 10-49.

गुल्मे

गुल्मशमनाय च स्याद्देशजमत्र रससलितादृते सहसा ।

वृक्षाम्लस्य स्वरसः सैन्धवयुक्तस्तथैव नियतं स्यात् ॥

Vaidya Manoramā, Paṭala, 8-17.

वृक्षाम्लम्

क. वृक्षाम्लं तित्तिडीकं तु शाकाम्लं रक्तपूरकम् ।

अम्लवृक्षोऽम्लशाकं स्यादम्लपूरो महीरुहः ॥

वृक्षाम्लगुणाः

ख. अम्लोष्णं रोचनं रूक्षं दीपनं कफवातनुत् ।

तृष्णार्शोग्रहणीगुल्मशूलहृद्रोगजन्तुजित् ॥

अपक्वफलम्

ग. वृक्षाम्लमाम्लोष्णं वातघ्नं कफपित्तलम् ।

गुरु पक्वं तु सङ्ग्राहि कटुकं तुवरं लघु ॥

अम्लिका

‘अम्लिकायाः फलं पक्वं तस्मादल्पान्तरं गुणैः ।’

Caraka Samhitā.

‘अम्लिका कन्दप्रधाना कामरूपे प्रसिद्धा अम्लिकाभेदे ।’

Caraka Samhitā, Vīmāna, 8-140.

वृक्षाम्लकम्

क. वृक्षाम्लमम्लशाकं स्याच्चुक्राम्लं तित्तिडीफलम् ।

शाकाम्लमम्लपूरं च पूराम्लं रक्तपूरकम् ॥

चूडाम्लबीजाम्लफलाम्लकं स्यादग्रादि वृक्षाम्लफलं रसाम्लकम् ।

गुणाः

ख. श्रेष्ठाम्लमस्रं कटुकं कषायं सोष्णं कफाशोघ्नमुदीरयन्ति ।
 तृष्णासमीरोदरहृद्गदादि गुल्मातीसारव्रणदोषनाशि ॥
Rāja Nighaṇṭu, Pippalyādi varga, 122-124.

दीपनार्थम्

सैन्धवादिचूर्णे

Caraka Samhitā, Cikitsā, 11-85.

षाडवे

Caraka Samhitā, Cikitsā, 11-85.

तृष्णायाम्

वृक्षाम्लमातुलुङ्गैर्गण्डूषस्तालुशोषघ्नाः ।
 कोलदाडिमवृक्षाम्लचुक्रिकाचुक्रिकारसः ।
 पञ्चाम्लको मुखालेपः सद्यस्तृष्णां नियच्छति ॥

Caraka Samhitā, Cikitsā, 24-151.

मुखरोगे

फलत्रयादिगुटिकायाम्

Āṣṭāṅga Hṛdaya, Uttara, 22-81.

VRNTĀKA

Botanical name : *Solanum melongena* Linn.**Family :** Solanaceae**Classical name :** Vṛntāka**Sanskrit names**

Vṛntāka, Vṛntākī, Vārttāku, Bhaṇṭākī, Bhāṇṭikā.

Regional names

Baigan, Bhata, Bhanta (Hindi), Bhaddu (U.P. hills); Eggplant, Brinjal (Eng.).

Description

A herbaceous annual prickly or sometimes unarmed perennial 0.6-2.4 meters tall.

Leaves ovate, sinuate or lobed.

Flowers blue, in small clusters of 2.5.

Fruits berries large, ellipsoid or elongate, in various sizes, shapes and shades of white, yellow to dark-purple,

2.5-25 cm. long, glabrous, with thick calyx; seeds many, discoid.

Flowering and fruiting time

April to September and other periods. Farming seasons. Warm season crop and grown also almost throughout the year.

Distribution

It is cultivated throughout country as an annual horticultural plant for popular edible (vegetable) fruits of commonly grown.

Kinds and varieties

There are large number of types of Eggplant or Brinjal (Vṛntāka) mainly based on colour and shape of the fruits preferred to different region and suitability of cultivation which includes commercial, cultivated types, hybrids and varieties adopted for farming in different states with wide range of climatic conditions and lands.

Chemical composition

Analysis of the edible portion of fruit (all except stalks and calyx) gave the following values : moisture 92.7, protein 1.4, fat 0.3, minerals 0.3, fibres 1.3, and other carbohydrates 4.0 g./100 g. Edible portion of the fruit contain 11 per cent pectins and other constituents.

The mineral constituents present are : (mg./100 g. edible matter) : Ca 18, Mg 16, P 47 (phytin P_3), Fe 0.9 (ionisable F 0.8), Na 3, K 2.00, Cu 0.17, S 44, Cl. 52, small quantities of manganese (2.4 mg./100 g.) and iodine (7 ug./1 kg.).

The vitamins present are : Vitamin A, Vitamin B₁₂ thiamine, riboflavin, nicotinic acid, vitamin C and choline. The seeds yield fatty oil rich in linoleic acid. The main pigment of fruit is an anthocyanin. The bitter principle in leaves and fruit peel is solasonine. Arginine is present in plant.

Pharmacodynamics

Rasa	: Madhura
Gūṇa	: Tikṣṇa, laghu
Vīrya	: Uṣṇa

Vipāka	: Kaṭu
Doṣakarma	: Vātakaphahara [Stages of fruits carry distinctive doṣakarma]. Pittakara.

Properties and action

Karma	: Dīpana-rucya Jvaraghna Arśoghna Kāśahara Cakṣuṣya Śukrala Bṛñhaṇa.
Roga	: Agnimāndya-arocaka Jvara Arśa Kāśa-śvāsa Netraroga Dourbalya Mūtrakṛcchra Yakṛdvikāra.

Therapeutic uses

The drug Vṛntāka is stomachic, rocana, stimulant, anti-pyretic and anti-haemorrhoidal; it is wholesome and useful in fever, eye diseases, debility, seminal disorders, cough, mūtrakṛcchra (scanty or painful micturition) and liver complaints. Vṛntakāka fruits are used in vegetable (phalaśāka) and fruits alongwith some other parts useful in medicine.

Roots of Vṛntāka (brinjal plants) are credited in indigenous medicine as anti-asthmatic and general stimulant. The juice is employed to cure otitis and toothache.

Leaves possess silagogue and narcotic properties and are used in cholera, bronchitis, dysuria and asthma.

Vṛntāka fruits are recommended in liver complaints. The seeds are used as a stimulant. An excess use of brinjal may cause dyspepsia and constipation.

Fruits of brinjal (vṛntāka phala) are reported to stimulate the intrahepatic metabolism of cholesterol. Both

leaf and fruits, fresh or dry, produce a marked drop in blood cholesterol level. the decholesterolizing action is attributed to the presence of magnesium and potassium salts in the plant tissue. Experimental results, however, need to be confirmed by clinical trials. Aqueous extracts of fruits inhibit choline esterase activity of human plasma. Extracts of the plant inhibit the growth of several types of bacteria; the pulp of fruit is more effective than the juice. Dried fruit is reported to contain a goitrogenic principle.

In indigenous medicinal, the texts of materia medica (nighaṇṭu) make consideration of difference or changes about specific medicinal properties and therapeutic utility of different stages, conditions, and cooking methods etc. in regard to fruits of Vṛntāka for use.

Vṛntāka is an esteemed vegetable as common brinjal fruits which are very popular and consumed everywhere in a variety of ways and cooking vegetable and food regimens.

Parts used : Fruits, roots, leaves.

Dose : Edible-fruit.

VRNTĀKA (वृन्ताक)

वृन्ताकम्

क. वृन्ताकं स्त्री तु वार्ताकुर्भण्टाकी भाण्टिकाऽपि च ।

ख. वृन्ताकं स्वादु तीक्ष्णोष्णं कटुपाकमपित्तलम् ।

ज्वरवातबलासघ्नं दीपनं शुक्रलं लघु ॥

बालवृद्धफलयोगुणाः

तद्बालं कफपित्तघ्नं वृद्धं पित्तकरं गुरु ।

अङ्गारपरिपाचितवृन्ताकफलगुणाः

वृन्ताकं पित्तलं किञ्चिदङ्गारपरिपाचितम् ।

कफमेदोऽनिलामघ्नमत्यर्थं लघु दीपनम् ॥

तैललवणान्वितवृन्ताकफलस्य श्वेतवृन्ताकस्य च गुणाः

तदेव हि गुरु स्निग्धं सतैलं लवणान्वितम् ।

अपरं श्वेतवृन्ताकं कुक्कुटाण्डसमं भवेत् ॥

तदर्शःसु विशेषेण हितं हीनं च पूर्वतः ।

Bhāvaprakāśa Nighaṇṭu, Śāka varga, 79-82.

दहनपक्कलवणाद्यन्वितवृन्ताकफलम्

लवणमरिचचूर्णेनावृतं रामठाढ्यं दहनपवनं पक्वं जम्बुकान्तं नितान्तम् ।

हरति पवनदोषं श्लेष्महन्तु प्रसिद्धं जठरभरणभव्यं चारुभोज्यं मरिचम् ॥

Rāja Nighaṇṭu.

कफपित्तकरा वृन्ताकादयः

कफपित्तकराः माषाः कफपित्तकरं दधि ।

कफपित्तकरा मत्स्या वृन्ताकं कफपित्तकृत् ॥

Bhāvaprakāśa Nighaṇṭu.

बालवृन्ताकम्

‘.....बालं कासज्वरापहम् ।

त्रिदोषशमनं पथ्यं मधुरं रसपाकयोः ।

रुच्यं ज्वरघ्नमर्शोघ्नं क्षुद्रवाताङ्गिनी फलम् ।

श्लेष्मलं सृष्टविण्मूत्रं शीतलं गुरु बृंहणम् ॥’

Kaiyadeva Nighaṇṭu.

पक्कामवृन्ताकम्

वार्त्ताकं कोमलं पथ्यं चक्षुष्यं सर्वदोषजित् ।

मध्यमं पित्तजननं पक्वं वातप्रकोपणम् ॥

Kaiyadeva Nighaṇṭu.

अशरोगे वार्त्ताकुफलयोगः

स्विन्नं वार्त्ताकुफलं घोषायाः क्षारजेन सलिलेन ।

तद् घृतभृष्टं युक्तं गुडेनातृप्सितो योऽस्ति ॥

पिबति च तक्रं नूनं तस्याश्वेवातिवृद्धगुदजानि ।

वान्ति विनाशं पुंसां सहजान्यपि सप्तरात्रेण ॥

Cakradatta, Arśa cikitsā, 5-21.

YAVA

Botanical name : Hordeum vulgare Linn.

Family : Poaceae (Graminae)

Classical name : Yava

Sanskrit names

Yava, Medhya, Śaktu, Sitaśūka, Divya, Hayeṣṭa, Akṣata, Kancuki, Pavitradhānya, Rājadhānya, Tīkṣṇaśūka, Turaṇāpriya.

Regional names

Jou, Jo (Hindi).

Description

An annual, erect, stout, tufted herb, 3-4 ft. high, resembling wheat in habit.

Leaves few, linear-lanceolate; ligules short, membranous; spikes terminal, linear-oblong, compressed, 2-2.5 in. long, densely flowered.

Spikelets is sessile, arranged in three or two sides of a flattened rachis; all fertile (6-rowed type) or lateral ones barren and occasionally rudimentary (12-rowed type).

Glumes 2 small, narrow, short-awned, enclosing three spikelets; lemma lanceolate, five-ribbed, tapering into a long straight or recurved awn; palea a little smaller than lemma with margins inflexed; lodicules 2; stamens 3; stigma 2.

Fruit a caryopsis, elliptic, C. $3/8$ in. long, short-pointed, grooved on the inner face, smooth, free or adherent to palea or both to lemma and palea.

Flowering and fruiting time

Farming seasons.

Distribution

Plant is grown in the plains as well as in hilly regions of the Himalayas upto an altitude of 14,000 ft. It is a common cereal crop under extensive agro-practices in country, especially plains. It gives produce of Barley which is widely used as food, cattle feed and for malting, brewing and pearling.

Kinds and varieties

There are numerous cultivated types of barley undertaken for crop production in country generally as rabi crop (sown in October-November and harvested by the end of March or beginning of April), and sometimes in early January, depending on area, land, climates rains and cultivated practices.

Chemical composition

In general, the chemical profile of typical barleys and malts follow : starch 61.05-53.06, protein insol. 4.74-6.06, protein sol. 2.53-4.01, reducing sugars 0.96-3.40, sucrose 1.09-8.40, fat 2.51-1.99, fibre 4.99-5.71 and ash 2.82-2.65 percent dry matter of two rowed barley (values pertaining to barleys and malts respectively).

Pharmacodynamics

Rasa	: Kaṣāya, madhura
Gūṇa	: Rūkṣa, laghu
Vīrya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Kaphapittahara

Properties and action

Karma	: Lekhana
	Balya
	Varṇya
	Kañṭhya
	Medohara
	Kāśahara
	Kañṭhya
	Agnivardhana
	Abhiṣyandi
	Chardinigrahaṇa
Roga	: Prameha
	Varṇavikāra
	Kañṭhavikāra
	Kāsa-śvāsa-pīnasa-pratiśyāya
	Urustambha
	Plihāroga
	Vraṇa
	Medoroga-sthoulya
	Kṣatakṣīṇa
	Kuṣṭha

Therapeutic uses

The drug Yava is useful in various diseases such as obesity, prameha, diabetes, anaemia, cough, asthma, coryza, colic, urustambha, eye diseases-timira, erysepalas,

vomiting, excess thirst, ulcers, dysuria, hyperacidity and rheumatism.

Yavakṣāra is recommended in various diseases and used in indigenous medicine for treatment of certain ailments e.g. udararoga, mūtrakṛcchra, viṣa, āmadoṣa, aśmarī, kaphavāta vikāra, āmavāta and some other complaints.

Yava or barley is one of the oldest of cultivated cereals and extensively used as food and cattle feed and for malting brewing and pearling. Barley is utilised in various purposes and it enters in several products (malt extracts, infant foods, candies, bakery, malted milk concentrates, breakfast cereals and other products) of food and pharmaceutical preparations other than alcoholic manufacture.

Parts used : Fruit, whole plant.

Dose : Decoction 50-100 ml.

Formulation : Yavakṣāra.

YAVA (यव)

यवाति यवतोऽव्यञ्ज गुणाः

क. यवः कषायो मधुरः शीतलो लेखनो मृदुः ।
व्रणेषु तिलवत्पथ्यो रूक्षो मेधाऽग्निवर्धनः ॥
कटुपाकोऽनभिष्यन्दी स्वर्यो बलकरो गुरुः ।
बहुवातमलो वर्णस्थैर्यकारी च पिच्छिलः ॥
कण्ठत्वगामयश्लेष्मपित्तभेदः प्रणाशनः ॥
पीनसश्वासकासोरुस्तम्भलोहिततृप्प्रणुत् ॥

ख. अस्मादति यवो न्यूनस्तोऽव्यो न्यूनतरस्ततः ।

Bhāvaprakāśa Nighaṇṭu, Dhānya varga, 28-30.

शूकधान्यादि-यवभेदाः

यवस्तु सितशूकः स्यान्निःशूकोऽति यवः स्मृतः ।

तोऽव्यस्तद्वत्सहरितस्ततः स्वल्पश्च कीर्तितः ॥

Bhāvaprakāśa Nighaṇṭu, Dhānya varga, 27.

शूकधान्यम्

‘यवादिकं शूकधान्यमिति धान्यं तु पञ्चधा ।’

Kaiyadeva Nighaṇṭu, Dhānya varga, 2.

यवः

यवस्तु मेध्यः सितशूकसंज्ञो दिव्योऽक्षतः कञ्चुकिधान्यराजौ ।
स्यात्तीक्ष्णशूकस्तुरगप्रियश्च शकुर्हयेष्टश्च पवित्रधान्यम् ॥

यवगुणाः

यवः कषायो मधुरः सुशीतलः प्रमेहजित्तिककफापहारकः ।
अशूकमुण्डस्तु यवो बलप्रदो वृष्यश्च नृणां बहुवीर्यपुष्टिदः ॥

Rāja Nighaṇṭu, Śālyādi varga, 69-70.

वेणुयवः

वेणुजो वेणुबीजश्च वंशजो वंशतण्डुलः ।
वंशधान्यं च वंशाह्नो वेणुवंशद्विधायवः ॥
शीतः कषायो मधुरस्तु रूक्षो मेहक्रिमिश्लेष्पविषापहश्च ।
पुष्टिं च वीर्यञ्च बलञ्च दत्ते पित्तापहो वेणुयवः प्रशस्तः ॥

Rāja Nighaṇṭu, Śālyādi varga, 71-72.

प्लीहारोगे यवक्षारः

‘पलाशक्षारयुक्तं वा यवक्षारं प्रयोजयेत् ।’

Cakradatta, 38-8.

प्रमेहे यवपिष्टकम्

भक्षपीताम्बुना मासं प्रमेही यवपिष्टकम् ।
मेदोष्णा बद्धमूत्राश्च समाः सर्वेषु धातुषु ।
यवास्तस्माद्विशिष्यन्ते प्रमेहेषु विशेषतः ॥

Bhāvaprakāśa, Madhyakhaṇḍa, Pramehādhikāra, 38-61.

यवक्षारगुणाः

यवक्षारः स्मृतः पाक्यो यवजो यवसूचकः ।
यवशूको यवाह्वयः यवापत्यं यवाग्रजः ॥
यवक्षारः कटूष्णञ्च कफवातोदरार्तिनुत् ।
आमशूलाश्मरीकृच्छ्रविषदोषहरः सरः ॥

Rāja Nighaṇṭu, Pippalyādi varga, 255-256.

अम्लपित्तचिकित्सायां यवादिक्लाथः

Cakradatta, 51-10.

प्रमेहे सन्तर्पणयोगः

निशि स्थितानां त्रिफलाकषाये स्युस्तर्पणाः क्षौद्रयुता यवानाम् ।
तान् सीधुयुक्तान् प्रपिबेत् प्रमेही प्रयोगिकान्मेहवधार्यमेव ॥

Caraka Samhitā, Cikitsā, 6-22.

प्रमेहे यवप्रयोगः

भृष्टान् यवान् भक्षयता प्रयोगाञ्छुष्कांश्च सक्तून् भवन्ति मेहाः ।

श्चित्रं च कृच्छ्रं कफजं च कुष्ठं तथैव मुद्गामलकप्रयोगान् ॥

Caraka Samhitā, Cikitsā, 6-48.

उरःक्षते (क्षतक्षीण) यवप्रयोगः

यवानां चूर्णमादाय क्षीरसिद्धं घृतप्लुतम् ।

ज्वरे दाहे सिताक्षौद्रसक्तून् वा पयसा पिबेत् ॥

Caraka Samhitā, Cikitsā, 11-19.

आमवाते मूत्रकृच्छ्रं यवक्षारप्रयोगः

यवक्षारसमायुक्तं मूत्रकृच्छ्रविनाशनम् ।

कटीशूलेषु दातव्यं तैलमेरण्डसम्भवम् ॥

Bhāvaprakāśa, Madhyakhaṇḍa, 26-55.

मूत्रकृच्छ्रे यवक्षारः

गुडमामलकं वृष्यं श्रमघ्नं तर्पणं प्रियम् ।

पित्तासृग्दाहशूलघ्नं मूत्रकृच्छ्रनिवारणम् ॥

Bhāvaprakāśa, Mūtrakṛcchrādhikāra, 35-44.

सितातुल्यो यवक्षारः सर्वकृच्छ्रप्रसाधनः ।

द्राक्षासितोपलकल्कं कृच्छ्रघ्नं मस्तुना युतम् ॥

Bhāvaprakāśa, Mūtrakṛcchrādhikāra, 35-45.

मक्कलशूले यवक्षारः

सुचूर्णितं यवक्षारं पिबेत्कोष्णेन वारिणा ।

सर्पिषा वा पिबेन्नारी मक्कलस्य निवृत्तये ॥

Bhāvaprakāśa, Yonirogādhikāra, 70-139.

प्रमेहे गोभक्षितयवप्रयोगः

गोभक्षितान्यवान्मूत्रभावितान्केवलानपि ।

चित्रकोदश्विता खादेन्निम्बमुद्गरसने वा ॥

Bhāvaprakāśa, Madhyakhaṇḍa, 38-60.

उपदंशे यवपथ्यभोजनम्

सेवेन्नित्यं यवान्नञ्च पानीयं कौषमेव च ।

अर्शसां च्छिन्नदग्धानां क्रियां चात्र प्रयोजयेत् ॥

Bhāvaprakāśa, Madhyakhaṇḍa, 38-60.

अग्निमान्द्यचिकित्सायां यवचूर्णयोगः

तक्रेण युक्तं यवचूर्णमुष्णं सक्षारमर्तिजठरे निहन्यात् ।
स्वेदो घटैर्वा बहुबाष्पपूर्णैरुष्णैस्तथाऽभ्यैरपि पाणितापैः ॥

Cakradatta, Agnimāndya cikitsā, 6-95.

मूत्रकृच्छ्राश्मरीनाशाय यवक्षारः

‘मधुना च यवक्षारं मूत्रकृच्छ्राश्मरीहरम् ।’

Bhaiṣajyaratnāvalī, 34-15.

छर्दिरोगे तर्पणप्रयोगः (यवसक्तुकघोलम्)

‘तर्पणं वा मधुयुक्तं तिसृणामपि भेषजम् ।’

Cakradatta, Chardi cikitsā, 15-15.

मूत्रकृच्छ्रप्रतीकारार्थं यवक्षारप्रयोगः

सितातुल्यो यवक्षारः सर्वकृच्छ्रविनाशनः ।

निदिग्धकारसो वाऽपि सक्षौद्रः कृच्छ्रनाशनः ॥

Cakradatta, Mūtrakṛcchr cikitsā, 32-26.

प्रमेहे

वासितेषु वराकृताथे शर्वरीशोषितेष्वहः ।

यवेषु सुकृतान् सक्तून् सक्षौद्रान् सीधुना पिबेत् ॥

Āṣṭāṅga Hṛdaya, Cikitsā, 12-14.

यवान् सुकुट्टितान् कृत्वा गोमूत्रे परिभावयेत् ।

त्रिफलारससंशुष्कान् सप्ताहं भावयेत् पुनः ॥

तेभ्यो यवेभ्यः सक्तूश्च कुल्माषान् योज्यमेव च ।

अपूर्णाश्चापि कुर्वीत प्रमेहाणां निवृत्तये ॥

Gadanigraha, 2-30-63/64.

दाहज्वरे

‘शतधौतघृताभ्यक्तं लिह्याद् वा यवसक्तुभिः ।’

Suśruta Samhitā, Uttara, 29-283.

क्षतक्षीणे

यवानां चूर्णमादाय क्षीरसिद्धं घृतप्लुतम् ।

ज्वरे दाहे सिताक्षौद्रसक्तून् वा पयसा पिबेत् ॥

Caraka Samhitā, Cikitsā, 11-19.

सक्तूनां वस्त्रपूतानां मन्थं क्षौद्रघृतान्वितम् ।

यवान्नसात्म्यो दीप्ताग्निः क्षतक्षीणः पिबेन्नरः ॥

Caraka Samhitā, Cikitsā, 11-81.

प्रमेहीहितार्थम्

सषष्टिकं स्यात्तृणधान्यमन्नं यवप्रधानस्तु भवेत् प्रमेही ।

यवस्य भक्ष्यन् विविधांस्तथाघात् कफप्रमेही मधुसंप्रयुक्तान् ॥

Caraka Samhitā, Cikitsā, 6-21.

आहारं च यवविकृतिप्रायं मध्वामलकोपेतमाहारयेत् ।....

गवाश्वजठरस्थितैश्च

यवैर्वश्ययवैर्वा ॥

कुष्ठे

‘यावकांश्च भक्ष्यान्.....सेवेत् ।’

Suśruta Samhitā, Cikitsā, 10-5.

गुल्मे

‘बद्धविण्मारुतौ गुल्मी भुञ्जीत पयसा यवान् ।’

Suśruta Samhitā, Uttara, 42-65.

शूले

‘तक्रेण युक्तं यवचूर्णमुष्णं सक्षारमर्तिजठरे निहन्यात् ।’

Caraka Samhitā, Sūtra, 3-20.

विसर्पे

यवचूर्णं समधूकं सघृतं च प्रलेपनम् ।

पृथक् पृथक् प्रदेहाः स्युः सर्वे वा सर्पिषा सह ॥

Caraka Samhitā, Cikitsā, 21-80/81.

तर्पणैर्यवशालीनां सस्नेहा चावलेहिका ।

जीर्णे पुराणशालीनां यूषैर्भुञ्जति भोजनम् ॥

Caraka Samhitā, Cikitsā, 21-110.

नेत्ररोगे-तिमिरे

‘.....यवौदनो वा तिमिरं व्यपोहति ।’

Suśruta Samhitā, Uttara, 17-49.

पाण्डुरोगे

‘सेवेत शोफाभिहितांश्च योगान्

पाण्ड्वामयी शालियवांश्च नित्यम् ।’

Suśruta Samhitā, Uttara, 44-37.

स्तन्यदोषे

‘स्तनौ चालेपयेत् पिष्टैर्यवगोधूमसर्षपैः ।’

Caraka Samhitā, Cikitsā, 30-268.

उरुस्तम्भे

‘कुर्याद् रूक्षोपचारश्च यवश्यामाककोद्रवाः ।’

Āṣṭāṅga Hṛdaya, Cikitsā, 21-45.

श्लीपदे

‘.....कफजे शीलयेद् यवान् ।
सक्षौद्राणि कषायाणि वर्धमानास्तथाभयाः ।
लिम्पेत् सर्षपवार्ताकीमूलाभ्यां धान्ययाऽथवा ॥’

Āṣṭāṅga Hṛdaya, Uttara, 30-11/12.

वातरक्ते

जलजैर्यवचूर्णैर्वा समष्ट्याह्वययोषृतैः ।
सर्पिषा जीवनीयैर्वा पिष्टैर्लैपोऽर्तिदाहनुत् ॥

Caraka Samhitā, Cikitsā, 29-132.

प्रतिश्याये

घृततैलेन संयुक्तं सक्तु धूमं पिबेन्नरः ।
प्रतिश्यायहरं प्राक्तं कासहिक्कानिवारणम् ॥

Vṛndamādhava, 60-17.

कासे श्वासे

यवादिलेहः ।

Caraka Samhitā, Cikitsā, 18-136/137.

स्थौल्ये

‘यवामलकचूर्णश्च प्रयोगः श्रेष्ठ उच्यते ।’

Caraka Samhitā, Sūtra, 21-23.

स्थौल्ये यवभोजनम्

‘हन्त्यवश्यमतिस्थौल्यं यवश्यामाकभोजनम् ।’

Vṛndamādhava, 36-4.

छर्द्याम्

छर्द्यां ज्वरे पित्तभवेऽथ शूले घोरे विदाहे तृषितेऽतिमात्रम् ।
यवस्य पेयां मधुना विमिश्रां पिबेत् सुशीतां मनुजः सुखार्थी ॥

Cakradatta, 26-26.

तृष्णायाम्

यवसक्तुमन्थः ।

Sārṅgadharma Samhitā, 2-3-12.

वाट्यं वामयवानां शीतं मधुशर्करायुक्तं दद्यात् ।
पेयां वा शालीनां दद्याद् वा कोरदूषाणाम् ॥

Caraka Samhitā, Cikitsā, 22-28.
Āṣṭāṅga Hṛdaya, Cikitsā, 6-61.

व्रणे

सरुजाः कठिनाः स्तब्धाः निरासावाश्च ये व्रणाः ।
यवचूर्णैः ससर्पिष्कैर्बहुशस्तान् प्रलेपयेत् ॥

Caraka Samhitā, Cikitsā, 25-111.

यवचूर्णं समधुकं सतिलं सह सर्पिषा ।
दद्यादालेपनं कोष्णं दाहशूलोपशान्तये ॥

Caraka Samhitā, Cikitsā, 25-78.

यवान् दग्ध्वा मसी कार्यां तैलेन युक्तया तथा ।
दद्यात् सर्वाग्निदग्धेषु प्रलेपो व्रणरोपणः ॥

Śārṅgadhara Samhitā, 3-11-109.

द्रव्याणां पिच्छिलानां तु त्वङ्मूलानि प्रपीडनम् ।

यवगोधूममाषाणां चूर्णानि च समासतः ॥

Suśruta Samhitā, Sūtra, 37-51.

Vṛndamādhava, 44-20.

YAVĀNĪ

Botanical name : *Trachyspermum ammi* (Linn.) Sprague.

Family : Apiaceae (Umbelliferae)

Classical name : Yavānī

Sanskrit names : Yavānī, Ajamodikā, Dīpyaka.

Regional names

Ajavain, Ajawayan (Hindi); Javan (Beng.); Java (Mar.); Ajami (Guj.); Vamu (Tel.); Javen (Punj.); Javind (Kann.); Oma (Kann.); Omam (Mal.); Amam (Tam.); Yunulmaluki (Arabic); Nanakhah (Pers.); Ajowan (Eng.).

Description

Annual, glabrous or minutely pubescent erect 15-50 cm. tall branched herbs. Stems glabrous, striate.

Leaves 2-3-pinnate; ultimate segments linear; rather distant; segments 1.0-2.5 cm. long.

Inflorescence an axillary or terminal compound umbel involucre of 5-8 linear bracts, rays about 10. Flowers white. Pedicel in fruits twice as long as the fruit. Fls. minute.

Fruits ovoid, Ca 2 mm. long or less, muricate, aromatic, cremocarps, 2-3 mm. long, greyish-brown; mericarp compressed, with distinct ridges and tubercular surface, 1-seeded; two mericarp and each mericarp containing one seed. Fruits 5-ridged or lined.

Flowering and fruiting time

Plant flowers in April-February and bears fruits afterwards. Farming seasons.

Distribution

Plant is cultivated almost throughout India. It is grown throughout the country, mainly in the plains, but flourishes equally well at higher altitudes in the plateaus and the hills. It is under farming on commercial scale in Madhya Pradesh, Andhra Pradesh, Gujarat, Maharashtra, and Uttara Pradesh. It is also grown to a considerable extent in Rajasthan, Bihar and West Bengal.

The crop is grown in cold weather, both as a dry crop and under irrigation in heavy soils; it is also grown as a rainfed crop. It grows on all kinds of soil, but does well on loams or clayey loams. For the dry-crop, the black cotton soils, which store the moisture of the earlier heavy rains, are very suitable. Under irrigation, it is grown extensively as a garden crop or in small fields. Cultivation practices of ajowan differ to a certain extent in various parts of India mainly according to soil and climatic conditions.

Kinds and varieties

There are various kinds or types of commercial importance of ajowan.

Chemical composition

Analysis of the fruits gave the following values; moisture 7.4, protein 17.1, fat 21.8, fibre 21.2, carbohydrates 34.6, and mineral matter 7.9%; calcium 1.525, total phosphorous 443, iron 27.7, sodium 56, potassium 1.390, thiamine 0.21, riboflavin 0.38 and nicotinic acid 2.1 mg./100 g. carotene and iodine (0.45 mg. per kg.) are present.

Ajowan owes a characteristic odour and taste to the presence of an essential oil (2-4%), other constituents in the fruits include sugars, tannins and glycosides.

Ajowan oil has been chemically screened in detail and its profile is on record.

Pharmacodynamics

Rasa	: Kaṭu, tikta
Guṇa	: Laghu, rūkṣa, tikṣṇa
Virya	: Uṣṇa
Vipāka	: Kaṭu
Doṣakarma	: Kaphavātaśāmaka Pittavardhaka.

Properties and action

Karma	: Śūlapraśamana-vātānulomana Rocana-dipana Kṛmighna Vedanāsthāpana-śothahara- anulomana-jantughna Viśaghna Hṛdayottejaka Kaphaghna-śleṣmapūti-hara- śvāsahara Mūtrajanana Śukranāśana-stanyanāśana Garbhāśayottejaka Svedajanana-tvacya-tvagdoṣahara
Roga	: Aruci-agnimāndya-ajīrṇa Udaraśūla-ādhmāna-ānāha Gulma Plihāroga Kṛmiroga-aṅkuśakṛmi- jantusaṅkramaṇa Jīrṇakāśa-śvāsa Mūtrāghāta Kaṣṭhārtava Sūtikāroga Tvagvikāra Śītajvara Jīrṇa ahiphena viṣa.

Therapeutic uses

The drug Yavānī is an effective anti-colic (śūlapraśamana), carminative (anulomana), digestive (pācana) stimulant, antispasmodic and tonic herbal agent belonging to aromatic group which is used as medicine as well as spice and condiment commonly among household dietary needs. Dried fruits with aromatic smell and pungent taste form Yavani or ajowan.

Yāvānī is orally administered as single drug or in combination with other suitable adjuvants and vehicles; and it enters into several formulations recommended in treatment of various diseases.

Yavani is orally used in flatulence, atonic dyspepsia, diarrhoea, cholera, abdominal colic, skin affections, gulma, splenic disorders, worms, heart-troubles, cough, asthma, chronic cough, dysuria, dysmenorrhoea, sūtikāroga (puerperal disorders), fever (śīta jvara), chronic opium toxicity or narcotic addiction and other ailments. The drug-fruits possess antibiotic activity.

Externally, the drug (fruits and oil) is applied on lesions with swellings and pains. Fruits are pasted over poisonous stings, crushed, fruits are applied in abdominal colic.

Fruits mixed (heated up) in oil which is applied on checking cold, cough etc.

Parts used : Fruits.

Dose : Powder 1-3 gm., Oil 1-3 gm., Extract 30-120 ml., Aqua 20-40 ml.

Formulations

Yavānikādi kvātha, Yavānikādi cūrna, Yavāniśāḍava Yavānyarka.

Groups

Śītapraśamana (Caraka Saṁhitā), Caturbīja (Bhāvaprakāśa).

YAVĀNĪ (यवानी)

यवानी कटुका तिक्ता तीक्ष्णोष्णा रोचनी लघुः ॥

दीपनी पाचनी हृद्या कफशुक्रानिलापहा ।
कृमिशूलोदरानाहगुल्मघ्नी पित्तकोपनी ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1204-1205.

यवानी पाचनी रुच्या तीक्ष्णोष्णा कटुका लघुः ॥
दीपनी च तथा तिक्ता पित्तला शुक्रशूलहृत् ।
वातश्लेष्मोदरानाहगुल्मप्लीहकृमिप्रणुत् ॥

Bhāvaprakāśa Nighaṇṭu, Harīṭakyadi varga, 77.

यवानी कटुतिक्तोष्णा वातार्शः दोषनाशनी ।
शूलाध्मानक्रिमिच्छर्दिर्मर्दनी दीपनी परा ॥

Rāja Nighaṇṭu, Pippalyādi varga, 40.

यवानी कटुतिक्तोष्णा वातश्लेष्माद्विजामयान् ।
हन्ति गुल्मोदरं शूलं दीपयत्याशु चानलम् ॥
यवानी यावनी सूक्ष्मा ग्राहिणी मादिनी कटुः ।
अजमोदा च शूलघ्नी तिक्तोष्णा कफवातजित् ॥
हिक्काध्मानारुचि हन्ति क्रिमिजिद् वह्निदीपनी ॥

Dhanvantari Nighaṇṭu.

दन्तरोगे

‘यवानीं च वचां रात्रौ दन्तमूले च धारयेत् ।’

Harīta Saṁhitā, Cikitsā, 45 (3-46-11).

गलशुण्डिकायाम्

‘दिवारात्रौ यवान्याश्च मुखे सन्धारणं हितम् ।’

Harīta Saṁhitā, 3-46-37.

अर्शःसु

‘शीधुसंयुक्तमजाजीदीप्यकं पिबेत् ।’

Caraka Saṁhitā, Cikitsā, 9-68.

उदरं

सगुडं दीप्यकं यस्तु खादेत् पथ्यान्नभुङ्क्नः ।

तस्य नश्यति सप्ताहादुदरं सर्वदेहजः ॥

Cakradatta, Śitapittādhikāra, 51-4.

Vṛndamādhava, 52-4.

यवानीपत्रम्-यवानीशाकम्

यवानीशाकमाग्नेयं रुच्यं वातकफप्रणुत् ।

उष्णं कटु च तिक्तं पित्तलं लघु शूलहृत् ॥

Bhāvaprakāśa Nighaṇṭu, Śāka varga, 35.

अरोचके यवानीखाण्डवचूर्णम्

उदरे

Bhāvaprakāśa, Madhyakhaṇḍa, 16-21/24.

शीतपित्तोदरे यवानीगुडयोगम्

सुगुडं दीप्यकं यस्तु खादेत्पथ्यान्भुङ्क्ते ।

तस्य नश्यति सप्ताहादुदरे सर्वदेहजः ॥

Bhāvaprakāśa, Śitapittodardakothādhikāra, 55-1.

शूलशामनार्थं दीप्यकादिचूर्णम्

Cakradatta, Śūla cikitsā, 26-60.

प्लीहयकृच्चिकित्सायां यमानिकादिचूर्णम्

यमानिकाचित्रकयावशूकषड्ग्रन्थिदन्तीमगधोद्भवानाम् ।

प्लीहानामेतद्विनिहन्ति चूर्णमुष्णाम्बुना मस्तु सुराऽऽसर्वैर्वा ॥

Cakradatta, Plīhayakṛccikitsā, 38-1.

अरुचौ

यवानीषाडवम्

Caraka Samhitā, Cikitsā, 8-141/145.

ग्रहणीरोगे

तक्रारिष्टः

Caraka Samhitā, Cikitsā, 15-121.

शूले

दीप्यकं सैन्धवं पथ्या नागरं च चतुःसमम् ।

चूर्णं शूलं जयत्याशु सत्रस्याग्नेश्च दीपनम् ॥

Vṛndamādhava, 26-29.

अर्शःसु

भल्लातकयुक्तं वापि प्रदद्यात्तक्रतर्पणम् ।

बिल्वनागरयुक्तं वा यवान्या चित्रकेण वा ॥

Caraka Samhitā, Cikitsā, 14-70.

वातानुलोमनार्थम्-अर्शरोगे

यवानीं नागरं पाठां दाडिमस्य सा गुडाम् ।

सतक्रलवणं दद्याद् वातवर्चोऽनुलोमनम् ॥

Caraka Samhitā, Cikitsā, 24-99.

शीतपित्ते

यवान्याः सूक्ष्मपिष्टायाः देहेषूद्धृतनादपि ।

शोधः कण्डूश्च शीघ्रेण नश्यतो नात्रसंशयः ॥

Rasa-pradīpa, 168.

गुल्मे

यवानीचूर्णितं तक्रं विडेन लवणीकृतम् ।

पिबेत् सन्दीपनं पातकफमूत्रानुलोमनम् ॥

Caraka Samhitā, Cikitsā, 5-168.

Vṛndamādhava, 30-21.

YAVĀSA-YAVĀSAKA

Botanical name

Alhagi maurorum Medik.

Syn. *Alhagi camelorum* Fisch.

A. pseudalhagi (Biab.) Desv.

Family : Fabaceae (Pepilionaceae-Leguminosae)

Classical name : Yavasa-yavāsaka

Sanskrit names : Yavāsa, Yavāsāka, Yāsa, Duḥsparśa.

Regional names

Javara (Hindi, Mar.); Javaso (Guj.); Javasa (Beng.); Haj, Algoul (Arab); Khareshutur (Pers.); Persian manna plant, camel thorn (Eng.).

Description

Branches almost glabrous, spines axillary, sharp up to 2.5 cm. long.

Leaves ovate, oblong, obtuse or mucronate, cuneate, coriaceous, stipule minute, subulate.

Peduncles of raceme spinescent at tip. Bracts minute, bracteoles absent. Calyx sub-equally 2-lobed, glabrous, longer than pedicel. Corolla pink, 3-times longer than calyx; vexillum and keel longer than wings.

Pod falcate, irregularly constricted in between seeds.

Flowering and fruiting time

Plant flowers and fruits in May-July. Remarkably plant dries up (dies) in the rains while it flourishes summers. Blooming in springs and fruiting in summers.

Distribution

Plant occurs in Arab countries and Indian sub-continent. It is commonly growing along river bank. Particularly sandy soils. Plant is growing wild in Uttar Pradesh, Rajsthan, Punjab and Gujrat.

Manna (Yāsaśarkarā) : The Sugary Secretion (manna) obtained from the plant *Alhagi pseudalhagi* (Bieb.) Desv. syn. *A. maurorum* Baker. is collected and used in the name Yāsaśarkarā (mannā) which is also known as 'Turanzavin'. It is used medicinally in indigenous systems of medicine; the manna is prevalent as Turanzvin in Unani medicine. There had been report of import of the manna from Iran to India. Indian plants have not been reported about yield of manna. Indian medicine has early tradition of use of Yāsaśarkarā which has been incorporated in classical compendia (Saṁhitā).

Yāvaśarkarā is referred in Caraka Saṁhitā (Sūtra, 27) and Suśruta Saṁhitā (Sūtra, 25) and also other works of medicine and materia medica (Nighaṇṭu).

Chemical composition

The manna occurs in small round grains, which adhere to form an opaque mass, and has been found to consist mostly of sugar : melizitose 47.1, sucrose 26.4 and invert sugar 11.6 per cent.

Pharmacodynamics

Rasa	: Madhura, tikta, kaṣāya
Guṇa	: Guru, snigdha
Virya	: Śīta
Vipāka	: Madhura
Doṣakarma	: Vātapittaśāmakā Kaphaniḥsāraka.

Properties and action

Karma	: Tṛṣṇānigrahaṇa Dāhapraśamana Mastiṣkaśāmakā Chardinigrahaṇa Anulomana Raktarodhaka Kaphaniḥsāraka

	Mūtrajanana
	Vṛṣya
	Jvaraghna
	Kaṭupouṣṭika
	Koṭha praśamana
	Balya
	Bṛmhāṇa
	Tvagdoṣahara.
Roga	: Tṛṣṇā
	Chhardi
	Vibandha
	Arśa
	Raktapitta-vātarakta
	Bhrama
	Mastiṣka dourbalya
	Pratiśyaya-kāsa-śvāsa-galaroga
	Mūtrakṛchra
	Śirahśūla
	Sandhivāta
	Śukradourbalya
	Carmaroga
	Jvara-vātapittajanyopadrava.

Therapeutic uses

The drug Yavāsa or Yavāsaka is tṛṣṇānigrahaṇa (checking over thirst). It is anti-inflammatory, analgesic, haemostatic, (blood coagulant) carminative, blood purifier, expectorant, diuretic, aphrodisiac, antipyretic, tonic, antidermatosis and anti-emetic emaciating and laxative.

The manna or Yasaśarkarā is mild laxative. An infusion of the plant is used in affections of the chest.

The plant is given as fodder to camels liking Yavāsaka herb for their feed of relish.

Yavāsaka is useful in burning sensation (dāha), chronic fever (jīrṇa jvara), madātyaya (alcoholism) piles (arśa), diseases of mouth (mukha roga), cough (kāsa), dysuria (mūtra kṛcchra), vomiting (chardi), diarrhoea (atisāra), grahaṇī, vertigo (bhrama), intrinsic haemorrhage (rakta pitta), gout (vātarakta), fever (jvara),

masūrikā, general debility (dourbalya) and skin affections (tvagvikāra).

The drug is used in disorders of respiratory system; it is given in Kāsa, śvāsa, pratiśyāya and other ailment. Yavāsaka is useful for tonning up brain (mastiṣka balya) and seminal disorders (śukra dourbalya). Yavāsaka alleviates in general, the ailments caused by aggravation of vāta and pitta doṣas.

Externally the drug Yavāsaka is administered in various ailing conditions.

Leaves decoction is applied as wash (prakṣālaṇa) on haemorrhoids (arśāṅkura) and whole plant is ground and pasted over piles for checking bleeding; swelling and pain. Whole plant or leaves are cooked in oil which is applied to sandhivāta or joints pain and inflammation. The decoction of herb or leaves is used as gargle in catarrhal and throat affections.

Parts used : Whole plant, manna (Yāsaśarkarā).

Dose

Juice 10-20 ml., Decoction 40-80 ml., Manna (Yāsaśarkarā) 3-6 gm.

Formulations

Agasāyāvāleha, Khadirādi guṭikā, Vāsādyā ghr̥ta.

YAVĀSA-YAVĀSAKA (यवास-यवासक)

क. यासो यवासो दुःस्पर्शो धन्वयासः कुनाशकः ।

ख. यासः स्वादुः सरस्तिकस्तुवरः शीतलो लघुः ।

कफमेदोमदभ्रान्तिपित्तसृक्कुष्ठकासजित् ॥

तृष्णाविसर्पवातास्रवमिष्वरहरः स्मृतः ।

Bhāvaprakāśa Nighaṇṭu, Guḍācyādi varga, 211-213.

यासशर्करा

‘कषायमधुरा शीता सतिक्ता यासशर्करा ।’

Caraka Samhitā, Sūtra, 27.

‘यवासशर्करा मधुरकषाया तिक्तानुरसा श्लेष्महरा सरा च ।’

Suśruta Samhitā, Sūtra, 45.

यवासः

- अ. यासो यवासो बहुकण्टोऽल्पकः
 क्षुद्रेक्षुदी रोदनिका च कच्छुरा ।
 स्याद् बालपत्रोऽर्थिककण्टकः स्वरः
 सुदूरमूलो विषकण्टकोऽपि सः ॥
 अनन्तस्तीक्ष्णकण्टवः समुद्रान्ती मरुद्भवः ।
 दीर्घमूलः सूक्ष्मपत्रो विषघ्नः कण्टकालुकः ॥
 त्रिपर्णिका च गान्धारी चैकविंशतिनामभिः ।
 ब. यासो मधुरतिक्तोऽसौ क्षीतः पित्तार्तिदाहजित् ।
 बलदीपनकृत्तृष्णा-कफच्छर्दिविसर्पजित् ॥

Rāja Nighaṇṭu, Śalāhvādi varga, 44-46.

‘यवासाधूमपानेन कासो नश्यति तत्क्षणात् ।’

Vaidyāmṛtam.

‘यासः सरो ज्वरच्छर्दिश्लेष्मपित्तविसर्पजित् ।’

Rāja Ballabha Nighaṇṭu.

कासे

‘यवासाधूमपानेन कासो नश्यति तत्क्षणात् ।’

Vaidyāmṛtam.

मदात्यये

दुःस्पर्शशितेन.....शृतं वापि दद्याद्दोषविपाचनम् ।
 एतदेवं च पानीयं सर्वत्रापि मदात्यये ॥
 निरत्ययं पीयमानं पिपासाज्वरनाशनम् ॥

Caraka Samhitā, Cikitsā, 12.

भ्रमचिकित्सायाम्

Cakradatta, 17-8.

‘दुरालभाक्काथं सघृतं भ्रमशान्तये ।’

Bhāvaprakāśa, Murchādyadhikāra, 19-40.

अर्शरोगे पिच्छा बस्तौ

दुरालभाक्काथः पीतन्तु घृतसंयुतम् ।
 निवारयेद् भ्रमं शीघ्रं तं यथा शम्भुभाषितम् ॥

Bhāvaprakāśa, Madhyakhaṇḍa, 19-43.

Caraka Samhitā, Cikitsā, 14-225.

वमने यवासकचूर्णम्

‘दुरालभां वा मधुसम्प्रयुक्तां लिह्यात्कफच्छर्दिनिग्रहार्थम् ।’

Cakradatta, Chardi cikitsā, 15-14.

अर्शसि (रक्तपित्तोल्बणे)

मधुकं सपञ्चवल्कलैर्बदरीत्वगुदुम्बरं धवपटोलम् ।

परिषेचने विदध्यात् वृषककुभयवासनिम्बांश्च ॥

Caraka Samhitā, Cikitsā, 14-214.

मूत्रवेगविघातजोदावर्त्तचिकित्सायां यवासकप्रयोगः

दुःस्पर्शास्वरसं वाऽपि कषायं कुकुभस्य च ।

एवार्बुजं तोयेन पिबेद्वाऽलवणीकृतम् ॥

[अर्जुनत्वक् स्वरसं कर्कटीबीजस्य एकौषधिप्रयोगसहितम्]

Cakradatta, Udāvarta Cikitsā, 28-16.

कफज-पित्तजमसूरिकारोगे

दुरालभादिक्वाथः

Cakradatta, Masūrikā cikitsā, 54-18.

निर्वापणे

‘यवासमूलं कुशकाशयोश्च निर्वापणः स्याज्जलमेरका च ।’

Caraka Samhitā, Sūtra, 3-27.

जीर्णज्वरे

वासाद्यघृते

Caraka Samhitā, Cikitsā, 3-222/223.

कलश्यादिघृते

Suśruta Samhitā, Uttara, 39-223/225.

रक्तपित्ते

रक्तपित्तहरणणे

Caraka Samhitā, Cikitsā, 4-75.

भद्रश्रियादिगणे

Caraka Samhitā, Cikitsā, 4-103.

यवासभृङ्गरजसामूलं वा गोशकृद्रसे ।

विनीय रक्तपित्तघ्नं पेयं स्यात्तण्डुलाम्बुना ॥

*Caraka Samhitā, Cikitsā, 4-6**

रक्तपित्ते-घ्राणप्रवृत्तरुधिरे

द्राक्षारसस्येश्वरसस्य नस्यं क्षीरस्यदूर्वास्वरसस्य चैव ।

यवासमूलानि पलाण्डुमूलं नस्यं तथा दाडिमपुष्पतोयम् ॥

Caraka Samhitā, Cikitsā, 4-100.

कासे

अगस्त्यावलेहे ।

Suśruta Samhitā, Uttara, 52-42.

मुखरोगे

खदिरादिगुटिकायाम्

Caraka Samhitā, Cikitsā, 26-210.

YŪTHIKĀ

Botanical name : *Jasminum auriculatum* Vahl.

Family : Oleaceae

Classical name : Yūthikā

Sanskrit name : Yūthikā

Regional names

Juhi, Jai (Hindi); Yedthika, Umbustha, Gunica (Beng.); Advimolla (Tel.); Usimallijai (Tam.); Kadarmallige (Kann.); Jai, Banamallika (Oriya).

Description

A scandent, pubescent or villous shrub.

Leaves mostly simple, occasionally trifoliolate, the lower leaflets small or reduced to auricles or frequently wanting.

Flowers white, sweet scented, borne in pubescent, compound, many-flowered and lax cymes; corolla lobes 5-8; elliptic.

Carpels solitary, globose, black.

Flowering and fruiting time

Flower appear during the rainy season, about the beginning of August. Plant is propagated in (by cutting planted) during November-January.

Distribution

Plant is cultivated, throughout India for its fragrant flowers as an ornamental plant in gardens. It is also cultivated on large scale, particularly in Uttar Pradesh, Bihar and Bengal.

It is observed farming that the flowers are small and light, as 26,000 flowers weighing per kg. and average yield of flowers varies from 37 to 75 kg. per acre.

Kinds and varieties

In classical texts of Indian medicine (particularly Nighaṇṭus), there are two kinds of yūthikā viz. Yūthikā and Swarṇa Yūthikā. (*Jasminum* species; *Jasminum auriculatum* Vahl. and *J. heterophyllum*).

Chemical composition

The otto from Yūthika (*Jasminum auriculatum* Vahl.) contains ester (as bengyl acetate) 35.7, alcohols (as linalool) 43.81, indole 2.82 and methyl anthranilate 6.1%.

Pharmacodynamics

Rasa	: Tikta, Kaṭu
Guṇa	: Laghu
Vīrya	: Śīta
Vipāka	: Kaṭu
Doṣakarma	: Pittaghna

Properties and action

Karma	: Hṛdya
	Trṣṇānigrahaṇa
	Dāhapraśamana
	Tvacya
	Mūtrala
	Viśaghna
	Grāhī
	Vedanāhara.
Roga	: Vraṇa
	Hṛdroga
	Śīroroga
	Trṣṣā
	Dāha
	Tvagdoṣa
	Yonivyāpada
	Prameha
	Atisāra-grahaṇi
	Viṣa
	Raktapitta
	Mukha-dantaroga

Netravikāra

Mūtrāghāta-mūtrakṛcchra-aśmari-
śarkarā.

Therapeutic uses

The drug Yūthikā is cardi tonic (hṛdya) and it useful in consumption, diarrhoea (atisāra), grahaṇī roga, head-diseases (śīroroga), prameha, intrinsic haemorrhage (raktapitta), vaginal or vaginal tract disorders (yonivyāpada) and poisons (viṣa). It is used in mukha (mouth), danta (dental) and akṣi (eye) diseases. Yūthikā is useful in ulcers (vraṇa); overthirst (trṣā) and skin affections (tvagdoṣa).

The flowers are utilised for production of perfumed hair oils and attars. The yields and properties of concrete and otto, produced from the flowers are studied and values recorded, alongwith other relevant species of Jasminum. The otto has red dark red colour and an odour similar to that of fresh flowers, more pleasant and delightful than that of ottos from other Jasminum species.

Yūthikā is an ingredient in formulating tvagādi taila and cūrṇa yoga (Caraka Saṁhitā, Cikitsā, 26-184); it is administered as snuff (nasya and pradhamana of oil and powder respectively) in śīroroga (head-diseases). The drug yūthikā is used as rasāyana : it enters into composition of Brāhma-rasāyana. Yūthikā enters into the formulation of Kirātādyā cūrṇa (Caraka Saṁhitā, Cikitsā. 15-135), Guḍūcyādi taila (Caraka Saṁhitā, Cikitsā, 30-60) and other combinations or recipes, used in various ailments.

The flowers of yūthikā are of ornamental value as well as perfumery importance. Aromatic flowers are used in various purposes.

Parts used : Flowers, leaves.

Dose : Powder 3-5 gm.

YŪTHIKĀ (यूथिका)

यूथिका पीतयूथिका च

क. यूथिका गणिकाऽम्बुजा सा पीता हेमपुष्पिका।

- ख. यूथीयुगं हिमं तिक्तं कटुपाकरसं लघु ॥
मधुरं तुवरं हृद्यं पित्तघ्नं कफवातलम् ।
व्रणास्रमुखदन्ताक्षिशिरोरोगविषापहम् ॥

Bhāvaprakāśa Nighaṇṭu, Puṣpa varga, 29-30.

यूथिका

- अ. यूथिका पीतिका बाला बालपुष्पा गुणो ज्वला ।
काण्डी शिखण्डिनी चान्या युवती पीतयूथिका ॥
पुष्पगन्धा चारुमोदा हरिणी स्वर्णयूथिका ।

स्वर्णयूथिका

- ब. हेमपुष्पी पीतपुष्पी त्वपरा शङ्खपुष्पिका ॥
शिखण्डी गणिकाऽम्बुष्टा जालमोटा च पाण्डुरा ।
स. यूथिका शीतला तिक्ता कटुपाका कटुर्लघुः ॥
व्रणास्रमुखदन्ताक्षिशिरोरोगविषापहा ॥

Kaiyadeva Nighaṇṭu, Oṣadhi varga, 1475-1478.

यूथिका

- यूथिका गणिकाऽम्बुष्टा मागधी बालपुष्पिका ।
मोदनी बहुगन्धा च भृङ्गानन्दा गजाह्वया ॥

Rāja Nighaṇṭu, Karavirādi varga, 95.

सुवर्णयूथिका

- अन्या यूथी सुवर्णाह्वा सुगन्धा हेमयूथिका
युवतीष्टा व्यक्तगन्धा शिखण्डी नागपुष्पिका ॥
हरिणी पीतयूथी च पीतिका कनकप्रभा ॥
मनोहरा च गन्धाढ्या प्रोक्ता त्रयोदशाह्वया ॥

यूथिकाद्वयगुणाः

- यूथिकायुगलं स्वादु शिशिरं शर्करात्तिनुत् ।
पित्तदाहतृषाहारि नान्तात्वग्दोषनाशनम् ॥

Rāja Nighaṇṭu, Karavirādi varga, 96-98.

साधारणयूथिका

- सितपीतनीलमेचकनाम्नाः कुसुमेन यूथिकाः कथिताः ।
तिक्तहिमपित्तकफामज्जरघ्ना व्रणादिदोषहराः ॥

सामान्यगुणाः

- सर्वासां यूथिकानां तु रसवीर्यादिसाम्यता ।

सरूपं तु सुगन्धाढ्यं स्वर्णयूथ्या विशेषतः ॥

Rāja Nighaṇṭu, Karavirādi varga, 99-100.

यूथिका

‘यूथिका वृक्षविशेषः, सा द्विधा ईषच्छेतपुष्पा अतिश्चेतपुष्पा च ।’

Dalhana, Suśruta Samhitā, Sūtra, 46-249.

मूत्राघातमूत्रकृच्छ्रशर्कराऽश्मरीषु

यूथीमूलं ग्रीष्मकालोद्गृहीतम् छागीक्षीरे सम्यगुत्पवाथ्यपीतम् ।

मूत्राघातं मूत्रकृच्छ्रं सशूलं हन्यात् क्षिप्रं शर्कराऽश्मरीञ्च ॥

Śoḍhala.

शिरोरोगे

नावनतैले प्रथमनचूर्णे च ।

Caraka Samhitā, Cikitsā, 26-184.

रसायने

द्वितीयब्राह्मरसायने

Caraka Samhitā, Cikitsā, 1-1-58.

प्रमेहे

प्रियङ्गुवादिगणे ।

Suśruta Samhitā, Cikitsā, 11-10.

योनिव्यापदि

गुडूच्यादितैले

Caraka Samhitā, Cikitsā, 30-60.

अतिसारे

कपित्थशाल्मलीफञ्जीवटकार्पासदाडिमाः ।

यूथिका कच्छुरा शेलुः शणश्चुञ्चूश्च दाधिकाः ॥

Suśruta Samhitā, Uttara, 40-113.

वेतसार्जुन....यूथिकायाश्च पल्लवान् ।

मातुलुङ्गस्य धातक्या दाडिमस्य च कारयेत् ।

स्नेहाम्ललवणोपेतम् खडान् साङ्ग्राहिकान् परम् ॥

Caraka Samhitā, Cikitsā, 8-129/130.

ग्रहण्याम्

किराताद्यचूर्णे

Caraka Samhitā, Cikitsā, 15-135.



Appendixes

OFFICIAL (PHARMACOPOEIAL) DRUGS
PLANT DRUGS USED IN THE FORMULATIONS (YOGA)

Section A

S. No.	Sanskrit or Popular Name	Other names appearing in the formulations	Product/varieties parts appearing in the formulations	Botanical Name	Substitutes
1	2	3	4	5	6
1.	Aklāri (s.y.)	arkarāga		Lodoicea maldivica Pers.	
2.	Akṣoḍa	jongaka		Juglans regia Linn.	
3.	Aguru	māhyaka loha akil (s.y.) kālaloḥa jayā muñja (s.y.) gaṇikārikā vajrayanti	kr̥ṣṇāgaru	Aquilaria agallocha Roxb.	
4.	Agnimantha			Clerodendrum philomidis Linn f.	1. Premna integrifolia linn. 2. Premna micronata Roxb.
5.	Ajagandhā	paśugandhā		Gynandropsis gynandra (Linn.) Briquet.	

1	2	3	4	5	6
6.	Ajamodā	ajamoda ayamoda dīpyaka ajamoja		Trachyspermum roxburghianum (DC.) Sprague.	
7.	Atasī			Linum usitatissimum Linn	
8.	Aubalā			Abutilin indicum (Linn.) Sw.	
9.	Auviṣā	aruṇa ghuṇapriyā viṣa virā (s.y.) atviṣa girikanyā (śveta) mayūra mayūṛaka kharamaṇjari kaṭalāṭi (s.y.) śikhari		Aconitum heterophyllum wall.	
10.	Aparājītā			Clitoria ternatea Linn.	
11.	Apāmārga			Achyranthes aspera Linn	
12.	Ābhā				Acacia arabica Willd.
13.	Ambaṣṭhaki			Hibiscus sabdariffa Linn.	

1	2	3	4	5	6
14.	Amlavetasa	vetasāmīa		Garcinia pedunculata Roxb.	Rheum emodi Wall.
15.	Araluka	katvaṅga		Ailanthus excelsa Roxb.	
16.	Arimeda	irimeda		Acacia leucophloea Willd.	
17.	Arka	ravi bhānu mandāra tapana kakubha pārtha śvetavāha		Calotropis procera (Ait) R. Br. or C. gigantea (Linn.) R. Br. ex. Ait Terminalia arjuna W. & A.	
18.	Arjuna				
19.	Asoka			Saraca asoca (Rose) Dc. Wilde	
20.	Asvakarna			Dipterocarpus alatus Roxb.	Terminalia tomentosa W. & A.
21.	Asvagandhā	hayagandhā turagagandhā vājigandhā vājigandhika amukkura (s.y.) pippala bijaka		Withania somnifera Dunal	
22.	Asvattha				Ficus religiosa Linn
23.	Asana				Pterocarpus marsupium

1	2	3	4	5	6
		asanaka pitasāra bijasāra		Roxb.	
24.	Asthisamhṛta	phaṇiphena		Cissus quadrangularis Linn.	
25.	Ahiphena	karuppu (s.y.) nāgaphena ākallaka agragrāhi		Papaver somniferum Linn.	
26.	Akārakarabha			Anacyclus pyrethrum DC.	
27.	Ādhakī			Cajanus cajan (Linn.) Mill sp.	
28.	Ātmaguptā	kaṇḍūkari kapikacchu śūkaśimbi svayamguptā markaṭa svagupta amla āmalaka amṛtaphala haṭha dhātri nelli (s.y.) nellikka (s.y.)		Mucuna prurita Hook.	
29.	Āmalaki			Embolia officinalis Gaertn.	

1	2	3	4	5	6
30.	Āmra	kapitana		Mangifera indica Linn.	
31.	Āmrāta	ambaka		Spondias pinnata Kurz.	
		kṛtamāla		Syn. S. mangifera Willd.	
32.	Āragvadha	vyādhigṛhāta		Cassia fistula Linn.	
		śampāka			
		śamyāka			
		nīṇpadruma			
		kṛtamālaka			
33.	Ārdraka (fresh form)	auṣadha		Zingiber officinale Rosc.	
		mahaauṣadha			
		cukku (s.y.)			
		nāgara			
		nāgarā			
		nāgaraka			
		viśva			
		viśvabheṣaja			
		śṛṅgavera			
		śṛṅgibera			
		śuṇṭhi			
		viśvā			
34.	Āsphoṣa	viśvaauṣadha			Hemidesmus indicus R. Br.

1	2	3	4	5	6
35.	Ikṣu	bahurasa	khaṇḍa sitā matsyaṇḍikā śarkarā guḍa sitā sitopala jīṃaguḍa purāṇaguḍa	Saccharum officinarum Linn.	
36.	Indravāruṇi	gavākṣi indravalli aindrī viśālā indravāruṇikā nākuli karaleka (s.y.)		Citrullus colocynthis Schrad.	
37.	Isvari			Aristolochia indica Linn.	
38.	Uṅgaṇa			Blepharis edulis Pers.	
39.	Utpala			Nymphaea stellata Willd.	
40.	Udumbara			Ficus racemosa Linn.	
41.	Upakuñcika	nilotpala sadāphala sthūlajiraka upakuñci kāraṇi suṣavi vīraṇa		Nigella sativa Linn.	
42.	Uśira			Vetiveria zizanioides	

1	2	3	4	5	6
		sevya		(Linn.) Nash	
		rāmacca (s.y.)			
		vīraṇasīphā			
43.	Ṛddhi			Habenaria intermedia	Dioscorea
44.	Ṛṣabhaka	ṛṣabha		D. Don	bulbifera Linn.
45.	Eraṇḍa	gandharvahasta vātāri pañcāṅgula citrā urubu rubu uśravūka urvāru		Microstylis wallichii Lindl. Ricinus communis Linn.	Pueraria tuberosa Dc.
46.	Ervāru				
47.	Elāvāluka	aileya		Cucumis melo var. utilissimus Duthie & Fuller	
48.	Kaṅkola	kaṅkolikā cinoṣaṇa cinatikṣṇa kakkola somavalka tikṭā kaṭukā		Prunus avium Linn. Piper cubeba Linn. f.	
49.	Kaṭphala				
50.	Kaṭuki			Myrica nagi Thunb. Picrorhiza kurroa Royle ex Benth	

1	2	3	4	5	6
		tiktaroḥiṇī sutiktaka kaṭurohiṇī kaṭvī rohiṇī kaṭuka kaṭurohiṇī vyāghrī nidigdhikā kṣudrā kaṇṭakārikā dhāvani nidigdhā duḥsparśa teṭṭāmparal (s.y.) katakaphala			
51.	Kaṇṭakārī			Solanum xanthocarpum schrud. & Wendl.	
52.	Kataka			Strychnos potatorum Linn. f.	
53.	Kadam̐ba			Anthocephalus cadamba Miq. A. Rich	Acacia suma Buch Ham.
54.	Kadara				
55.	Kadali	rambhā		Musa paradisiaca Linn	
56.	Kapitha			Feronia limonia (Linn.) Swingle.	
57.	Kamala	abja	raktakamala	Nelumbo nucifera Gaertn.	

1	2	3	4	5	6
		aravinda padma kalhāra puṇḍarīka puṇḍra āraṇāla	śvetakamala varaṭa (kamalabīja) padmakanda padmakeśara padmakesara kamalakiṇjalka mr̥ṇāla bisa śālūka		
58.	Kampilla	rajanaka kampillaka āvittol (s.y.)		Mallotus philippinensis Muell. Arg.	
59.	Karañja	karañjaka naktamāla naktāhva ghṛtakarañja hayamāraka harapriya asvamāra		Pongamia pinnata (Linn.) Merr.	
60.	Karavira		śvetakaravira raktakaravira	Nerium indicum Mill.	
61.	Karinkāra			Carissa carandas Linn.	
62.	Karkaṭaśṛṅgi	śṛṅgi viṣāṇi karkaṭa kaccūra		Pistacia integerrima Stew. ex. Brandis.	
63.	Karcūra			Curcuma zedoaria Rosc.	

1	2	3	4	5	6
		kacoraka karcūra coram (s.y.) gandhapatāśā ghanaśāraka śāśi indu candraprabhā śītalaraṇa Candra gandhadravya kaśeruka			
64.	Karpūra				Cinnamomum camphora (Linn.) T. Nees & Eberm.
65.	Kāśeru				Scirpus kysoor Roxb.
66.	Kastūrilatikā				Hibiscus esculentus Linn.
67.	Kākajāṅghā				Peristrophe bicalyculata Nees.
68.	Kākatiktā				Cardiospermum halicacabum Linn.
69.	Kākanāsikā	śatakratulatā uziñña (s.y.)			Pentatropis microphylla W. & A.
70.	Kākamāci				Solanum nigrum Linn.
71.	Kākoli				Lilium polyphyllum D. Don
					Withania somnifera Dunal.
72.	Kāñcanāra	kāñcanāraka			Bauhinia variegata Linn.

1	2	3	4	5	6
73.	Kāravalli			Momordica charantia Linn.	
74.	Kārpāsa		raktakārpāsa kārpāsāsthi	Gossypium herbaceum Linn.	
75.	Kāśa			Saccharum spontaneum Linn.	
76.	Kirātātika	kairāta kirātaka kiryāt (s.y.) bhūnimba kirātātiktaka cuṇḍa (s.y.) ārya (s.y.) kāśmīra Kāśmīra janma kṣataja vāthika		Swertia chirata Buch. Ham.	
77.	Kuṅkuma			Crocus sativus Linn.	
78.	Kuṇḍaja	kaliṅga kaliṅgaka vatsa śakra vatsaka	kuṇḍajavak indravaya indrabija vatsabija	Holarrhena antidysenterica Wall.	
79.	Kunduru	kunduruṣka kundara		Boswellia serrata Roxb.	

1	2	3	4	5	6
80.	Kumāri	kanyā kumārīkā	sannināyaka cennināyaka cenyāya sahāsāra kanyāsāra	Aloe barbadensis Mill.	
81.	Kumudā			Nymphaea alba Linn.	
82.	Kuruvikizaṅgu (s.y.)			Melothria perpusilla Cogn.	
83.	Kulathā	Khalva vardhipataka		Dolichos biflorus Linn.	
84.	Kuśa			Desmostachya bipinnata Stapf.	
85.	Kuṣṭha	āmaya gada ruka pālaka koṭṭam		Saussurea lappa C.B. Clarke	
86.	Kusumbha			Carthamus tinctorius Linn.	
87.	Kūṣmāṇḍa	kūṣmāṇḍaka	kūṣmāṇḍanāḍi	Benincasa hispida (Thunb.) Cogn.	
88.	Kṛṣṇajīraka	asita jīraka karuñjīraka (s.y.) śyāmā		Carum carvi Linn.	
89.	Kṛṣṇasārivā			Cryptolepis buchanani Roem. & Schult.	
90.	Ketaki		katakikanda	Pandanus tectorius Soland	

1	2	3	4	5	6
				ex Parkinson or	
91.	Kokilākṣa	ikṣura ikṣuraka vayalculli (s.y.) kokilākṣī culli (s.y.)			Pandanus odoratissimus Linn. Asteracantha longifolia Nees.
92.	Kodrava				Paspalum scrobiculatum Linn.
93.	Kozuppā (s.y.)				Portulaca oleracea Linn.
94.	Kola	kolī badarī	lākṣā kolāsthi		Zizyphus jujuba Lam.
95.	Koṣātakī				Luffa acutangula (Linn.) Roxb. var. amara C.B. Clarke
96.	Klitaka				Glycyrrhiza glabra Linn.
97.	Kṣīrakākoli	payasyā kṣīraśuklā			Withania somnifera Dunal.
98.	Kṣīravīdārī				Fritillaria roylei Hook.
99.	Khadira	gāyatrī khādīra			Ipomoea digitata Linn. Acacia catechu Willd.

1	2	3	4	5	6
100.	Kharjūra	śreyasī		Phoenix dactylifera Linn.	
101.	Gajapippali	hastipippali ibhapippali gajāhvā gajopakulā		Scindapsus officinalis Schoott.	
102.	Gandhadūrvā				Cyperus rotundus Linn.
103.	Gāngeru	kāśmarī		Grewia populifolia Vahl.	
104.	Gambhārī	kāśmārya pitakārohini pura māhiṣākṣa kauśika palaṅkaṣā amṛtavallī amṛtā chinnotbhavā chinnaruhā somavallī madhuparṇī guḍūcīkā chinnaroha		Gmelina arborea Linn.	
105.	Guggulu			Commiphora mukul (Hook ex Stocks) Engl.	
106.	Guḍūcī		guḍūcī satva	Tinospora cordifolia (Willd.) Miers	

1	2	3	4	5	6
		ciṭṭamṛt (s.y.)			
		amṛta			
		gulūci			
107.	Guṇjā	kunni (s.y.)			Abrus precatorius Linn.
108.	Gokṣura	trikaṇṭaka			Tribulus terrestris Linn.
		traikaṇṭaka			
		gokṣuraka			
		svadamṣṭrā			
		ñeriñjil (s.y.)			
109.	Gojihva	granthiparṇa			Onosma bracteatum Wall.
110.	Granthiparṇi	granthi			Leonotis nepetaefolia R. Br.
		granthikā			
111.	Ghoṇṭā				Zizyphus xylopyra Willd.
112.	Caṇaka	caṇa	caṇakāmla		Cicer arietinum Linn.
113.	Caṇḍā (corakabheda)				Angelica archangelica Linn.
					Angelica glauca Edgw.
114.	Candrikā	aśālī (s.y.)			Lepidium sativum Linn.
		jāṭi			
115.	Campaka				Michelia champaca Linn.
116.	Cavya	cavika			Piper chaba hunter.
					Piper betle Linn.
117.	Cāṅgeri				Oxalis corniculata Linn.

1	2	3	4	5	6
118.	Citraka	agni vahni jvalanākhyā kṛṣṇu hutāśa dahana hutabhuk Śikhi		Plumbago zeylanica Linn.	
119.	Ciñcā				
120.	Cirabilva	cirivilva pūti pūtika pūtigandha		Tamarindus indica Linn. Holoptelea integrifolia Planch.	
121.	Coraka	corakā kopanā corakākhyā		Angelica glauca Edgw.	
122.	Chāgakarṇa	śvetasarja		Vateria indica Linn.	
123.	Jaṭāmānsi	mānsi jaṭā nalada jaṭilā		Nardostachys jatamansi D.C.	
124.	Jambū		mahājambū kṣudrajambū	Syzygium cumini (Linn.) Skeels	
125.	Jayanū			Sesbania sesban (Linn.)	

1	2	3	4	5	6
126.	Jayapāla			Merr.	
127.	Jalakarnā			Croton tiglium Linn.	
128.	Jāu	mālati	jātikusuma jātipuṣpa	Lippia nodiflora Mich. Jasminum officinale Linn. Var. grandiflorum Bailey. Myristica fragrans Houtt.	
129.	Jāuphala	jāukoṣa jānikoṣa jāṭisasya jāupauri jāṭidala jāṭikkā (s.v.) jāupatra jāṭikapoṇḡāra jāuphalā jāuphala			
130.	Jivaka			Microstylis muscifera Ridley.	Pueraria tuberosa D.C.
131.	Jivanū			Leptadenia reticulata W. & A.	
132.	Jyotiṣmatī			Celastrus panicuatus Willd.	
133.	Ṭakkola			Illicium verum Hook. f.	
134.	Tagara	kālānūsāri kālānūsārikā		Valeriana Wallichii D.C.	

1	2	3	4	5	6
		kālā			
		tagarapādukā			
		nata			
		mahidhāruikā			
		ajjhaḍā			
135.	Tāmalakī			Phyllanthus niruri Linn.	
136.	Tāmracūḍa				Adiantum lunu- latum Burm.
	pādikā				
137.	Tāla		panaviral (s.y.) tālapuṣpakṣāra	Borassus flabellifer Linn.	
138.	Tālamūli	bhūmitāla		Cuculigo orchioides Gaertn.	
139.	Tālīśa	tālīśa	tālīśa patra	Abies webbiana Lindl.	1. Abies pindrow Spach. 2. Taxus baccata Linn.
		tālīsaka	tālīśa patra		
140.	Tiniśa			Ougeinia dalbergioides Benth.	
141.	Tintiḍḍika			Rhus parviflora Roxb	
142.	Timira	tintriṇi			Curcuma longa Linn.
143.	Tila		taila tilotbhava tila taila sneha	Sesamum indicum Linn.	

1	2	3	4	5	6
			tilaja eṇṇa (s.y.) kṛṣṇaṭṭila		
144.	Tumbinī			Lagenaria siceraria (Mol.) Standl.	
145.	Turuṣka	silhaka		Liquidambar orientalis Miller.	
146.	Tulasī	surasā surasa		Ocimum sanctum Linn.	
147.	Tuvaraka			Hydnocarpus laurifolia (Dennst.) Sleumer	Hydnocarpus kurzii (King) Wab.
148.	Tejapatra	patra patraka tvakpatra		Cinnamomum tamala Nees & Eberm.	
149.	Tejovatl	tejhava	tumburu	Zanthoxylum alatum Roxb.	
150.	Trapuṣa			Cacumis sativus Linn.	
151.	Trāyamāṇā	trāyanti pālani trāyantikā		Gentiana kurroo Royle.	
152.	Trivṛt	kuṭaraṇā kumbha	śyāma śyāmā trivṛtā	Ipomoea turpethum R. Br.	
153.	Tvak	coca		Cinnamomum zeylanicum	

1	2	3	4	5	6
		dārucinī varāṅga nikumbha		Blume	
154.	Danū			Baliispermum montanum Muell-Arg.	
155.	Darbha			Imperata cylindrica Beauv.	
156.	Daḍima			Punica granatum Linn.	
157.	Dāruharidrā	dāru dārvī dāruniśā dārurajani	añjana rasañjana	Berberis asiatica Roxb. ex. D.C. B. lycium Royle. Euphorbia pro- strata W. Ait.	
158.	Dugdhikā			Euphorbia thymifolia Linn.	
159.	Dūrvā		śveta dūrvā nila dūrvā	Cynodon dactylon Linn. Pers.	
160.	Devadāru	amaradāru amarakāṣṭha dāru surāhvā suradruma surāhva suradāru dāruka surapādapa		Cedrus deodara (Roxb.) Loud	

1	2	3	4	5	6
		devāhva devadruma devakāṣṭha devāhvaya mahādāru		Jatropha glandulifera Roxb. Vitis vinifera Linn.	
161.	Dravanti				
162.	Drākṣā	mṛdvikā mṛdvikā tumbā (s.y.) kanaka unmatta dhustūra dhustūraka dhūrta harapriyā hāṭa hema	svarnabīja	Leucas cephalotes Spreng. Datura metel Linn.	Datura innoxia Mill. Datura stramonium Linn.
163.	Dronapuspi				
164.	Dhattūra				
165.	Dhanvayāsa	dhanvayāsaka durālabha		Fagonia cretica Linn.	Alhagi pesu- dahlagi (Bieb.) Desv.
166.	Dhava			Anogeissus latifolia Wall.	
167.	Dhātaki			Woodfordia fruticosa	

1	2	3	4	5	6
168.	Dhānyaka	kustumburi dhanika dhanyāka dhānyāka vitunnaka		Kurz. Coriandrum sativum Linn.	
169.	Nandī				
170.	Nalikā			Ficus arnottiana Miq.	Cinamomum tamala Nees. & Eberm.
171.	Nāgakeśāra	keśāra kesara nāgapuṣpa nāga nāgakusuma hema ibhakeśāra gajakceśāra		Mesua ferrea Linn.	
172.	Nāgabalā				
173.	Nāgavallī	ahivallī phanivallī nālīkera (s.y.) tuṅgadruma madhuphala	parṇapatra parīṇatakerikṣāra	Sida veronicaefolia Lam. Piper betle Linn.	
174.	Nārikela			Cocos nucifera Linn.	

1	2	3	4	5	6
175.	Nicula			Barringtonia acutangula (Linn.) Gaertn.	
176.	Nimba	ariṣṭa picumarda nimbaka nāraṅga nimbūka nimbu nimbuka jambīra līmpāka amla	sāra	Azadirachta indica A. juss.	
177.	Nimbū			Citrus limon (Linn.) Burm. f.	
178.	Nirguṇḍī	sinduvāra nirguṇḍikā sugandhika nilikā nilinī	nīlanirguṇḍī svetanirguṇḍī	Vitex negundo Linn.	
179.	Nilī			Indigofera tinctoria Linn.	
180.	Nyagrodha			Ficus bengalensis Linn.	
181.	Paṭola			Trichosanthes dioica Roxb.	
182.	Pattāṅga			Caesalpinia sappan Linn.	
183.	Padmaka			Prunus cerasoides D. Don	
184.	Paruṣaka	padmanāluka paruṣa	praroḥa	Grewia asiatica Linn.	
185.	Parpaṭa	parpaṭaka parpaṭi		Fumaria parviflora Lam.	

1	2	3	4	5	6
186.	Pāśa			Butea monosperma (Lam.) Kuntze.	
187.	Paśupāśi			Myristica malabarica Lam.	
188.	Pāṭalāi	pāṭali		Stereospermum suaveo- lens D.C.	
189.	Pāṭali			Schrebera swietenoides Roxb.	
190.	Pāṭhā			Cissampelos pareira Linn.	
191.	Pāraṅkī			Garuga pinnata Roxb.	
192.	Pāribhadra	pāribhadra		Erythrina indica Lam.	
193.	Pāṣāṇabheda	aśmabheda aśmabhīt śilābhīt śilābheda kallūruvañci (s.y.)		Bergenia ligulata (Wall.) Engl.	Aerva lanata Juss.
194.	Pippali	kaṇā kaṇa kṛṣṇā capalā māgadha māgadhi śauṇḍī pippala upakulyā	granthika māgadhisīphā pippalimūla granthi	Piper longum Linn.	

1	2	3	4	5	6
195.	Pitacandana	kāliyaka pītasāra haricandana tūkṣṇavīkṣa		Coscinium fenestratum Colebr.	
196.	Pīlu		phala	Salvadora persica Linn. Calycopteris floribunda Lam.	
197.	Pullāni (s.y.)			Inula racemosa Hook. f.	
198.	Puṣkara	puṣkara puṣkarākhya puṣkarāhva kramuka ghoṇṭā kalasī guhā dhāvanī	puṣkaramūla pauṣkaramūla	Areca catechu Linn. Uraria picta Desv.	
199.	Pūga				
200.	Prśniparnī				
201.	Pezuntol (s.y.)			Careya arborea Roxb.	
202.	Poṭagala			Typha elephantina Roxb.	
203.	Ponnāṅgānī (s.y.)			Althernanthera triandra Lamk.	
204.	Prativīṣa			Aconitum palmatum D. Don.	
205.	Prapunnaḍa	edagajā prapunnaḍa pundrāhva		Cassia tora Linn	
206.	Prāpaṇḍarīka				Nelumbo nuci- fera Gaertn.

1	2	3	4	5	6
207.	Prasāriṇī	sarāṇī prasāraṇī talanīli (s.y.) pūṭigandhā gandha patrā phalinī vanitā priyaṅgukā piyāla		Paederia foetida Linn.	
208.	Priyaṅgu			Callicarpa macrophylla Vahl.	Prunus mahaleb Linn.
209.	Priyāla			Buchanania lanzen Spreng.	
210.	Plakṣa			Ficus lacor Buch. Ham.	
211.	Phalgu	malapū (s.y.)		Ficus hispida Linn. f.	
212.	Bakula			Mimusops elengi Linn.	
213.	Balā	vāṭyālaka		Sida cordifolia Linn.	
214.	Babbūla	bāvarī		Acacia arabica Willd.	
215.	Bākucī	avalguja somarāji		Psoralea corylifolia Linn.	
216.	Basthāntri			Argyrea speciosa Sweet	
217.	Bibhītaka	bibhīta akṣa akṣaka bibhītaki kalivr̥kṣa	bibhītakāṅgāra	Terminalia belerica Roxb.	

1	2	3	4	5	6
218.	Bimbī			Coccinia indica W. & A.	
219.	Bilva			Aegle marmelos Corr.	
220.	Bījapūra			Citrus medica Linn.	
221.	Bṛhatgokṣura			Pedaliūm murex Linn.	
222.	Bṛhaṭṭī	cuṇḍā (s.y.) sirīhī		Solanum indicum Linn.	
223.	Bola (hirābola)			Commiphora myrrha (Nees) Engl.	
224.	Brāhmi			Bacopa monnieri (Linn.) Pennel.	
225.	Bhallātaka	aruṣkara bhallāta		Semecarpus anacardium Linn. f.	
226.	Bhārṅgi	brahmayaṣṭikā bhārāṅgi bhārṅgi dvijayaṣṭikā		Clerodendrum serratum (Linn.) Moon	Clerodendrum indicum (Linn.) Kuze
227.	Bhūtika			Cymbopogon citratus (DC) Stapf.	
228.	Bhūtna				Cymbopogon jvarankusa Schult.
229.	Bhūrja				
230.	Bhr̥ṅgarāja	kayyonni (s.y.) keśarāja		Betula utilis D. Don. Eclipta alba Hassk.	

1	2	3	4	5	6
		tekarāja bhṛṅga mārkava bhṛṅgaja cowalli (s.y.) asra mañjiṣṭha samaṅgā lohitā lohitayaṣṭikā bhekaparnikā		Rubia cordifolia Linn.	
231.	Mañjiṣṭhā				
232.	Maṇḍukaparnī			Centella asiatica (Linn.) Urban. Alternanthera sessilis (Linn.) R. Br.	
233.	Matsyākṣi	matsyākṣi matsyākṣikā minākṣi madanaka	phala	Randia dumetorum Lamk. Lawsonia inermis Linn.	Jasminum sambac Ait.
234.	Madana				
235.	Madayantī				
236.	Madhusnuhī				
237.	Madhūka				
238.	Madhūrika	miśi miṣi misi vallija		Smilax china Linn. Madhuca indica J. F. Gmel. Foeniculum vulgare Mill.	
239.	Marica				Piper nigrum Linn.

1	2	3	4	5	6
		vellaja uṣaṇa uṣaṇaka			
240.	Masūra			Lens culinaris Medic.	
241.	Mahānimba			Melia azedarach Linn.	
242.	Mahābalā			Sida rhombifolia Linn	
243.	Mahāmedā			Polygonatum cirrhifolium Royle	Asparagus racemosus Willd.
244.	Mātuluṅga			Citrus medica Linn.	
245.	Mādhavī			Hiptage benghalensis Kurz.	
246.	Māyaku			Quercus infectoria Oliv.	
247.	Māṣa			Phaseolus mungo Linn.	
248.	Māṣaparnī			Teramnus labialis Spreng.	
249.	Maṇḍitukā	śūrpaparnī bhūkadamba śrāvāṇī muṇḍī muṇḍīka	mahāśrāvāṇī	Sphaeranthus indicus Linn.	
250.	Mudga			Phaseolus radiatus Linn	
251.	Mudgaparnī			Phaseolus trilobus Ait.	
252.	Muni	munitaru		Sesbania grandiflora (Linn.) Pers.	
253.	Murā			Selinium tenuifolium Wall.	Nardostachys jatamansi DC.

1	2	3	4	5	6
254.	Musali	musali		Chlorophytum tuberosum Baker.	
255.	Mustā	abla ambuda ghana mustaka jalada ambhodhara balāhaka vārivāha musta payoda	āryamuttāṅga (s.y.) Bhadramustaka plava	Cyperus rotundus Linn.	Cyperus sca- riosus R. Br. Cyperus arundinaceum Baker.
256.	Mūlaka		śuṣkamūlaka mūlakakṣāra	Raphanus sativus Linn.	
257.	Mūrva	madhusrava madhurasā		Marsdenia tenacissima Weight and Arn. Trigonella foenumgra- ceum Linn.	Conimorpha microphylla
258.	Methi			Polygonatum cirrihifolium Royle.	Asparagus racemosus Willd.
259.	Medā				Gymnema sylvestre R. Br.
260.	Meṣāśṛṅgi				
261.	Yava		Yavāgraja	Hordeum vulgare Linn.	

1	2	3	4	5	6
			kṣāra yavakṣāra yavaśūkaja yavanāla bhasma		
262.	Yavānī	dīpyaka yamānī yavānikā yamānikā yavāsa yāsa yavāśaka yaṣṭikā madhuka madhuyaṣṭī madhu yaṣṭimadhuka yaṣṭimadhuka yaṣṭyāhva yaṣṭyāhvaya raktāṅga kucandana śrīkaṇṭha (s.y.) hima kaṭhilla		Trachyspermum ammi (Linn.) Sprague.	
263.	Yavāsaka			Alhagi pseudalhagi (Bieb.) Desv.	
264.	Yaṣṭī			Glycyrrhiza glabra Linn	
265.	Raktacandana			Pterocarpus santalinus Linn. f.	
266.	Raktapunarnavā			Boerhaavia diffusa Linn.	Boerhaavia

1	2	3	4	5	6
			kṣāra yavakṣāra yavaśūkaja yavanāla bhasma		
262.	Yavāni	dipiyaka yamāni yavānikā yamānikā yavāsa yāsa yavāṣaka yaṣṭikā madhuka madhuyaṣṭi madhu yaṣṭimadhuka yaṣṭimadhuka yaṣṭyāhva yaṣṭyāhvaya raktāṅga kucandana śrīkaṇṭha (s.y.) hima kaṭhilla		Trachyspermum ammi (Linn.) Sprague. Alhagi pseudalhagi (Bieb.) Desv. Glycyrrhiza glabra Linn	
265.	Raktacandana			Pterocarpus santalinus Linn. f.	
266.	Raktapunarnavā			Boerhaavia diffusa Linn.	Boerhaavia

1	2	3	4	5	6
282.	Vacā	ṣaḍgranthā ugrā ugragandhā vayambu (s.y.)		Acorus calamus Linn.	
283.	Vāñjulā			Salix caprea Linn.	
284.	Vanya jīraka			Centratherum anthelminticum (Willd.) Kuntze.	
285.	Vatsanābha	amṛta viṣa vajranāga sthāvaraviṣa vatsanāgaka varāṇa		Aconitum chasmanthum (Stapf. ex. Holmes)	
286.	Varuṇa			Crataeva nurvala Buchham.	
287.	Varṣābhu			Trianthema portulacastrum Linn.	
288.	Vasuka			Osmanthus fragrans Lowr. Calotropis procera (Ait) R. Br.	
289.	Vārāhi			Dioscorea bulbifera Linn.	
290.	Vasā	vāsaka vṛṣa simhavadanā vṛṣaka ātarūṣa		Adhatoda vasica Nees.	

1	2	3	4	5	6
291.	Vijayā	bhaṅgā indrāṣana trāilokyavijayā		Cannabis sativa Linn.	
292.	Vidāṅga	jantughna kṛmighna kṛmihara kṛmiripu vella vidārī vidārikā viṣatindu viṣataru kucila viṣamuṣṭikā	sāra	Embelia ribes Burn. f.	Embelia robusta C. B. Clarke.
293.	Vidārī		vidāricūrṇa vidārikanda	Pueraria tuberosa DC.	
294.	Viṣamuṣṭi			Strychnos nuxvomica Linn.	
295.	Viralā			Diospyros tomentosa Roxb.	
296.	Vṛkṣāmla			Garcinia indica Chois.	
297.	Vṛddhadāruka	vṛddhadāru vṛddhadāraka vṛddhdadāra		Ipomoea petaloidea Choisy.	
298.	Vṛddhi			Habenaria intermedia D. Don.	Dioscorea bul- bifera Linn.
299.	Vṛścikālī			Tragia involucrata Linn.	
300.	Varnāśa		varnāśalocanā śudhā	Bambusa bambos Druce.	Curcuma an- gustifolia Roxb.

1	2	3	4	5	6
			tugākṣīrī tvakṣīrī vasu tugā vanīśajā vanīśarocanā kūvaūral (s.y.)		
301.	Śāṅkhaṇḍapī	śāṅkhaṇḍapī		Convolvulus pluricaulis Choisy.	Evolvulus al- sinoides Linn. Clitoria ternatea Linn.
302.	Śāṅkhini			Ctenolepis cerasiformis Naud.	
303.	Śaṭī	śaṭī		Hedychium spicatum Ham. ex. Smith	
304.	Śaṇa			Crotalaria juncea Linn.	
305.	Śatapatrikā	taruṇī śatapatra abhīru nārāyaṇī varī	gulābarka himāmbha	Rosa centifolia Linn.	
306.	Śatāvārī			Asparagus racemosus	
307.	Śatāhvā	śatapuṣpā		Anethum sowa Kurz.	
308.	Śara			Saccharum munja Roxb.	
309.	Śāka			Tectona grandis Linn. f.	

1	2	3	4	5	6
310.	Sākhoṭaka			Streblus asper Lour.	
311.	Śāla		rāla śālasāra suradhūma ceṇṇālya (s.y.) ceṇṇāliya	Shorea robusta Gaertn. f.	Vateria indica Linn.
312.	Śālaparnī	amśumati		Desmodium gangeticum DC.	
313.	Śālī	sthirā	raktasāli dhānya āranāla tuṣa lāja lājā kāñjika taṇḍulāmbu dhānyāmla śukta nīra mocarasa	Oryza sativa Linn.	
314.	Śālmali	moca mocāhva		Salmalia malabarica Schott & Endl.	
315.	Śigru	śobhāñjana bahala bhaṇḍi	śigrūdbhava	Moringa pterygosperma Gaertn.	
316.	Śiriṣa			Albizzia lebeck	Benth
317.	Śimśapā			Dalbergia sissoo	Roxb.

1	2	3	4	5	6
318.	Śṛṅgātaka	śṛṅgāṭa		Trapa bispinosa Roxb.	
319.	Śuṇṭhī (dried form)	pl. see item no. 33 for col. No. 3		Zingiber officinale Rosc.	
320.	Śaileya	śaileyaka		Parmelia perlata Ach.	
321.	Śyonāka			Oroxylum indicum Vent.	
322.	Śvetacandana	ekāṅgi hima śṛīkhaṇḍa candana śṛīgandha ajāji ajāji jīraka vṛścīva vṛścīraka anantā gopasutā gopi nannāri (s.y.) sāriya saptacchada saptaparṇi saptāhvā carmasāhvā sātālā		Santalum album Linn.	
323.	Śvetajiraka			Cuminum cyminum Linn.	
324.	Śveta punarnavā			Boerhaavia verticillata Poir.	
325.	Śveta sārīvā			Hemidesmus indicus R. Br.	
326.	Saptaparna			Alstonia scholaris R. Br.	
327.	Saptalā			Euphorbia dracunculoides Lam.	
328.	Satala		srivāsa	Pinus roxburghii Sargent	

1	2	3	4	5	6
329.	Sarja		śrīnīvāsaka	Vateria indica Linn.	
330.	Sarṣapa		sarjarasa	Brassica campestris Linn.	
			gaurasarṣapa	var. rapa (Linn.) Hartm.	
			siddhārtha		
			kaṭu taila		
331.	Sahacara	bāṇa		Barleria prionitis Linn.	
		kuraṇṭaka			
		sairiyā			
		koranḍa			
		koranḍaka			
332.	Sahadevi	truṭi		Vernonia cinerea Less.	
333.	Sūkṣmailā	tuṭi		Elettaria cardamomum	
		elā		Maton.	
		elāsūkṣma			
334.	Sūraṇa	sūraṇaka		Amorphophallus campan-	
				ulatus (Roxb.) BL.	
335.	Somavalli			Sarcostemma brevistigma	Ephedra gerar-
				W. A.	diana Wall.
336.	Sthūlaclā	bhadrā		Amomum subulatum	
		bhadrailā		Roxb.	
		elā			
337.	Sthaṇḍeya				Taxus baccata
					Linn.
338.	Snuhī	sudhā	snugyagra	Euphorbia nerifolia Linn.	

1	2	3	4	5	6
		vajra snuk kallī (s.y.) spṛk			
339.	Spṛkṇā			Schizachyrum exile (Hochst) Stapf.	Delphinium zaili Aitch & Hemsl.
340.	Sruvavṛkṣa			Flacourtia indica Merr.	Gymnosporia spinosa (Forsk) Fiori
341.	Svarṇakṣīrī			Euphorbia thomsoniana Boiss	Argemone me- xicana Linn.
342.	Svarṇapatrī			Cassia angustifolia Vahl.	
343.	Hapuṣa	kapotapaṇka havuṣa		Juniperus communis Linn.	
344.	Haridrā	rajani niṣā niṣi rātri kṣaṇada doṣā		Curcuma longa Linn.	
345.	Haritaki	paimaṇjal (s.y.) abhayā kāyasthā śivā			Terminalia chebula Retz.

1	2	3	4	5	6
		pathyā vijayā abhaya rāmaṭha sahasravedhi vedhi		Ferula foetida Regel.	
346.	Hingu				
347.	Hingupatri			Ferula jaeschkeana Vatke.	
348.	Himsrā			Capparis spinosa Linn.	
349.	Hṛddhātṛī			Smilax china Linn.	
350.	Hamsapadi			Adiantum lunulatum Burm.	
351.	Hṛivera			Coleus vettiveroides K. C. Jacob.	
		tripādi haṁsapādi ambu ambhas udaka udicya jala toya bālā bālaka vāri hiruberaka iruveli (s.y.) bāla			



Section B

PLANT SOURCES OF DRUGS

Sl. No.	Botanical Name	Family	Sanskrit name
1.	<i>Abelmoschus moschatus</i> Medic. syn. <i>Hibiscus abelmoschus</i> Linn.	Malvaceae	Latākastūrī
2.	<i>Abies spectabilis</i> G. Don. syn <i>Abies webbiana</i> Lindl.	Pinaceae	Tālīśa
3.	<i>Abroma augusta</i> Linn. f.	Sterculiaceae	Pisaca-karpasa
4.	<i>Abrus precatorius</i> Linn.	Fabaceae	Guñjā
5.	<i>Abutilon indicum</i> . Linn.	Malvaceae	Atibalā
6.	<i>Acacia catechu</i> Willd.	Mimosaceae	Khadira
7.	<i>Acacia leucophloea</i> Willd.	Mimosaceae	Arimeda
8.	<i>Acacia nilotica</i> (Linn.) Willd. subsp. <i>indica</i> (Benth.) Brenan syn. <i>Acacia arabica</i> Willd. var. <i>indica</i> Benth.	Mimosaceae	Babbul
9.	<i>Acacia polycantha</i> Willd. syn. <i>Acacia suma</i> Buch. - Ham.	Mimosaceae	Śveta-khadira
10.	<i>Achyranthes aspera</i> Linn.	Amaranthaceae	Apāmārga
11.	<i>Aconitum bisma</i> (Ham.) Rapaics syn. <i>Aconitum palmatum</i> D. Don	Ranunculaceae	Prativiśā
12.	<i>Aconitum heterophyllum</i> Wall.	Ranunculaceae	Ativiśā
13.	<i>Aconitum napellus</i> Linn. syn. <i>Aconitum ferox</i> Wall. ex Springs	Ranunculaceae	Vatsanābha
14.	<i>Acorus calamus</i> Linn.	Araceae	Vacā
15.	<i>Actinopteris radiata</i> (Sw.) Link	Actinopteri- daceae	Mayūraśikhā
16.	<i>Adiantum lunulatum</i> Burm.	Adiantaceae	Haṃsapadī
17.	<i>Adina cordifolia</i> Benth. & Hook. f.	Rubiaceae	Haridru
18.	<i>Aegle marmelos</i> Corr.	Rutaceae	Bilva
19.	<i>Aerva lanata</i> Juss. ex Schult	Amaranthaceae	Goraksaganja
20.	<i>Agaricus campestris</i> Linn.	Agaricaceae	Chatraka
21.	<i>Ailanthus excelsa</i> Roxb.	Balanitaceae (Simaroubaceae)	Aralu
22.	<i>Alargium salviifolium</i> (Linn. f.) Wang.	Alangiaceae	Aṅkola

23. <i>Albizia lebbeck</i> Benth.	Mimosaceae	Śirīṣa
24. <i>Alhagi pseudalhagi</i> (Bieb.) Desv. syn. <i>Alhagi camelorum</i> Fisch.	Fabaceae	Yavāsa
25. <i>Allium cepa</i> Linn.	Alliaceae	Palāṇḍu
26. <i>Allium sativum</i> Linn.	Alliaceae	Rasona (Laśuna)
27. <i>Alocasia indica</i> (Roxb.) Schott.	Araceae	Manaka
28. <i>Aloe barbadensis</i> Mill. syn. <i>Aloe vera</i> Tourn. ex Linn.	Alliaceae	Kumāri
29. <i>Alpinia galanga</i> Willd.	Zingiberaceae	Kulañjana
30. <i>Alstonia scholaris</i> R. Br.	Apocynaceae	Saptaparnā
31. <i>Alternanthera sessilis</i> (Linn.) R. Br. ex DC.	Amaranthaceae	Matsyakṣaka
32. <i>Amaranthus spinosus</i> Linn.	Amaranthaceae	Taṇḍuliya
33. <i>Amaranthus tricolor</i> Linn.	Amaranthaceae	Māriṣa-bheda
34. <i>Amomum subulatum</i> Roxb.	Zingiberaceae	Bṛhadeḷā
35. <i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson var. <i>campanulatus</i> (Bl. ex Decne.) Sivad. syn. <i>Amorphophallus campanulatus</i> Bl. ex Decne	Araceae	Sūrana
36. <i>Anacyclus pyrethrum</i> DC.	Asteraceae	Akarkarabha
37. <i>Ananas comosus</i> (Linn.) Merr.	Bromeliaceae	Anānāsa
38. <i>Andrographis paniculata</i> nees	Acanthaceae	Bhūnimba
39. <i>Anethum graveolens</i> Linn. syn. <i>Anethum sowa</i> Kurz	Apiaceae	Satapušpa
40. <i>Angelica archangelica</i> Linn.	Apiaceae	Caṇḍā
41. <i>Angelica glauca</i> Edgew.	Apiaceae	Coraka
42. <i>Anogeissus latifolia</i> Wall.	Combretaceae	Dhava
43. <i>Anthocephalus chinensis</i> (Lamk.) A. Rich. ex Walp. syn. <i>Anthocephalus cadamba</i> Miq.	Rubiaceae	Kadamba
44. <i>Aquilaria agallocha</i> Roxb.	Thymelaeaceae	Aguru
45. <i>Areca catechu</i> Linn.	Arecaceae	Pūga
46. <i>Argemone mexicana</i> Linn.	Papaveraceae	Kaṭuparnī
47. <i>Argyrea nervosa</i> (Burm. f.) Boj. syn. <i>Argyrea speciosa</i> Sweet	Convolvulaceae	Samudra- Phalaka
48. <i>Aristolochia bracteolata</i> Lamk. syn. <i>Aristolochia bracteata</i> Retz.	Aristolochiaceae	Kittamari
49. <i>Aristolochia indica</i> Linn.	Aristolochiaceae	Iswari
50. <i>Artemisia maritima</i> Linn.	Asteraceae	Cauhāra
51. <i>Artocarpus integrifolia</i> Linn. f.	Moraceae	panasa

52. <i>Artocarpus lacucha</i> Buch.-Ham. syn. <i>Artocarpus lakoocha</i> Roxb.	Moraceae	Lakuca
53. <i>Arundo donax</i> Linn.	Poaceae	Nala
54. <i>Asparagus adscendens</i> Roxb.	Alliaceae	Mahāśatāvārī
55. <i>Asparagus racemosus</i> Willd.	Alliaceae	Śatāvārī
56. <i>Astragalus candolleanus</i> Royle	Fabaceae	Rudantī
57. <i>Atropa belladonna</i> Linn.	Solanaceae	Suci
58. <i>Azadirachta indica</i> A. Juss.	Meliaceae	Nimba
59. <i>Bacopa monnieri</i> (Linn.) Pennel	Scrophulariaceae	Brāhmī
60. <i>Balanites aegyptiaca</i> (Linn.) Delile	Balanitaceae	Ingudi
61. <i>Baliospermum montanum</i> Muell. Arg.	Euphorbiaceae	Danū
62. <i>Bambusa arundinacea</i> Willd.	Poaceae	Vamśa
63. <i>Barleria prionitis</i> Linn.	Acanthaceae	Śaireyaka
64. <i>Barringtonia acutangula</i> (Linn.) Gaertn.	Barringtoniaceae	Nicula (Hijjal)
65. <i>Basella rubra</i> Linn.	Burseraceae	Upodikā
66. <i>Bauhinia variegata</i> Linn.	Caesalpiniaceae	Kāñcanāra
67. <i>Benincasa hispida</i> (Thunb.) Cogn.	Curcubitaceae	Kuśmāṇḍa
68. <i>Berberis aristata</i> DC.	Berberidaceae	Daruharidrā
69. <i>Bergenia ciliata</i> Starnb. syn. <i>Bergenia ligulata</i> (Wall.) Engl.	Saxifragaceae	Pāśāṇa-Bheda
70. <i>Betula utilis</i> D. Don	Betulaceae	Bhūrja
71. <i>Blumea lacera</i> DC.	Asteraceae	Kukundara
72. <i>Boerhavia diffusa</i> Linn.	Nyctaginaceae	Punarnavā
73. <i>Boerhavia verticillata</i> Poir.	Nyctaginaceae	Punarnavā- Bhed
74. <i>Bombax ceiba</i> Linn. syn. <i>Salmaal</i> <i>malabarica</i> Schott & Endl.	Bombacaceae	Śālmālī
75. <i>Borassus flabilifer</i> Linn.	Arecaceae	Tala
76. <i>Boswellia serrata</i> Roxb. ex Coleb.	Burseraceae	Śallakī
77. <i>Brassica napus</i> Linn. var. <i>glauca</i> (Roxb.) Schultz. syn. <i>B. campestris</i> Linn. var. <i>sarson</i> Prain.	Brassicaceae	Sarṣapa
78. <i>Bryophyllum pinnatum</i> (Lam.) Kurz	Crassulaceae	Parṇabija
79. <i>Buchanania lanzan</i> Spreng.	Anacardiaceae	Priyāla
80. <i>Butea monosperma</i> (Lam.) Kuntze	Favaceae	Palāśa
81. <i>Caesalpinia bonduc</i> (Linn.) Roxb. syn. <i>Caesalpinia crista</i> Linn.	Caesalpiniaceae	Kanta karañja
82. <i>Caesalpinia digyna</i> Rottl.	Caesalpiniaceae	Vakeri

83. <i>Caesalpinia sappan</i> Linn.	Caesalpiniaceae	Paṭraṅga
84. <i>Cajanus cajan</i> (Linn.) Mill.	Fabaceae	Ādhaki
85. <i>Callicarpa macrophylla</i> Vahl	Verbenaceae	Priyaṅgu
86. <i>Calophyllum inophyllum</i> Linn.	Clusiaceae	Punnāga
87. <i>Calotropis gigantea</i> R. Br. ex Ait.	Asclepiadaceae	Alarka
88. <i>Calotropis procera</i> (Ait.) R. Br.	Asclepiadaceae	Arka
89. <i>Cannabis sativa</i> Linn.	Cannabinaceae	Bhaṅga
90. <i>Capparis decidua</i> Edgew.	Capparidaceae	Karīra
91. <i>Capparis sepiaria</i> Linn.	Capparidaceae	Himśra
92. <i>Capsicum annuum</i> Linn.	Solanaceae	Laṅka
93. <i>Cardiospermum halicacabum</i> Linn.	Sapindaceae	Karṇasphota
94. <i>Careya arborea</i> Roxb.	Lecythidaceae	Kumbhi
95. <i>Carica papaya</i> Linn.	Caricaceae	Eraṇḍkarkarṇi
96. <i>Carissa carandas</i> Linn.	Apocynaceae	Karamarada
97. <i>Carthamus tinctorius</i> Linn.	Asteraceae	Kusumbha
98. <i>Carum carvi</i> Linn.	Apiaceae	Kṛṣṇa-jīraka
99. <i>Cascabela thevetia</i> (Linn.) Lippold syn. <i>Thevetia neriifolia</i> Juss. ex Steud.	Apocynaceae	Pita-karavīra
100. <i>Cassia abus</i> Linn.	Caesalpiniaceae	Cakṣusya
101. <i>Cassia auriculata</i> Linn.	Caesalpiniaceae	Avartaki
102. <i>Cassia fistula</i> Linn.	Caesalpiniaceae	Āragvadha
103. <i>Cassia occidentalis</i> Linn.	Caesalpiniaceae	Kāsamarda
104. <i>Cassia senna</i> Linn. syn. <i>Cassia angustifolia</i> Vahl	Caesalpiniaceae	Svaranapatttri
105. <i>Cassia tora</i> Linn.	Caesalpiniaceae	Cakramarda
106. <i>Catharanthus roseus</i> (Linn.) G. Don syn. <i>Vinca rosea</i> Linn.	Apocynaceae	Sadāpuṣpa
107. <i>Catunaregum spinosa</i> (Thunb.) Tirv. syn. <i>Randia dumetorum</i> (Retz.) Poir.	Rubiaceae	Madana
108. <i>Cedrus deodara</i> (Roxb.) Loud.	Pinaceae	Devadāru
109. <i>Celastrus paniculatus</i> Willd.	Celastraceae	Jyotiṣmatī
110. <i>Centalla asiatica</i> (Linn.) Urban	Apiaceae	Maṇḍukaparnī
111. <i>Centipeda minima</i> (Linn.) A. Baun. & Aschers	Asteraceae	Kṣavaka
112. <i>Ceratophyllum demersum</i> Linn.	Ceratophyllaceae	Śaivāla
113. <i>Chlorophytum tuberosum</i> Baker	Alliaceae	Muśālī
114. <i>Cicer arietinum</i> Linn.	Fabaceae	Caṇaka
115. <i>Cichorium intybus</i> Linn.	Asteraceae	Kasani
116. <i>Cinnamomum camphora</i> Ness & Eberm.	Lauraceae	Karpūra

117. <i>Cinnamomum tamala</i> Nees & Eberm.	Lauraceae	Tvakpatra
118. <i>Cinnamomum verum</i> Presl syn. <i>Cinnamomum zeylanicum</i> Breyn.	Lauraceae	Tvak
119. <i>Cissampelos pareira</i> Linn. var. <i>hirsuta</i> (Buch. - Ham. ex DC. Forman syn. <i>Cissampelos pareira</i> Linn.	Menispermaceae	Pāṭhā
120. <i>Cissus quadrangularis</i> Linn.	Vitaceae	Ashthi-saṃhāra
121. <i>Citrullus colocynthis</i> Schrad.	Cucurbitaceae	Indravaruṇī
122. <i>Citrus limon</i> (Linn.) Burm. f.	Rutaceae	Jambīra
123. <i>Citrus medica</i> Linn.	Rutaceae	Bijapūra (Mātuluṅga)
124. <i>Claviceps purpurea</i> (Fr.) Tul.	Hypocreaceae	Annamaya
125. <i>Cleome gynandra</i> Linn. syn. <i>Gynandropsis gynandra</i> (Linn.) Briquet	Capparidaceae	Tilaparnī
126. <i>Clerodendrum infortunatum</i> Linn.	Verbenaceae	Bhaṇḍīra
127. <i>Clerodendrum phlomidis</i> Linn. f.	Verbenaceae	Tarkari
128. <i>Clerodendrum serratum</i> (Linn.) Moon	Verbenaceae	Bhāraṅgi
129. <i>Clitoria ternatea</i> Linn.	Fabaceae	Aparājita
130. <i>Coccinia grandis</i> (Linn.) Voigt syn. <i>Coccinia indica</i> W. & A.	Cucurbitaceae	Bimbī
131. <i>Cocculus hirsutus</i> (Linn.) Diels	Menispermaceae	Chilahinta
132. <i>Cocos nucifera</i> Linn.	Arecaceae	Nārikela
133. <i>Coleus amboinicus</i> Lour.	Laminaceae	Paṇa yavāni
134. <i>Commiphora myrrha</i> (Nees) Engl.	Burseraceae	Bola
135. <i>Commiphora wightii</i> (Arn.) Bhand.	Burseraceae	Guggulu
136. <i>Convolvulus microphyllus</i> Sieb. ex Spreng syn. <i>Convolvulus pluricaulis</i> Choisy	Convolvulaceae	Saṅkhaṇḍī
137. <i>Coptis teeta</i> Wall.	Ranunculaceae	Pitamūla (Mamira)
138. <i>Cordia dichotoma</i> Forst. f.	Boraginaceae	Śleṣmātaka
139. <i>Coriandrum sativum</i> Linn.	Apiaceae	Dhānyaka
140. <i>Coscinium fenestratum</i> Colebr.	Menispermaceae	Kalambak
141. <i>Costus speciosus</i> (Koenig) Sm.	Zingiberaceae	Kebuka

142. <i>Crateva magna</i> (Lour.) DC. syn. <i>Crateva nurvala</i> Buch. - Ham.	Capparidaceae	Varuṇa
143. <i>Crinum latifolium</i> Linn.	Amaryllidaceae	Sudarsana
144. <i>Crocus sativus</i> Linn	Iridaceae	Kuṅkuma
145. <i>Crotalaria juncea</i> Linn.	Fabaceae	Śaṇa
146. <i>Crotalaria verrucosa</i> Linn.	Fabaceae	Śaṇa-bhed
147. <i>Croton tiglium</i> Linn.	Euphorbiaceae	Jayapala
148. <i>Cryptolepis buchananii</i> Roem. & Schult	Asclepiadaceae	Kṛṣṇa-sārivā
149. <i>Ctenolepis cerasiformis</i> Naud.	Cucurbitaceae	Śaṅkhini
150. <i>Cucumis melo</i> var. <i>utilissimus</i> Duthie & Fulier	Cucurbitaceae	Ervāru
151. <i>Cucumis sativus</i> Linn.	Cucurbitaceae	Trapusa
152. <i>Cuminum cyminum</i> Linn.	Apiaceae	Jiraka
153. <i>Curculigo orchoides</i> Gaertn.	Amaryllidaceae	Talmuli
154. <i>Cursuma amada</i> Roxb.	Zingiberaceae	Āmrāgandhi haridrā
155. <i>Curcuma angustifolia</i> Roxb.	Zingiberaceae	Tavakṣira
156. <i>Curcuma aromatica</i> Salisb.	Zingiberaceae	Vanharidrā
157. <i>Curcuma longa</i> Linn.	Zingiberaceae	Haridrā
158. <i>Curcuma zedoria</i> Rosc.	Zingiberaceae	Karcūra
159. <i>Cynodon dactylon</i> Pers.	Poaceae	Dūruva
160. <i>Cyperus rotundus</i> Linn.	Cyperaceae	Musta
161. <i>Daemonorops draco</i> Blume	Arecaceae	Raktanriyāsa
162. <i>Dalbergia lanceolaria</i> Linn. f.	Fabaceae	Gorakṣa
163. <i>Dalbergia sissoo</i> Roxb.	Fabaceae	Siṁsapā
164. <i>Datura metel</i> Linn.	Solanaceae	Dhatūra
165. <i>Datura stramonium</i> Linn.	Solanaceae	Kṛṣṇa- dhatūra
166. <i>Dendrophthoe falcata</i> (Linn. f.) Ettings	Loranthaceae	Bandāka
167. <i>Derris indica</i> (Lamk.) Bennet syn. <i>Pongamia pinnata</i> Pierre	Fabaceae	Karaṇja
168. <i>Desmodium gangeticum</i> DC.	Fabaceae	Śālaparṇi
169. <i>Desmostachya bipinnata</i> Stapf.	Poaceae	Kuśa
170. <i>Dichrostachys cineria</i> W. & A.	Araceae	Virataru
171. <i>Digitalis purpurea</i> Linn.	Scrophulariaceae	Hṛtpatri
172. <i>Diospyros peregrina</i> (Gaertn.) Gurke	Ebenaceae	Tinduka
173. <i>Dipterocarpus turbinatus</i> Gaertn. f.	Dipterocarpaceae	Aśvakarṇa
174. <i>Dolichos biflorus</i> Linn.	Papilionaceae	Kulattha

175. <i>Drypetes roxburghii</i> (Wall.) Hurusawa syn. <i>Putranjiva</i> <i>roxburghii</i> Wall.	Euphorbiaceae	Putrañjivaka
176. <i>Eclipta prostata</i> Linn. syn. <i>Eclipta</i> <i>alba</i> Hassk.	Compositae	Bhr̥ṅgarāja
177. <i>Elaeocarpus sphaericus</i> (Gaertn.) K. Schum. syn. <i>Elaeocarpus</i> <i>ganitrus</i> Roxb.	Elaeocarpaceae	Rudrākṣa
178. <i>Elettaria cardamomum</i> Maton	Zingiberaceae	Elā
179. <i>Embelia ribes</i> Burm. f.	Myrsinaceae	Viḍaṅga
180. <i>Embllica officinalis</i> Gaertn.	Euphorbiaceae	Āmalaki
181. <i>Enicostema hyssopifolium</i> (Willd.) verdoorn syn. <i>Enicostema littorale</i> Blume	Gentianaceae	Māmajjaka
182. <i>Erianthus munja</i> Jesw. syn. <i>Saccharum munja</i> Roxb.	Poaceae	Śara
183. <i>Erythrina variegata</i> Linn. var. <i>variegata</i> syn. <i>Erythrina indica</i> Lam.	Fabaceae	Pāribhadra
184. <i>Eucalyptus globulus</i> Labill	Myrtaceae	Tailapaṇṇa
185. <i>Euphorbia dracunculoides</i> Lam.	Euphorbiaceae	Saptalā
186. <i>Euphorbia neriifolia</i> Linn.	Euphorbiaceae	Snuhī
187. <i>Euphorbia prostata</i> Linn.	Euphorbiaceae	Dugdḥikā- bhed
188. <i>Euphorbia thomsoniana</i> Boiss.	Euphorbiaceae	Svarṇakṣirī
189. <i>Euphorbia thymifolia</i> Linn.	Euphorbiaceae	Dugdḥikā
190. <i>Euryale ferox</i> Salisb.	Nymphaeaceae	Makhāṇna
191. <i>Fagonia cretica</i> Linn.	Zygophyllaceae	Dhanvayāsa
192. <i>Ferula narthex</i> Boiss.	Apiaceae	Hīṅgu
193. <i>Ficus arnottiana</i> Miq.	Moraceae	Nandī Vṛkṣa
194. <i>Ficus benghalensis</i> Linn.	Moraceae	Vaṭa
195. <i>Ficus carica</i> Linn.	Moraceae	Phalgu (Añjira)
196. <i>Ficus hispida</i> Linn. f.	Moraceae	Kākodumbara
197. <i>Ficus lacor</i> Buch.-Ham.	Moraceae	Plakṣa
198. <i>Ficus racemosa</i> Linn. syn. <i>Ficus glomerata</i> Roxb.	Moraceae	Udumbara
199. <i>Ficus religiosa</i> Linn.	Moraceae	Aśvattha
200. <i>Flacourtia indica</i> (Burm. f.) Merr.	Flacourtiaceae	Vikaṅkat
201. <i>Foeniculum vulgare</i> Mill.	Apiaceae	Miśreyā
202. <i>Fritillaria roylei</i> Hook.	Alliaceae	Kṣīra-kākoli
203. <i>Fumaria parviflora</i> Lam.	Papaveraceae	Parpaṭa

204. <i>Garcinia indica</i> Choisy	Clusiaceae	Vrkṣāmla
205. <i>Garcinia morella</i> Desr.	Clusiaceae	Kaṇkuṣṭha
206. <i>Garcinia pedunculata</i> Roxb.	Guttiferae	Amlavetasa
207. <i>Gardenia gummifera</i> Linn. f.	Rubiaceae	Nadihiṅgu
208. <i>Gentiana kurroo</i> Royle.	Gentianaceae	Trāyamāṇa
209. <i>Gloriosa superba</i> Linn.	Alliaceae	Lāṅgali
210. <i>Glycyrrhiza glabra</i> Linn.	Fabaceae	Yaṣṭimadhu
211. <i>Gmelina arborea</i> Roxb.	Verbenaceae	Gambhārī
212. <i>Gossypium herbaceum</i> Linn.	Malvaceae	Karpasa
213. <i>Grewia asiatica</i> Linn.	Tiliaceae	Paruṣaka
214. <i>Grewia hirsuta</i> Vahl.	Tiliaceae	Nāgabalā
215. <i>Grewia tenax</i> (Forssk.) Fiori syn. <i>Grewia populifolia</i> Vahl.	Tiliaceae	Gāṅgeruki
216. <i>Grewia tiliifolia</i> Vahl.	Tiliaceae	Dhanvana
217. <i>Gymnema sylvestre</i> R. Br.	Asclepiadaceae	Meṣaśṛṅgi
218. <i>Habenaria intermedia</i> D. Don	Orchidaceae	Rddhi
219. <i>Habenaria intermedia</i> D. Don	Orchidaceae	Vrddhi
220. <i>Hedychium spicatum</i> Buch. - Ham.	Zingiberaceae	Śaṭī
221. <i>Helicteres isora</i> Linn.	Sterculiaceae	Āvartanī
222. <i>Hemidesmus indicus</i> R. Br.	Asclepiadaceae	Sārivā
223. <i>Hibiscus rosa-sinensis</i> Linn.	Malvaceae	Japā
224. <i>Hiptage benghalensis</i> Kurz.	Malpighiaceae	Mādhavī
225. <i>Holarrhena antidysenterica</i> Wall.	Apocynaceae	Kuṭaja
226. <i>Holoptelea integrifolia</i> Planch.	Ulmaceae	Cirabilva
227. <i>Hordeum vulgare</i> Linn.	Poaceae	Yava
228. <i>Hydnocarpus pentandra</i> (Buch.-Ham.) Oken syn. <i>Hydnocarpus laurifolia</i> (Dennst.) Sleumer	Flacourtiaceae	Tuvarak
229. <i>Hygrophila schullia</i> (Ham.) M. R. & S. M. Almeida syn. <i>Asteracantha longifolia</i> Nees	Acanthaceae	Kokilākṣa
230. <i>Hyoscyamus niger</i> Linn.	Solanaceae	Pārsika-yavānī
231. <i>Imperata cylindrica</i> (Linn.) Raeus.	Poaceae	Darbha
232. <i>Indigofera tinctoria</i> Linn.	Fabaceae	Nilīnī
233. <i>Inula racemosa</i> Hook. f.	Asteraceae	Puṣkaramūla
234. <i>Ipomoea digitata</i> Linn.	Convolvulaceae	Kṣira-vidāri
235. <i>Ipomoea nil</i> (Linn.) Roth	Convolvulaceae	Kṛṣṇabīja
236. <i>Jasminum grandiflorum</i> Linn.	Oleaceae	Jāti
237. <i>Jasminum sambac</i> Linn.	Oleaceae	Mallikā
238. <i>Jatropha glandulifera</i> Roxb.	Euphorbiaceae	Dravantī
239. <i>Juglans regia</i> Linn.	Juglandaceae	Akṣoṭa

240. <i>Justicia adhatoda</i> Linn. syn. <i>Adhatoda vasica</i> Nees	Acanthaceae	Vāsā
241. <i>Lagenaria siceraria</i> (Mol.) Standil.	Cucurbitaceae	Ikṣvāku
242. <i>Lawsonia inermis</i> Linn.	Lythraceae	Madayantī
243. <i>Lens culinaris</i> Medic.	Papilionaceae	Masūra
	Fabaceae	
244. <i>Lepidium sativum</i> Linn.	Brassicaceae	Candrasura
245. <i>Leptadenia reticulata</i> W. & A.	Asclepiadaceae	Jivantī
246. <i>Leucas aspera</i> Spreng.	Laniaceae	Droṇapuspī- bheda
247. <i>Leucas cephalotes</i> Spreng.	Laniaceae	Droṇapuspī
248. <i>Lilium polyphyllum</i> D. Don.	Alliaceae	Kākoli
249. <i>Limonia acidissima</i> Linn. syn. <i>Feronia limonia</i> (Linn.) Swingle	Rutaceae	Kapittha
250. <i>Linum usitatissimum</i> Linn.	Linaceae	Atasi
251. <i>Liquidambar orientalis</i> Miller	Hamamelidaceae	Turuṣka
252. <i>Litsea glutinosa</i> (Lour) C. B. Robinson	Lauraceae	Medasaka
253. <i>Lodicea maldivica</i> (Poir.) Pers.	Arecaceae	Samudra- nārikel
254. <i>Luffa acutangula</i> (Linn.) Roxb.	Cucurbitaceae	Kośātaki
255. <i>Luffa cylindrica</i> (Linn.) M. J. Roem.	Cucurbitaceae	Dhāmāgarva
256. <i>Luffa echinata</i> Roxb.	Cucurbitaceae	Devadāli
257. <i>Madhuca indica</i> J. F. Gmel.	Sapotaceae	Madhuka
258. <i>Malaxis acuminata</i> D. Don. syn. <i>Microstylis wallichii</i> Lindl.	Orchidaceae	Rṣabhaka
259. <i>Malaxis muscifera</i> (Lindley) Kuntze syn. <i>Microstylis muscifera</i> Ridley	Orchidaceae	Jivaka
260. <i>Mallotus philippinensis</i> Muell. - Arg.	Euphorbiaceae	Kampillaka
261. <i>Mangifera indica</i> Linn.	Anacardiaceae	Āmra
262. <i>Marsdenia tenacissima</i> W. & A.	Apiaceae	Mūrvā
263. <i>Marsilea minuta</i> Linn.	Marsileaceae	Suniṣaṇṇaka
264. <i>Melia azedarach</i> Linn.	Meliaceae	Mahānimba
265. <i>Mentha spicata</i> Linn.	Lamiaceae	Pūtiha (Podina)
266. <i>Merremia emarginata</i> (Burn. f.) Hallier f. syn. <i>Merremia</i> <i>gangetica</i> (Linn.) Cufod.	Convolvulaceae	Musakarni
267. <i>Mesua nagassarium</i> (Burm. f.) Kosterm syn. <i>Mesua ferrea</i> Linn.	Clusiaceae	Nāgakeśara

299. <i>Pandanus fascicularis</i> Lam.	Pandanaceae	Ketaki
300. <i>Papaver somniferum</i> Linn.	Papaveraceae	Ahiphena
301. <i>Parmelia perlata</i> Ach.	Parmeliaceae	Saileya
302. <i>Paspalum scrobiculatum</i> Linn.	Poaceae	Kodrava
303. <i>Pedaliium murex</i> Linn.	Pedaliaceae	Br̥hatgokṣura
304. <i>Pentatropis capensis</i> (Linn. f.) Bullock syn. <i>Pentatropis</i> <i>microphylla</i> (Roxb.) W. & A.	Asclepiadaceae	Kākanasa
305. <i>Peristrophe paniculata</i> (Forssk.) Brummitt syn. <i>Peristrophe</i> <i>bicalyculata</i> Nees	Acanthaceae	Kākajāṅghā
306. <i>Phoenix sylvestris</i> Roxb.	Arecaceae	Kharjūra
307. <i>Phyla nodiflora</i> (Linn.) Greene syn. <i>Lippia nodiflora</i> A. Rich.	Verbenaceae	Jalapipalī
308. <i>Picrorhiza kurroa</i> Royle ex Benth.	Scrophulariaceae	Kaṭuka
309. <i>Pinus roxburghii</i> Sargent	Pinaceae	Sarala
310. <i>Piper betle</i> Linn.	Piperaceae	Tāmbūla
311. <i>Piper cubeba</i> Linn. f.	Piperaceae	Kaṅkola
312. <i>Piper longum</i> Linn.	Piperaceae	Pippalī
313. <i>Piper nigrum</i> Linn.	Piperaceae	Marica
314. <i>Pistacia chinensis</i> Bunge subsp. <i>integerrima</i> (Stewart) Rech. f. syn. <i>Pistacia integerrima</i> Sewart	Anacardiaceae	Karkaṣṣrīgī
315. <i>Pistia stratiotes</i> Linn.	Araceae	Jalakumbhī
316. <i>Plantago ovata</i> Forssk.	Plantaginaceae	Īśagola
317. <i>Pluchea lanceolata</i> Oliver & Hiern.	Asteraceae	Rāsnā
318. <i>Plumbago zeylanicum</i> Linn.	Plumbaginaceae	Citraka
319. <i>Podophyllum hexandrum</i> Royle.	Berberidaceae	Vanatrapusi
320. <i>Polygonatum cirrhifolium</i> Royle.	Alliaceae	Mahāmeda
321. <i>Polygonatum verticillatum</i> All.	Alliaceae	Meda
322. <i>Portulaca oleracea</i> Linn.	Portulacaceae	Kozuppa (Loṇika)
323. <i>Premna serratifolia</i> Linn. syn. <i>Premna integrifolia</i> Linn.	Verbenaceae	Agnimantha
324. <i>Prosopis cineraria</i> Druce	Mimosaceae	Śamī
325. <i>Prunus avium</i> Linn.	Rosaceae	Elavāluka
326. <i>Prunus cerasoides</i> D. Don	Rosaceae	Padmaka
327. <i>Psoralea corylifolia</i> Linn.	Fabaceae	Bākucī
328. <i>Pterocarpus marsupium</i> Roxb.	Fabaceae	Asana
329. <i>Pterocarpus santalinus</i> Linn.	Fabaceae	Rakta- candana
330. <i>Pterospermum acerifolium</i> Willd.	Sterculiaceae	Mucukunda

331. <i>Pueraria tuberosa</i> DC.	Fataceae	Vidārī
332. <i>Punica granatum</i> Linn.	Punicaceae	Dāḍima
333. <i>Quercus infectoria</i> Oliv.	Fagaceae	Māyaphal
334. <i>Ranunculus sceleratus</i> Linn.	Ranunculaceae	Kaṇḍīra
335. <i>Raphanus sativus</i> Linn.	Brassicaceae	Mūlaka
336. <i>Rauvolfia serpentina</i> Benth. ex Kurz	Apocynaceae	Sarpagandhā
337. <i>Rheum australe</i> D. Don syn. - <i>Rheum emodi</i> Wall. ex Meim	Polygonaceae	Amlaparnī
338. <i>Rhinacanthus nasutus</i> (Linn.) Kurz	Acanthaceae	Yutiparnī
339. <i>Rhus parviflora</i> Roxb.	Anacardiaceae	Tintīḍika
340. <i>Ricinus communis</i> Linn.	Euphorbiaceae	Eraṇḍa
341. <i>Rosa centifolia</i> Linn.	Rosaceae	Satapatrikā
342. <i>Rubia cordifolia</i> Linn.	Rubiaceae	Mañjiṣṭha
343. <i>Saccharum officinarum</i> Linn.	Poaceae	Ikṣu
344. <i>Saccharum spontaneum</i> Linn.	Poaceae	Kāsa
345. <i>Salacia chinensis</i> Linn.	Hippocrateaceae	Saptacakra
346. <i>Salix caprea</i> Linn.	Salicaceae	Vetasa
347. <i>Salix tetrasperma</i> Roxb.	Salicaceae	Jalvetasa
348. <i>Salvadora persica</i> Linn.	Salvadoraceae	Pīlu
349. <i>Santalum album</i> Linn.	Santalaceae	Candana
350. <i>Sapindus emarginatus</i> Vahl syn. <i>Sapindus trifolius</i> Linn.	Sapindaceae	Ariṣṭaka
351. <i>Saraca asoca</i> (Roxb.) De Wilde	Caesalpiniaceae	Aśoka
352. <i>Sarcostemma acidum</i> (Roxb.) Voight syn. <i>Sarcostemma</i> <i>brevistigma</i> W. & A.	Asclepiadaceae	Somavallī
353. <i>Saussurea lappa</i> C. B. Clarke	Asteraceae	Kuṣṭha
354. <i>Schleichera oleosa</i> (Lour.) Oken.	Sapindaceae	Kośāmra
355. <i>Scirpus kysoor</i> Roxb.	Cyperaceae	Kaseru
356. <i>Semecarpus anacardium</i> Linn. f.	Anacardiaceae	Bhallātaka
357. <i>Sesamum orientale</i> Linn. syn. <i>Sesamum indicum</i> Linn.	Pedaliaceae	Tila
358. <i>Sesbania grandiflora</i> Pers.	Fabaceae	Agastya
359. <i>Sesbania sesban</i> Merrill	Fabaceae	Jayanū
360. <i>Shorea robusta</i> Gaertn. f.	Dipterocarpaceae	Sāla
361. <i>Sida cordata</i> (Burm. f.) Borss. Waalk.	Malvaceae	Rajbalā
362. <i>Sida cordifolia</i> Linn.	Malvaceae	Balā
363. <i>Sida rhombifolia</i> Linn.	Malvaceae	Mahābalā
364. <i>Smilax china</i> Linn.	Alliaceae	Dwipāntara- Vacā

365. <i>Solanum ferox</i> Linn. syn. <i>Solanum indicum</i> Linn.	Solanaceae	Bṛhatī
366. <i>Solanum nigrum</i> Linn.	Solanaceae	Kākamācī
367. <i>Solanum virginianum</i> Linn. syn. <i>Solanum xanthocarpum</i> Schrud. & Wendl.	Solanaceae	Kaṇṭakāri
368. <i>Soyimida febrifuga</i> A. Juss.	Meliaceae	Māmsarohiṇi
369. <i>Sphaeranthus indicus</i> Linn.	Asteraceae	Muṇḍī
370. <i>Spondias pinnata</i> Kurz syn. <i>Spondias mangifera</i> Willd.	Anacardiaceae	Āmrātaka
371. <i>Stereospermum chelonoides</i> (Linn. f.) DC. syn. <i>Stereospermum suaveolens</i> DC.	Bignoniaceae	Pāṭala
372. <i>Streblus asper</i> Lour.	Moraceae	Śākhoṭaka
373. <i>Strychnos nux. vomica</i> Linn.	Loganiaceae	Kupīlu
374. <i>Strychnos potatorum</i> Linn.	Loganiaceae	Kataka
375. <i>Styrax officinale</i> Linn.	Styracaceae	Silhaka
376. <i>Swertia chirayita</i> (Roxb. ex Flem.) Karst. syn. <i>Swerita chirata</i> C. B. Clarke	Gentianaceae	Kirātātika
377. <i>Symplocos racemosa</i> Roxb.	Symplocaceae	Lodhra
378. <i>Syzygium aromaticum</i> (Linn.) Merr. & Perry	Myrtaceae	Lavaṅga
379. <i>Syzygium cuminii</i> (Linn.) Skeels	Myrtaceae	Jambū
380. <i>Tagetes erecta</i> Linn.	Asteraceae	Jhaṇḍu
381. <i>Tamarindus indica</i> Linn.	Caesalpiniaceae	Amlikā
382. <i>Tamarix indica</i> Willd.	Tamaricaceae	Jhāvuka
383. <i>Taraxacum officinale</i> Weber ex. Wiggers	Asteraceae	Dugdhapheṇī
384. <i>Taxus baccata</i> Linn.	Taxaceae	Sthouṇeyaka
385. <i>Tecomella undulata</i> Seem. syn. <i>Tecoma undulata</i> G. Don	Bignoniaceae	Rohitaka
386. <i>Tectona grandis</i> Linn. f.	Verbenaceae	Śāka
387. <i>Tehrosia purpurea</i> (Linn.) Pers.	Fabaceae	Sarpūṅkha
388. <i>Teramnus labialis</i> Spreng.	Fabaceae	Māṣaparnī
389. <i>Terminalia arjuna</i> (Roxb.) W. & A.	Combretaceae	Arjuna
390. <i>Terminalia bellirica</i> Roxb.	Combretaceae	Bibhitaka
391. <i>Terminalia chebula</i> Retz.	Combretaceae	Haritaki
392. <i>Thymus seryllum</i> Linn.	Lamiaceae	Ajagandhā
393. <i>Tinospora cordifolia</i> (Willd.) Miers.	Menispermaceae	Guḍūci
394. <i>Trachyspermum ammi</i> (Linn.) Spraque	Apiaceae	Yavāni

395. <i>Tragia involucrata</i> Linn.	Euphorbiaceae	Vṛścikālī
396. <i>Trapa natans</i> Linn. var. <i>bispinosa</i> (Roxb.) Makino syn. <i>Trapa bispinosa</i> Roxb.	Trapaceae	Śrngāṭaka
397. <i>Trianthema portulacastrum</i> Linn.	Aizoaceae	Varṣābhū
398. <i>Tribulus terrestris</i> Linn.	Zygophyllaceae	Gokṣūra
399. <i>Trichodesma indicum</i> R. Br.	Boraginaceae	Adhaḥpuṣpī
400. <i>Trichosanthes dioica</i> Roxb.	Cucurbitaceae	Paṭola
401. <i>Trigonella foenum-graecum</i> Linn.	Fabaceae	Methika
402. <i>Typha australis</i> K. Schum. & Thonn.	Thpfaceae	Gundra
403. <i>Uraria picta</i> Desv.	Fabaceae	Prsniparnī
404. <i>Urginea indica</i> Kunth.	Alliaceae	Vanapalāṇḍu
405. <i>Vallisneria spiralis</i> (L.) Kuntze syn. <i>Vallisneria spiralis</i> Spreng.	Apocynaceae	Āsphoṭa
406. <i>Vateria indica</i> Linn.	Dipterocarpaceae	Sarja
407. <i>Vernonia anthelmintica</i> (Linn.) Willd. syn. <i>Centratherum</i> <i>anthelminticum</i> Kuntze	Asteraceae	Aranya-jiraka
408. <i>Vernonia cinerea</i> Less.	Asteraceae	Sahadevi
409. <i>Vetiveria zizanioides</i> (Linn.) Nash	Poaceae	Uṣīra
410. <i>Vigna mungo</i> (Linn.) Hepper syn. <i>Phaseolus mungo</i> Linn.	Fabaceae	Māṣa
411. <i>Vigna radiata</i> (Linn.) Wilczek syn. <i>Phaseolus radiatus</i> Linn.	Fabaceae	Mudga
412. <i>Vigna trilobata</i> (Linn.) Verdcourt syn. <i>Phaseolus trilobatus</i> (Linn.) Schreb.	Fabaceae	Mudga parṇī
413. <i>Vitex negundo</i> Linn.	Verbenaceae	Nirguṇḍī
414. <i>Vitis vinifera</i> Linn.	Vitaceae	Drākṣā
415. <i>Withania somnifera</i> (Linn.) Dunal	Solanaceae	Aśvagandhā
416. <i>Woodfordia fruticosa</i> Kurz	Lythraceae	Dhātakī
417. <i>Zanthoxylum armatum</i> DC.	Rutaceae	Tumburu
418. <i>Zingiber officinale</i> Roxb.	Zingiberaceae	Ārdraka
419. <i>Zingiber officinale</i> Roxb. (Dry)	Zingiberaceae	Śuṇṭhī
420. <i>Ziziphus xylopyrus</i> (Retz.) Willd.	Rhamnaceae	Ghoṇṭā
421. <i>Ziziphus mauritiana</i> Lamk. syn. <i>Ziziphus jujuba</i> Lam.	Rhamnaceae	Bādara

Source : The Ayurvedic Formulary of India, Govt. of India, Deptt. of Health./I.S.M., Ministry of Health & Family Welfare, New Delhi, Part I, 1978 and Part II.



PHARMACOLOGICAL INDICATION OF DRUGS

Medhya <i>promotes memory</i>	Devadāru
Maṇḍūkapaṇṇī	Medāsaka
Brāhmi (āindrī)	Mucakunda
Śankhapuṣpī	Gorakṣa
Jyotiṣmatī	Ākṣepajanana
Kūṣmāṇḍa	Kupīlu
Ustukhuḍḍusa	Ākṣepaśamana
Madakāri	Ūdasaliba
Ahiphena	Bhūrjapatra
Bhaṅgā	Cakṣuṣya
Sajñāsthāpana	Tiktamūlā (Mamīra)
Vacā	Pītarāṅgā
Jaṭāmāṁsī	Cakṣuṣyā
Coraka	Kataka
Nidrājanana	Karṇya
Sarpagandhā	Sudarśana
Vedanāsthāpana <i>analgesic</i>	Pāribhadra
Vacā	Nasya
Jaṭāmāṁsī	Kṣavaka
Rāsnā	Rasya
Kadamba	Meṣaśṛṅgī
Padmaka	Tvacya
Vetasa	Svedajanana
Jalavetasa	Vatsanābha
Sūcī	Svedopaga
Parasīka yavānī	Śobhāñjana
Guggulu	Keśya
Eraṇḍa	Nārikela
Gandhaprasārīṇī	Tila
Tagara	Bhṅgarāja
Nirguṇḍī	Nilīnī
Palāṇḍu	Vidāhi
Rasona	Rājikā

Tilaparnī
 Snehopaga
 Drākṣā
 Śleṣmātaka
 Varṇya
 Kuṅkuma
 Ketaka
 Kaṇḍūghna
 Karaṇja
 Kośāmra
 Nimba
 Sarṣapa
 Jayantī
 Araṇya jiraka
 Kuṣṭhaghna
 Khadira
 Haridrā
 Vanaharidrā
 Āmraghandhi haridrā
 Bhallātaka
 Āragvadha
 Tuvaraka
 Bākucī
 Jātī
 Madagantikā
 Kakodumbara
 Saireyaka
 Cakramarda
 Yūthiparnī
 Udardapraśamana
 Tinduka
 Priyāla
 Hr̥dya
 Arjuna
 Karpūra
 Hr̥tpatrī
 Vanapalāṇḍu
 Tāmbūla
 Karavīra

Pīta karavīra
 Taruṇī
 Hr̥dayottejaka
 Kaphika (Coffea)
 Raktabhāraśāmaka
 Rudrākṣa
 Śothahara
 Agnimantha
 Pāṭalā
 Gambhārī
 Mānakanda
 Hīnsrā
 Adhaḥpuspī
 Śākhoṭaka
 Gaṇḍamālanāśana
 Kāñacanāra
 Kaṇḍira
 Chedana (śleṣmahara)
 Vibhītaka
 Vāsā
 Tālīśa
 Lavaṅga
 Tvak (dārusitā)
 Yaṣṭimadhu
 Gojihvā
 Mastaki (rumimastagi)
 Bola
 Ūśaka
 Lohavāṇa (Loban)
 Silhaka
 Vanapsikā (banfsha)
 Khūbakalāla
 Todari
 Khatni
 Jupha
 Kāsahara
 Pippalī
 Kaṇṭakārī
 Br̥hatī

Karkaṭaśrṅgi	Tintiḍika
Kāsamarda	Dīpana
Agastya	Hiṅgu
Śvāsahara	Ativiṣā
Śaṭi	Kalambaka
Karcūra	Citraka
Puṣkaramūla	Marica
Bhārṅgi	Jiraka
Dugdihikā	Kṛṣṇajiraka
Soma	Pācana
Kaṇṭhya	Mustaka
Malayavacā	Eraṇḍakarkaṭi
Haṁsapadī	Vamana
Śleṣmapūṭihara	Madanaphala
Sarala	Ikṣvāku
Tailaparṇa	Dhāmārgava
Lālāprasekajanana	Kṛtavedhana
Lankā (Kaṭuvīrā)	Ariṣṭaka
Trṣṇānigrahaṇa	Tāmraparṇa
Yavāsaka	Vamanopaga
Dhanvayāsa	Hijjala
Parpaṭa	Śaṇapuspī
Dhānyaka	Purīṣajanana
Mukhavaiśadyakara	Māṣa
Latākastūrikā	Vātanulomana
Dantaśodhana	Pūṭihā
Tejovati	Maruvaka
Dantadārdhyakara	Damanaka
Bakula	Śatapuspā
Trptighna	Miśreyā
Śunṭhī	Nāḍihīṅgu
Cavya	Viṣṭambhi
Rocana	Panasa
Vṛkṣāmla	Lakuca
Amlavetasa	Recana
Dāḍima	(a) Mṛduvirecana
Mātuluṅga	Phalgu
Jambīra	Atasī
Cāṅgeri	Aśvagola

(b) Sukhavirecana

Svarṇapatrī

Trivṛt

Kṛṣṇabīja

Svarṇakṣīrī

(c) Tikṣṇavirecana

Dantī

Dravantī

Snubī

Arka

Indravāruṇī

Kaṅkuṣṭha

Kaṭukā

Amlaparnī

Kumārī

Śaṁśodhana

(ubhayatobhāgahara)

Devadālī

Grāhī

Bilva

Jātiphala

Parnayavānī

Virecanopaga

Pilu

Āmahara

(upaśoṣaṇa)

Kuṭaja

Aralu

Śyonāka

Stambhana

Dhātaki

Babbūla

Āvartaki

Dhanvana

Āvartani

Śamī

Māyāphala

Mayūraśikhā

Ākāśavallī

Purīṣavirajaniya

Śallakī

Śālmali

Śūlapraśamana

Yāvānī

Ajamodā

Candraśūra

Dhattūra

Kṛmighna

Viḍaṅga

Palāśa

Cauhāra

Tulasi

Barbarī

Aphasantin

Kiṭamārī

Kampillaka

Kāṇḍira

Ākhukarnī

Arśoghna

Mahānimba

Karīra

Sūraṇa

Sunīṣaṇṇaka

Yakṛt (vikāraghna)

Dāruharidrā

Apāmarga

Bhūnimba

(Kālamegha)

Dugdhapheni

Kāsani

Pārijāta

Plihā (rogaghna)

Rohitaka

Śarapuṅkhā

Jhābukā

Śukrajanana

Muśali

Tālamūli

Śatavari
 Makhāṇna
 Kokilākṣa
 Muñjātaka
 Kapikacchu
 Uṭṭāṅana
Śukraśodhana
 Kuṣṭha
 Kaṭṭhala
Śukrastambhana
 Ākarakarabha
Prajāsthāpana
 Dūrvā
 Kamala
 Kumuda
 Kaśeruka
 Śṛṅgātaka
 Putrajivaka
Garbha rodhaka
 Japa
 Nimba
 Haridrā
 Jayantī
Garbhāśaya-sankocaka
 Isvari
 Kālājāji
 Annāmaya
 Kārpāsa
 Laṅgali
 Kebuka
 Sitab
Ārtavajanana
 Piśācākārpāsa
 Varṇśa
 Śaṇa
Ārtavasāṅgrahanīya
 Lodhra
 Aśoka
 Patrāṅga

Stanyajanana
 Nala
 Rohiṣa
Stanyasaṅgrahanīya
 Mallikā
Stanyaśodhana
 Pāthā
Mūtraviracaniya
 Punarnavā
 Gokṣura
 Kuśa
 Kāśa
 Śara
 Ikṣu
 Bhūmyāmalakī
 Kaṅkola
 Hapuṣā
 Anānāsa
 Bandāka
 Trapuṣa
Aśmarībheda
 Pāṣāṇabheda
 Varuṇa
 Kulattha
 Virataru
 Gorakṣaganjā
Mūtrasaṅgrahanīya
 Jambū
 Āmra
 Vaṭa
 Udumbara
 Aśvattha
 Plakṣa
 Sarja Śāla
 Dhava
 Tiniśa
 Aśmantaka
 Vikankata
 Kapitana (pāriṣa)

Madhumehaghna

Bijaka

Kāravellaka

Saptacakrā

Bimbī

Jvaraghna

Sahadevī

Kirātatikta

Haridru

Trāyamāṇa

Paṭola

Mūrvā

Kāṣṭhadāru

Dāhapraśamana

Utpala

Candana

Raktacandanaa

Elā

Campaka

Śaivāla

Śaileya

Śītapraśamana

Aguru

Bṛhadelā

Samudranārikela

Kothapraśamana

Aśvakarṇa (garjana)

Vraṇāśodhana

Gāṅgerukī

Balya

Balā

Atibalā

Mahābelā

Rājabalā

Vidārī

Vārāhi

Tavakṣīra

Jivāṇīya

Jivāntī

Mudgaparṇī

Māṣaparnī

Sandhānīya

Lajjālu

Rasāyana

Haritakī

Āmalakī

Guḍūcī

Aśvagandhā

Vṛddhadārūka

Nāgabalā

Nāgadamana

Upaviṣa

Guñjā

Viśaghna

Śiriṣa

Nirviṣā

Chilahiṇṭa

Aṅkoṭa

Raktastambhana

Priyaṅgu

Nāgakeśara

Surapunnāga

Punnāga

Parṇabija

Āyapāna

Jhaṇḍu

Śāka

Raktaniryāsa

Kukundara

Jalakumbhī

Raktaprasādana

Sārivā

Manjiṣṭhā

Copacini

Muṇḍī

Śiṃśapā

Suranjana

Br̥ṇhaṇa	Pr̥śniparnī
Kharjūra	Methikā
Madhūka	Vraṇaropana
Chatraka	Māṃsarohiṇī
Lekhana (karśana)	Asthisandhāṇīya
Cirabilva	Asthiśṛṅkhalā
Haimavatī	
Aṅgamardapraśamana	
Śalaparnī	



THERAPEUTIC (DISEASE-WISE) INDICATION OF DRUGS

Agnimāndya (deficient indigestion)

Ajamodā
Āmalakī
Ārdraka
Arkā
Caturbija
Haritakī
Haritamañjarī
Jambū
Kaṇṭakikarañja
Kupīlu
Pañcakola
Pūtiha
Śuṇṭhī
Trikaṭu
Vṛkṣāmla
Anaemia (pāṇḍu)
Āmalakī
Asana
Citraka
Dāḍima
Dantī
Dāruharidrā
Daśamūla
Drākṣā
Haridrā
Haritaki
Ikṣu
Kākādanī
Kāśmarya
Kaṭukī
Kumārī

Laghupañcamūla
Madhuka
Mātulūṅga
Mūlaka
Palakyā
Punarnavā
Rohitaka
Śāla
Śālī
Svarṇakṣīrī
Triphalā
Trivṛt
Yava
Anorexia
Amlīkā
Āmra
Ārdraka
Bṛhatī
Karañja
Kṛṣṇa jiraka
Nimbūka
Tālīśa
Vetra
Yavānī
Arthritis
Indravāruṇī
Pārijāta
Ketaki
Nirguṇḍī
Asthma (śvāsa)
Aguru
Amlavetasa
Añkoṭa

Ādraka	Tāliśa
Arka	Tejovatī
Aśvagandhā	Timira
Bibhītaka	Triphalā
Bhārṅgī	Turuṣka
Bhṛṅgarāja	Vāsā
Coraka	Yava
Daśamūla	Haematuria
Devadāru	Gokṣura
Guggulu	Kharjūra
Harītakī	Parnīñī-catustya
Kadalī	Haemorrhage
Kākodumbara	Arimeda
Kaṇṭakārī	Bhūmyāmalkī
Kankaṭaśṛṅgī	Dhanvana
Karpūra	Lajjālu
Kāsamarda	Lodhra
Kūṣmāṇḍa	Head-diseases
Kulattha	(śīroroga)
Madhūlikā	Abhiṣuka
Māmsī	Akṣoṭa
Marica	Apāmārga
Mātulūṅga	Kaṭukā
Mūlaka	Madhukā
Nirguṇḍī	Mahat pan
Padmaka	Māsa
Palāṇḍu	Mātulūṅga
Patra	Meṣaśṛṅga
Pippalī	Mudga
Puṣkaramūla	Muñjātaka
Rasona	Rohiṣa
Śāla	Śarkarā
Śallakī	Śṛṅgātaka
Saptaparṇa	Śuṇṭhī
Sārivā	Vātāma
Śaṭī	Yūthikā
Śigru	Headache (śīraḥśūla)
Śiriṣa	Badarī
Śuṇṭhī	Coraka

Kuṅkuma	Bhāraṅgī
Kumārī	Godhūma
Kuṣṭha	Haritakī
Madhuka	Hiccough (hikkā)
Mucakunda	Aguru
Śigru	Āmalakī
Śiriṣa	Amlavetasa
Tvak	Arka
Vacā	Candana
Vatsanābha	Candraśūla
Sūryāvartta	Coraka
Bhṛṅgarāja	Devadāru
Head-evacuation	Haritakī
Tumburu	Ikṣu
Heart-disease (hṛdroga)	Kapittha
Āmalakī	Karkaṭaśṛṅgī
Arjuna	Kāsamarda
Aśvagandhā	Kaṭukā
Bibhītaka	Kharjūra
Daśamūla	Madhukā
Godhūma	Madhūka
Elā	Māmsī
Kaṭukā	Marica
Kulattha	Mātuluṅga
Laghupañcamūla	Mūlaka
Nāgabālā	Nāgakeśara
Nimba	Padmaka
Puṣkaramūla	Palāṇḍu
Śaivāla	Pāṭalā
Śuṇṭhī	Pippalī
Triphalā	Prasariṇī
Viḍaṅga	Raktacandana
Vacā	Rasona
Cardiac pain	Śāla
(hṛcchūla)	Śigru
Mātuluṅga	Śiriṣa
Śālaparnī	Tejovatī
Hernia	Tinduka
(āntravṛddhi)	Udumbara

Hoarseness of voice

(svarabheda)

Ajamoda

Āmalaki

Artagala

Balā

Citraka

Badarī

Haṃsapadi

Khadira

Kṣīrivr̥kṣa

Madhuka

Maṇḍukaparṇī

Pippali

Śatāvarī

Incontinence of urine

Campaka

Boils

Arka

Dhattūra

Kaṭutumbī

Lāṅgalī

Maṇḍukaparṇī

Sahadevī

Śālī

Uśīra

Bony growth

Vaṭa

Burn (agnidagdha)

Aśvattha

Dhātakī

Kumārī

Madhuka

Pāṭalā

Śālī

Tinduka

Burning sensation (dāha)

Āmalaki

Badarī

Caṇaka

Karkandhu

Mallikā

Nimba

Śālmali

Upodikā

Yavāsaka

Bleeding piles (raktārśa)

Amlikā

Balā

Candana

Cukrikā

Dāḍima

Dugdhikā

Dūrva

Jhaṇḍu

Kamala

Karīra

Kāśmarya

Kuṭaja

Mocarasa

Nāgakeśara

Nimba

Palāṇḍu

Pr̥śniparṇī

Rasāñjana

Vāstuka

Śālmali

Vātavyādhi

Ajagandhā

Amlikā

Ārdraka

Āśoka

Asthisaṃhāra

Aśvagandhā

Balā

Bhallātaka

Daśamūla

Devadāru

Eraṇḍa	Āpatantraka
Godhūma	Amlavetasa
Hapuṣā	Marica
Haridrā	Śukanāsā
Haritakī	Tumburu
Hiṅgu	Avabāhuka
Kapikacchū	Balā
Kārpāsa	Guñjā
Kunduru	Jiṅgiṇī
Kuṅkuma	Kākodumbara
Mahānimba	Lakuca
Mahat pañcamūla	Pāribhadra
Māṃsī	Gr̥dhrasī (sciatica)
Māṣa	Guggulu
Methikā	Pārijāta
Mūlaka	Rāsnā
Nirguṇḍī	Śiṃśapā
Palāṇḍu	Khallī (cramps)
Parṇinī-catuṣṭaya	Kuṣṭha
Paṭola	Kroṣṭuśīrṣa
Pippalī	(Chronic arthristis)
Prasāriṇī	Guggulu
Pūga	Lock jaw
Rāsnā	(hanugraha)
Rasona	Bimbī
Śaileya	Indigestion (ajirṇa)
Śaireyaka	Ajamodā
Saptalā	Āmra
Śarkarā	Dhānyaka
Snuhī	Jambīra
Spr̥kkā	Haritakī
Sthaṇḍeyaka	Lavaṅga
Suṇṭhī	Pippalī
Śyonākā	Śuṇṭhī
Tila	Tulasī
Tilvaka	Indigestion caused by āma
Turuṣka	(āmājirṇa)
Vāsa	Vacā
Vṛddhadārūka	Indigestion of ghee

(ghṛtājirṇa)	Dantī
Marica	Dāruharidrā
Inflammation (śoṭha)	Dronapuspī
Agnimantha	Guḍuci
Atasī	Haridrā
Aśvattha	Haritakī
Paññicavalkala	Ikṣu
Paṭola	Indravāruṇī
Plakṣa	Jimūta
Insanity (unmāda)	Kākādani
Brāhmī	Karkoṭaka
Cāngerī	Kaṭukā
Coraka	Kaṭukālabū
Daśamūla	Kumārī
Dhattūra	Maṇḍūkapaṇṇī
Hareṇukā	Mātuluṅga
Hiṅgu	Mūlaka
Indravāruṇī	Muṇḍī
Māṃsī	Nimba
Maṇḍūkapaṇṇī	Pippalī
Rasona	Punarnavā
Śaṅkhapuspī	Triphalā
Sarṣapa	Trivṛt
Śvetabalā	Viḍaṅga
Tāla	Halimaka
Insomnnia	Guḍuci
Apāmmrga	Mustaka
Aśvagandhā	Kṣataksīṇa
Bharṅgī	(Wasting with chest-wound)
Kokilākṣa	Abhiṣka
Pippalī	Akṣoṭa
Punarnavā	Balā
Jaundice (kāmalā)	Jīvakādyagaṇa
Āmalakī	Lākṣā
Aṅkoṭa	Nāgabalā
Apāmarga	Śuṇṭhī
Arka	Yava
Bhūmyalaki	Abscess (vidradhi)
Bilva	

Atasī	Karpūra
Citraka	Alcoholism (madātyaya)
Daśamūla	Amlavetasa
Guggulu	Bhārṅgī
Karaṇja	Dāḍima
Kumārī	Drākṣā
Śigru-madhuśigru	Hiṅgu
Pancavalkala	Hribera
Śaṇa	Kamala
Śigru	Kārpāsa
Śvetapunarnavā	Mudga
Triphalā	Mustaka
Trivṛt	Nimbūka
Varuṇa	Paruṣaka
Internal abscess	Paṭola
(antarvidradhi)	Satīna
Śarapunkhā	Śuṇṭhī
Śigru	Vetra
Varuṇa	Alopecia-Baldness
Pāthā	(Khālitya)
Punarnavā	Bhallātaka
Accidental wound	Bṛhatī
Amlikā	Dhattūra
Apāmārga	Gokṣura
Āragvadha	Guñjā
Aśvagandhā	Indravāruṇī
Bhārṅgī	Kākādani
Gaṅgerukī	Karaṇja
Kākajaṅghā	Lāṅgali
Karpūra	Māṃsī
Lajjālu	Paṭola
Madhuka	Tila
Māṃsī	Vacā
Mustaka	Acid gastritis -
Sahadevī	Hyperacidity
Śarapunkhā	(Amlapitta)
Śigru	Āmalakī
Leprotic wound	Bhrṅgarāja

Gudūci	Ṣaṣṭika
Guggulu	Śātāvārī
Harītakī	Galacto-depurant
Jambīra	(stanya śodhana)
Jambū	Ajamodā
Jiraka	Dasamūla
Mīśreyā	Gudūci
Pārasīkayavānī	Harītakī
Nārikela	Jivakādyagaṇa
Paṭola	Kaṭukā
Pippalī	Kirātatikta
Śuṇṭhī	Nimba
Vacā	Pañcakola
Nimba	Pāṭhā
Pāribhadra	Saptaparṇa
Kaṭukā	Trivṛt
Śṛṅgātaka	Vetra
Tilaparṇī	Yava
Tila	Galactagogue
Vidārī	(stanyajanana)
Vṛddhadārūka	Darbha
Aphrodisiac	Madhuka
(vājīkaraṇa)	Pippalī
Āmalaki	Rasona
Añkoṭa	Śālī
Aśvattha	Śātāvārī
Bhallatāka	Śṛṅgātaka
Girikarṇikā	Vanakārpāsī
Gokṣūra	Vidārī
Godhūma	Gaṇḍamālā
Kapikacchu	(cervical adenitis)
Madhuka	Āragvadha
Māṣa	Arka
Māṣaparṇī	Girikarṇikā
Mudgaparṇī	Godhūma
Muñjātaka	Guñjā
Muśālī	Indravāruṇī
Śālmali	Kāñcanāra
Śara	Kośātakī

Kulattha	Citraka
Muṇḍī	Daśamūla
Nirguṇḍī	Drākṣā
Pippalī	Durālabhā
Śākhoṭaka	Haritakī
Varuṇa	Ikṣu
Goitre (galagaṇḍa)	Kadalī
Āragvadha	Kharjūra
Balā	Kirātatikta
Bhārṅgī	Madhūka
Devadāru	Mahat pañcamūla
Girikarṇikā	Marica
Haṃsapadī	Masūra
Hastikarṇa	Mūrvā
Jalakumbhī	Pañcakola
Karkāru	Sarjarasa
Kaṭukālābū	Śuṇṭhī
Nicula	Trāyamāṇa
Śāla	Trikaṭu
Śālasārādigāṇa	Trivṛt
Tilaparṇī	Tumburu
Trikaṭu	Udumbara
Triphalā	Yavānī
Gonorrhoea	Greying of hairs (pālitya)
Āmra	Āmalakī
Arjuna	Bhṛṅgarāja
Dāḍima	Dugdhikā
Japā	Indravāruṇī
Jhaṇḍu	Jātī
Svarṇakṣīrī	Kāśmarya
Grahaṇīroga	Kumūda
Ankoṭa	Madhūka
Arjuna	Mallikā
Ativiśā	Nimba
Bhaṅgā	Saireyaka
Bilva	Sleṣmātaka
Bṛhatī	Tila
Candana	Tulasī
Cāṅgerī	Gulma

Eraṇḍa	Bibhītaka
Hapuṣā	Darbha
Haritakī	Ervāru
Hiṅgu	Gokṣura
Kampillaka	Haridra
Ajagandhā	Haritakī
Amlavetasa	Jātū
Amlikā	Kadamba
Arka	Kaṇṭakāri
Bhallātaka	Karkoṭa
Dhānyaka	Kataka
Drākṣā	Kaṭukālābū
Kaṇṭakīkarañja	Kṣīrivṛkṣa
Ketakī	Kulattha
Kulattha	Kunduru
Kumārī	Kuśa
Kuṣṭha	Kusumbha
Mahatpañcamūla	Māmsī
Mātuluṅga	Mātuluṅga
Nīlī	Mayūraśikhā
Vāsā	Moraṭa
Pīlu	Pāṣāṇabheda
Pippalī	Pañcatṛṇamūla
Punarnavā	Pāṭalā
Pūtika	Punarnavā
Rasona	Saireya
Śarapuñkhā	Śāka
Snuhī	Śara
Śuṇṭhī	Śigru
Upakuñcikā	Śitivāra
Vṛkṣāmla	Śuṇṭhī
Yava	Vandāka
Yavānī	Varuṇa
Raktagulma	Virataru
Tila	Gravels (śarkarā)
Palāśa	Ajamoda
Calculus (aśmarī)	Apāmārga
Amlavetasa	Darbha
Apāmārga	Kadamba

Karavīra
 Nārikela
 Śāka
Chest pain (urahśūla)
 Balā
 Eraṇḍa
 Jīvanṭī
 Puṣkaramūla
 Putrajīvaka
 Śāli
 Śrīṅgāṭaka
 Tumburu
Colic (śūla)
 Agastya
 Āmalakī
 Amlavetasa
 Apāmārga
 Aśvattha
 Babbūla
 Dhanvana
 Eraṇḍa
 Godhūma
 Haridrā
 Hiṅgu
 Jiraka
 Kaṇṭhakakarañja
 Kulattha
 Laghupañcamūla
 Lavaṅga
 Marica
 Matuluṅga
 Palāśa
 Pañcakola
 Parūṣaka
 Pippalī
 Pūṭika
 Rasona
 Śīgru
 Śunthī

Tila
 Vacā
 Vidārī
 Yava
 Yavānī
Cyst-Tumour
 (granthi-arbuda)
 Dantī
 Drākṣā
 Indrayava
 Karavira
 Madhūka
 Mūlaka
 Sarṣapa
 Saircyaka
 Śamī
 Śīgru
 Snuhī
 Sūraṇa
 Śyonāka
 Tulasī
 Upodikā
 Vanakārpāsī
 Vikankata
Contraceptive-Antifertility
 (santati nirodhaka)
 Japā
 Candrasūra
 Haridrā
 Pippalī
 Viḍaṅga
 Palāśa
 Nimba
 Koṣṭakī
Biliary colic
 Śatāvari
Pariṇāmasūla
 Āmalakī
 Haritakī

Kalāya	Balā
Nārikela	Bhūmyamalaki
Priyaṅgu	Dāruharidrā
Triphalā	Guḍūci
Viṣṇukrāntā	Japā
Gynaecological disorders-	Kadalī
Diseases of women (strīroga)	Kākodumbara
Lodhra	Karkandhū
Muṇḍī	Kārpāsa
Pippalī	Ketakī
Amenorrhoea	Kuśa
(rajaḥkṛccha)	Lākṣā
Indravāruṇī	Madhuka
Japā	Mudgaparṇī
Kulattha	Nagakeśara
Kumārī	Nimba
Tīla	Plakṣa
Vaiśā	Rājādana
Leucorrhoea (śveta pradara)	Raktacandana
Dāruharidrā	Rasāñjana
Dhātakī	Rohitaka
Kākajaṅghā	Śālī
Lodhra	Śālmali
Sahadevī	Sudarśana
Mastitis	Taṇḍuliya
Dhattūra	Udumbara
Kumārī	Vāsā
Viśālā	Vāstuka
Slackness of breasts	Vaṭa
(stanaśaithilya)	Puerperal disorders
Kāśmarya	(sūtikāroga)
Menometrorrhagia	Nirguṇḍī
(pradara-asṛgadara)	Pippalī
Alābū	Daśamūla
Āmalakī	Somaroga
Apāmārga	Āmalakī
Aśoka	Amlikā
Aūbalā	Kumuda
Badarī	Sterility (bandhytva)

Asthisamhāra	Bimbi
Aśvagandhā	Arjuna
Bākucī	Śyonaka
Bṛhati (śveta)	Anantamūla
Dhātaki	Madhuyaṣṭhi
Eraṇḍa	Āmra
Kārpāsa	Masūra
Māśaparnī	Japā
Mayūraśikhā	Apāmārga
Mudgaparnī	Atibalā
Nāgakeśara	Badarī
Śvetabalā	Bhūmyamalakī
Śvetakaṇṭakārī	Ketakī
Udumbara	Kuṣa
Vaṭa	Lākṣā
Pradara (śveta-rakta)	Rājādana
Guḍuci	Śāli-taṇḍula
Śatāvārī	Sudarśana
Śālmali (puṣpa)	Tanduliyaka
Dūrvā	Vāstuka
Vāsā	Pattaṅga
Jambū	Kāsa
Āmalakī	Asthīśṛṅkhalā
Kumārī	Hapuṣā
Punarnavā	Plakṣa
Udumbara	Śāla
Kaṭu alābū	Pāriṣa
Kadalī	Balā
Candana (dvaya)	Haritakī
Jiraka	Nāgabālā
Negkeśara	Kukundara
Nimba	Tinduka
Aśoka	Lajjālu
Dhātaki	Vṛddhadāruka
Mañjiṣṭhā	Babbūla
Pūga	Rohitaka
Dāḍima	Āvartakī
Pāṣāṇabheda	Mājūphala
Indrayava	Palāśa

Kumuda	Khadira
Kośāmra	Kharjūra
Śallaki	Kulattha
Bilva	Kūṣmāṇḍa
Cough (kāsa)	Kuṭaja
Abhiṣuka	Madhūlikā
Agastya	Mahatpañcamūla
Aguru	Māmsī
Ahiphena	Maṇḍūkapaṇī
Ajagandhā	Marica
Āmalakī	Māṣapaṇī
Amlikā	Mudga
Ādraka	Mudgaparṇī
Arka	Mūlaka
Badarī	Mustaka
Bhārṅgī	Nirguṇḍī
Bhrṅgarāja	Padmaka
Bibhitaka	Palāśa
Bṛhaṭī	Pañcakola
Citraka	Patra
Daśamūla	Pippalī
Devadāru	Puṣkaramūla
Drākṣā	Rāsnā
Eraṇḍa	Rohiṣa
Godhūma	Śara
Guḍūcī	Śarapunkhā
Hapuṣā	Śatāvarī
Hariṇukā	Śṛṅgāṭaka
Haridrā	Sunniṣaṇṇaka
Haritakī	Śuṇṭhī
Jivantī	Tālīśa
Kākādanī	Tilvaka
Kākamācī	Trijāta
Kakodumbara	Trikaṭu
Kamala	Triphalā
Kaṇṭakārī	Tṛṇapañcamūla
Karkaṭaśṛṅgī	Tulasī
Kārpāsa	Tvak
Kāsamarda	Vāsā

Vāstuka	Śarṣapa
Vidārī	Śrṅgāṭaka
Vidārigandhādigaṇa	Vāsā
Vikankata	Coryza
Yavāsaka	(pratiśyāya)
Yava	Amlikā
Constipation (vibandha)	Ādraka
Eraṇḍa	Citraka
Drākṣā	Coraka
Sanāmakī	Dāruharidrā
Triphalā	Dhattūra
Haritakī	Haritakī
Iṣadgola	Jayā
Dantī	Kaṇṭakārī
Jayapāla	Madhulikā
Indravaruṇī	Maṇḍūkapaṇṇī
Consumption (śoṣa)	Marica
Arjuna	Mūlaka
Aśvagandhā	Rasāñjana
Aśvattha	Rohiṣa
Balā	Sarṣapa
Daśamūla	Śigru
Drākṣā	Upakuñcikā
Gokṣura	Yava
Kākajaṅghā	Cosmetics (soundarya
Kharjūra	vardhana-prasādhana etc.)
Kāsamarda	Āmalakī
Laghupañcamūla	Bhṛṅgarāja
Madayantikā	Candana
Madhukā	Caṇaka
Maṇḍūkapaṇṇī	Haridrā
Mūlaka	Japā
Nāgabalā	Jāti
Nirguṇḍī	Kumārī
Pañcakola	Lodhra
Pañcapañcamūla	Madayantikā
Paṇṇī catuṣṭaya	Mallikā
Pippalī	Nārīkela
Śāla	Nimba

Nimbūka	Āmalakī
Priyāla	Mole
Saptalā (śīkakāi)	Eraṇḍa
Sarṣapa	Pimples
Kṣudraroga (minor diseases including skin disorders)	Kola
Bākucī	Kṣīrī vṛkṣa
Bhangā	Lodhra
Haritakī	Psoriasis
Karañja	Haimavatī
Karavīra	Rāsnā
Sarjarasa	Yuvāna pīdikā
Alasa	Lodhra
Kaṇṭakāri	Marica
Cracks in feet-sole	Ringworm
Dhattūra	Amlikā
Jāti	Dugdhikā
Kaṭutumbī	Pārijāta
Nārikela	Śigru
Sarjarasa	Valmīka
Śuṇṭhī	Kulattha
Upodikā	Sūraṇa
Dandruff	Varāhadaṇṣṭra
Ahiphena	Bhṛṅgarāja
Āmra	Kamala
Guñjā	Vrdārikā
Haritakī	Paṭola
Kodrava	Wart
Madhūka	Indravāruṇī
Eczema	Whitlow
Marica	Haridrā
Snuhī	Haritakī
Sarṣapa	Kāśmarya
Head-boils	Sarjarasa
Arka	Vyaṅga
Kuṣṭha	(freckles and shade on face)
Nimba	Agnimantha
Jālakagardabha	Āmlakī
	Amlikā
	Dāḍima

Haridrā	Madhuka
Īṅgudī	Madhuśigru
Jambū	Māṃsī
Jāṭī	Māṣaparnī
Kapittha	Mudgaparnī
Mañjiṣṭhā	Muṇḍī
Masūra	Muñjātaka
Muśālī	Mustaka
Rājādana	Nikocaka
Rakta-candana	Nimba
Śālmali	Padmaka
Vaṭa	Parūṣaka
Varuṇa	Pippalī
Vātarakta	Pṛśniparnī
Abhiṣuka	Rāsnā
Adhopuṣpī	Saireyaka
Ādhakī	Sarjarasa
Agastya	Śālaparnī
Akṣoṭa	Śatāvarī
Āmalakī	Śigru
Aśvattha	Śṛṅgātaka
Atasī	Suniṣaṇṇaka
Balā	Tila
Candana	Triphalā
Daśamūla	Trivṛt
Dhānyaka	Urumāṇa
Eraṇḍa	Vātāma
Godhūma	Vetra
Guḍūcī	Yava
Guggūlu	Diarrhoea (atisāra)
Haṃsapadi	Ahiphena
Haridrā	Ajamodā
Haritakī	Amlikā
Jivakādyagaṇa	Āmra
Kāravellaka	Aṅkoṭa
Karīra	Aralu
Kāśmarya	Arjuna
Kokilākṣa	Ativiṣā
Lāṅgalī	Babbūla

Badarī	Pippalī
Balā	Raktacandana
Bhārngī	Śallakī
Bibhītaka	Śālmali
Bilva	Śamī
Cāṅgerī	Śaṭī
Cavikā	Śimśapā
Citraka	Śuṇṭhī
Cukrikā	Śyonāka
Dāḍima	Tila
Daśamūla	Tinduka
Dhānyaka	Trāyamāṇa
Dhātakī	Trikaṭu
Durālabhā	Udumbara
Eraṇḍa	Vacā
Gajapippalī	Vandāka
Hapuṣā	Vaṭa
Haritakī	Vitosa
Hribera	Virataru
Jambū	Yūthikā
Jātiphala	Diarrhoea with blood
Jivantī	(saraktātisāra)
Kaṅcaṭa	Badarī
Kapittha	Candana
Kārpāsa	Jambū
Kāśmarya	Kadamba
Kaṭphala	Kamala
Keśarāja	Kṣīrivr̥kṣa
Kuṭaja	Nāgakeśara
Laghupañcamūla	Nyagrodhādigaṇa
Lājā	Plakṣa
Loṇikā	Priyāla
Mallikā	Priyaṅgu
Masūra	Pr̥śniparṇī
Mocarasa	Taṇḍuliya
Mūlaka	Tiniśa
Mustaka	Dysentery (āmātisāra)
Nicula	Ajamoda
Palāśa	Bākucī

Bilva
 Bhṛṅgarāja
 Kaṇṭhakakarañja
 Dāruharidrā
 Dugdhikā
 Lakuca
 Lodhra
 Loṇikā
 Marica
 Upodikā
 Vāstuka
Diseases of Throat
 (gala-kaṇṭha roga)
 Arka
 Haritakī
 Mustaka
Galarohini
 Eraṇḍakarkaṭī
 Parūṣaka
 Pattaṅga
Tonsilitis
 Pārijāta
 Jāti
Dysuria
 (mūtrakṛcchra)
 Atūbalā
 Apāmārga
 Darbha
 Elā
 Ervāru
 Gokṣura
 Hapuṣā
 Jāti
 Kadali
 Kadamba
 Kamala
 Kārpāsa
 Kāsa
 Ketakī

Kumāri
 Kumuda
 Laghu Pañcamūla
 Mūlaka
 Nimba
 Prasāriṇī
 Śālī
 Śatāvarī
 Śṛṅgāṭaka
 Śitīvāra
 Vidārī
Inflammation of lips
 (Oṣṭhaśoṭha)
 Śrīveṣṭaka
Stomatitis (mukhapākasotha)
 Āmra
 Aśvattha
 Jāti
Diseases of Nose (nāsāroga)
 Devadāru
 Śyonāka
Nasal polypus (nāsārśa)
 Kaṭukālābu
Diseases of Teeth
 (dantaroga)
 Akṣoṭa
 Babbūla
 Bakula
 Dugdhikā
 Jāti
 Nimba
 Tumburu
 Sarṣapa
 Yavānī
 Śarapuṅkhā
 Kṣīrīvṛkṣa
 Mallikā
Dental caries

(kṛmidanta)	Yavāsaka
Arka	Toothache (dantaśūla)
Bākucī	Girikarnīkā
Guñjā	Bakula
Hiṅgu	Haritamañjarī
Kākajaṅghā	Karpūra
Kamala	Tumburu
Kaṭutūmbī	Medhikā
Mātuluṅga	Yavāni
Saptaparṇa	Lavaṅga (taila)
Snuhī	Loose-teeth (caladanta)
Dentition	Bakula
(Dantodbheda)	Daśamūla
Pippalī	Mustaka
Tooth Fracture	Jāti
(dantabhagna)	Spongy gums
Diseases of Mouth	(dantamūla vikṛti)
(mukharoga)	Priyaṅgu
Arimeda	Upakuśa
Dāruharidrā	Kakodumbara
Drākṣā	Trikaṭu
Jivantī	Enlarged Uvula
Khadira	Pārijāta
Lavaṅga	Snuhī
Māṃsī	Yavāni
Mastakī	Kuṣṭha
Pañcapallava	Adhaḥpuṣpī
Paṭola	Āmalakī
Pippalī	Amlavetasa
Rājādana	Āragavadha
Śaileya	Arka
Śāla	Arjuna
Śarkarā (Ikṣu)	Asana
Śuṇṭhī	Bākucī
Tejovatī	Bāṇa
Triphalā	Bhallātaka
Vacā	Bhaṅgā
Vāsā	Bhūrja
Vṛkṣāmla	Cakramarda

Citraka	Saptaparna
Dantī	Sārivā
Dāruharidrā	Sarṣapa
Devadāru	Śigru
Dhātakī	Śirīṣa
Dhava	Śrīveṣṭaka
Godhūma	Sudarśana
Guḍūcī	Svarṇakṣīrī
Guñjā	Tiniśa
Haridrā	Triphalā
Haritakī	Tulasī
Ingudī	Tumburu
Jalakumbhī	Tuvaraka
Jimūta	Uttamāraṇī
Kākamācī	Vacā
Karañja	Vāsā
Karavīra	Viḍaṅga
Kārpāsa	Yava
Kaṭukā	Oedema (śoṭha)
Khadira	Aguru
Kośataki	Agnimanthā
Kṛṣṇa vetra	Alābū
Kuṭaja	Amlikā
Lakuca	Āmra
Lodhra	Ādraka
Māmsī	Bibhītaka
Manjiṣṭhā	Bilva
Mudgaparṇī	Caṇḍā
Mūlaka	Citraka
Mūrvā	Daśamūlā
Mokṣaka	Devadāru
Nāḍīca	Eraṇḍa
Nimba	Girikarṇikā
Pañcatikta	Guggulu
Paṭola	Haritakī
Rasāñjana	Kākamācī
Rohitaka	Karīra
Śākhoṭaka	Karpāsa
Śāla	Kaṭutumbī

Kirātatikta	Rasona
Kuṣṭha	Saivāla
Māmsī	Jāti
Māṇaka	Pañcavalkala
Mūlaka	Śāla
Nimba	Sarala
Pāṭhā	Śuṇṭhi
Paṭola	Śyonāka
Pippalī	Vacā
Punarnavā	Deafness (Karnāvādhirya)
Śaileya	Bākucī
Śakhoṭaka	Bilva
Śāla	Daśamūla
Sarṣapa	Muśalī
Śigru	Earache (karnasūla)
Sprkka	Aralu
Śriveṣṭaka	Ārdraka
Sthaṇḍeyaka	Aśvattha
Śuṇṭhi	Devadālī
Śveta punarnavā	Drākṣā
Triphalā	Eraṇḍa
Vacā	Hingu
Vāsā	Jambīra
Vetra	Mahatpañcamūla
Diseases of Ear (Karnaroga)	Mātulūṅga
Amlikā	Pippalī
Apāmārga	Śigru
Arka	Snuhī
Bhūrja	Tulasi
Bṛhatī	Tumburu
Catusparṇa	Foetid ear
Kaṇṭakārī	(karnadourgandhya)
Karpūra	Guggulu
Kaṭutumbī	Jātū
Lakuca	Nirguṇḍī
Lāṅgali	Rasāñjana
Dhava	Krimikarṇa
Madhuka	Jambū
Madhūka	Tailaparnī

Otorrhoea (karṇapūya)	Vandāka
Dhava	Vīrataru
Kārpāsa	Punnāga
Tinduka	Rasāñjana
Tinnitus	Śaileya
Sarṣapa	Saireyaka
Diseases of Eye	Saptalā
(netra roga)	Śigru
Artagala	Śiṃśapā
Āmalakī	Śirīṣa
Amlikā	Karañja
Apāmārga	Kāravellaka
Arka	Karavīra
Babbūla	Kaśeru
Bhrṅgarāja	Kataka
Bibhitaka	Lakuca
Bilva	Lodhra
Cakṣuṣya	Madhuka
Candana	Mahānimba
Dāruharidrā	Mallikā
Darbha	Māmsī
Devadāru	Marica
Droṇapūṣpī	Udumbara
Eraṇḍa	Vacā
Girikarṇikā	Vaṭa
Guḍucī	Tulasī
Hareṇukā	Trivṛta
Haritakī	Suṇṇisaṇṇaka
Jivantī	Śuṇṭhī
Kadali	Śveta punarnavā
Kākamācī	Tilā
Kamala	Triphalā
Pippalī	Cataract (līṅganāśa)
Punarnavā	Meṣaśṛṅga
Śaivāla	Palāśa
Śāla	Conjunctivitis
Śālaparṇī	(netrābhiṣyanda)
Śamī	Dantī
Vaṭa	Dhātakī

Eranda	Śigru
Kaṇṭakārī	Triphalā
Kaṭukā	Fever (jvara)
Palāśa	Āgastya
Pāṭalā	Āmalakī
Śallakī	Āmra
Tāmbūla	Āragavadha
Tulasī	Ārdraka
Excessive lachrymation	Bilva
(atyaśrusrāva)	Brhatī
Nicula	Dāḍima
Night blindness	Darbha
(naktāndhya)	Daśamūla
Agastya	Devadāru
Bhr̥ṅgarāja	Dhanvana
Eranda	Dhānyaka
Jivantī	Dhattūra
Marica	Hribera
Pippalī	Jīmūta
Eye pain (akṣirujā)	Jīraka
Bhūmyāmalakī	Jivantī
Pārijāta	Kaṇṭakārī
Pakṣmakopa	Kaṇṭakīkaraṇja
Haritakī	Kāravellaka
Pakṣmaśātaka	Karkoṭa
Tulasī	Kāśmarya
Pilla	Kaṭphala
Palāśa	Kaṭukā
Piṣṭaka (nodule & sclera)	Kirātatikta
Brhatī	Kulattha
Pippalī	Kupīlu
Pterygium (raktārma)	Kuṭaja
Saireyaka	Laghupañcamūla
Fainting	Lājā
Āmalakī	Madana
Ārdraka	Mahatpañcamūla
Haritakī	Mūrvā
Śarkarā	Mustaka
Satīna	Nala

Nārikela	(timira)
Nimba	Daśamūla
Palāśa	Elā
Parpaṭa	Eraṇḍa
Drākṣā	Guñjā
Eraṇḍa	Haritaki
Guḍuci	Jivantī
Hareṇukā	Marica
Haritakī	Pippalī
Parpaṭa	Raktacandana
Pāṭhā	Śarkarā
Paṭola	Śatāvārī
Punarnavā	Triphalā
Rohiṣa	Yava
Sahadevī	Complications of fever
Saptaparṇa	(jvaropadrava)
Śarkarā	Madhūlikā
Śatāvārī	Tastelessness
Śimśapā	(āsyavairasya-svādahīnatā)
Sindhuvāra	Mātulūṅga
Sthouṇḍeyaka	Nimbūka
Śuṇṭhī	Ādraka
Śvetapunarnavā	Chronic fever
Trāyamāṇa	(Jirṇa jvara)
Trivṛt	Guḍuci
Uśīra	Pippalī
Vatsanābha	Raktacandana
Fever with burning sensation	Sārivā
(sadāhajvara)	Triphalā
Vāsā	Vāsā
Vaṭa	Vetasa
Yava	Yavāsaka
Corneal opacity	Malarial fever
(avraṇa śukla)	(viṣamajvara etc.)
Karpūra	Ajagandhā
Mudga	Bhallātaka
Palāśa	Bhaṅgā
Defects of vision	Bhūstrṇa
	Coraka

Droṇapuṣpī	Palaśa
Guḍūcī	Pūtikā
Harītakī	Putrañjīva
Hīṅgu	Sahadevī
Jiraka	Śākhotaka
Kṛṣṇajīraka	Sarṣapa
Pippalīmūla	Śuṇṭhī
Rasona	Sūraṇa
Sāriva	Tāmbūla
Śīriṣa	Vandāka
Sitāphala	Vandhyākarkotakī
Trapuṣa	Yava
Triphalā	Fistula-in-ano (bhagandara)
Trivṛt	Guggulu
Tulasī	Khadira
Upakuñcikā	Madhuka
Vandāka	Nygrodhādigaṇa
Vāsā	Śuṇṭhī
Vidāri	Tila
Fumigation (dhūma)	Triphalā
Coraka	Vandāka
Māṃsī	Flatulence
Nimba	(ādhmāna)
Filaria (ślipada)	Pippalī
Arka	Ajamoda
Asana	Hritakī
Bākucī	Hīṅgu
Balā	Jiraka
Citraka	Pūtiḥā
Devadāru	Yavāni
Dhattūra	Foul smell in body
Eraṇḍa	(dehadourgandhya)
Guḍūcī	Campaka
Haridrā	Hilamocikā
Harītakī	Jāti
Jiṅginī	Mātuluṅga
Kāsamarda	Pūtika
Kebuka	Sarvagandha
Khadira	Tuvaraka

Fracture

(bhagna-asthibhagna)

Amlikā

Arjuna

Asthisamhāra

Aśvattha

Dhātaki

Godhūma

Lākṣa

Madhūka

Mahatpañcamūla

Māmsi

Mañjiṣṭhā

Nyagrodhādigaṇa

Pṛsniparni

Raktacandana

Śaileya

Śāli

Sarvagandhā

Satūna

Śrngātaka

Tila

Excessive digestion

(bhasmaka atyagni)

Apāmārga

Kola

Tila

Udumbara

Epilepsy (apasmara)

Agastya

Brāhmī

Coraka

Daśamūla

Jyotiṣmatī

Kaṇṭakārī

Karavīra

Kāsa

Kataka

Ketakī

Kumārī

Kūsmāṇḍa

Madanaphala

Mallikā

Māmsi

Mustaka

Nirguṇḍī

Rasona

Rohiṣa

Śankhapuṣpī

Sarṣapa

Śatāvarī

Vacā

Vāsā

Vidārī

Viṣakharpaṇa

Eruptive Boils

(visphoṭaka)

Dugdhikā

Guḍuci

Karañja

Khadira

Kirātatikta

Putrajīvaka

Sahadevī

Śirīṣa

Śleṣmātaka

Triphalā

Emaciation

Aśvagandhā

Ikṣu

Emetic (vāma)

Jimūta

Madana

Madhūlikā

Vetra

Excessive perspiration

(atisveda)

Kulattha

Erysipelas (visarpa)

Agnimantha

Āmalakī

Āragvadha

Ārtagala

Balā

Bhūrja

Candana

Dāḍima

Dāruharidra

Dhava

Dūrvā

Guñjā

Haridrā

Hribera

Ikṣu

Kaṇṭapañcamūla

Karañja

Kṣīrī vrkṣa

Madhuka

Mohūka

Mātuluṅga

Mudga

Mūlaka

Muñjātaka

Mustaka

Nala

Pañcavalkala

Paṭola

Plakṣa

Priyaṅgu

Rājādana

Saireyaka

Śaivāla

Śatāvarī

Śiriṣa

Śleṣmātaka

Śrngāṭaka

Śigru

Trāyamāṇa

Triphalā

Trivṛt

Varuna

Yava

Granthi-visarpa

Bibhītaka

Daśamūla

Wound (vraṇa)

Aguru

Ajagandhā

Apāmārga

Āragvadha

Arjuna

Arka

Āsphotā

Aśvattha

Atasī

Bakucī

Balā

Bhṛṅgarāja

Bhūrja

Dantī

Dāruharidrā

Devadāru

Dhattūra

Dravantī

Dūrvā

Eraṇḍa

Godhūma

Guggulu

Indravāruṇī

Ingudī

Jambū

Jātī

Jivantī

Jyotiṣmatī

Kadali

Kadamba

Kampillaka	Śriveṣṭaka
Kaṅguka	Śukanāsā
Karañja	Sunniṣaṇṇaka
Kāravellaka	Svarṇakṣīri
Karavīra	Triphalā
Khadira	Tulasī
Kośāmra	Vacā
Kṣīri vṛkṣa	Vaṭa
Kuśa	Yava
Kuṭaja	Wasting (kāṛśya)
Lakuca	Agastya
Lodhra	Balā
Madhuka	Madhuka
Mahat pañcamūla	Pippalī
Meṣaśṛṅga	Rasona
Nārikela	Tila
Nimba	Vātāma
Pañcavalka	Worms (helminthiasis)
Pāṭalā	Āmalakī
Pāṭhā	Bhallātaka
Plakṣa	Bimbī
Prśniparṇī	Devadāru
Pūtika	Kadamba
Rājādana	Kampillaka
Rasona	Kandalī
Śālasārādigana	Kapikacchū
Śālī	Karañja
Śallakī	Kebuka
Śālmālī	Kulattha
Samaṅgā	Mahanimba
Śaṅkhinī	Mūṣikaparṇī
Saptaparṇa	Nārikela
Sarala	Palāśa
Śarapuṅkhā	Pārasikayavānī
Sārivā	Paribhadra
Sarjarasa	Pippalīmūla
Sarṣapa	Pūtika
Śirīṣa	Sarala
Snuhī	Śarapuṅkhā

Śigru
 Śirīṣa
 Tulasi
 Viḍaṅga
Guinea worm
 Babbūla
 Bhallātaka
 Nirguṇḍī
 Pātālagaruḍi
 Śālmali
 Śigru
Liver enlargement
 (yakṛt(d)vrddhi)
 Haritakī
 Rajikā
 Rohitaka
Mental disorders
 (mānasa vikāra)
 Girikarṇikā
 Kuṣṭha
 Sarpagandhā
Necrosis
 Haritakī
 Kūsmāṇḍa
 Triphalā
 Upodikā
Obesity (medoroga)
 Agnimantha
 Asana
 Atimuktaka
 Babbūla
 Badarī
 Bilva
 Citraka
 Eraṇḍa
 Gavedhukā
 Guggulu
 Haritaka
 Mahatpañcamūla

Marica
 Muṇḍī
 Paṭala
 Paṭola
 Patra
 Rasāñjana
 Śirīṣa
 Tāmbūla
 Triphalā
 Vāsā
 Yava
Obstetric disorders
 (prasūti-vikṛti-sūtikā roga)
Abortion and Miscarriage
 (garbhapāta-garbhāsrāva)
 Kāmalā
 Kaṣeru
 Nyagrodhādi gaṇa
 Śāka
 Udumbura
 Vandāka
Anorexia
during pregnancy
 Mātulūṅga
Difficult labour
 (mūḍhagarbha)
 Apāmarga
 Atibalā
 Balā
 Bhūrja
 Kākamāci
 Madana
 Priyaṅgu
 Punarnavā
 Śāka
 Śarapuṅkhā
 Śirīṣa
 Snuhī
 Tejavatī

Vāsā	(post-partum pain)
Easy delivery	Trijāta
(sukha prasava)	Tulasī
Godhūma	Puerperal disorders
Jimūta	(prasūti vikāra)
Kokilākṣa	Daśamūla
Lāṅgalī	Methikā
Mātuluṅga	Stabilising foetus
Parūṣaka	(Calita garbha saṁsthāpana)
Pāthā	Bhṛṅgarāja
Śālaparṇī	Śṛṅgāṭaka
Upodikā	Purnsavana
Viśāla	(foetus sex reversal)
Placenta expulsion	Palāśa
(aparā pātana)	Pārīṣa
Kaṭukālābū	Putrajīvaka
Lāṅgalī	Śivaliṅgī
Pūga	Śveta kaṇṭakārī
Upakuṇḍikā	Vaṭa
Foetus atrophy	Pediatrics disorders
(garbhastha śśubhrūṇa śoṣa)	(Bāla roga-kaumāra bhr̥tya)
garbhaśoṣa)	Āmalakī
Kāśmarya	Ativiśā
Saireyaka	Bhūrja
Kikkisa	Bilva
stria gravidarum	Brāhmī
Āragvadha	Bṛhatī
Karavīra	Coraka
Varuṇa	Hribera
Pregnancy oedema	Kamala
(garbhiṇī śoṭha)	Kuṣṭha
Punarnavā	Madhūlikā
Pregnancy pain	Muṇḍī
Balā	Rasāñjana
Drākṣā	Śāliparṇī
Ervāru	Śamī
Pippalī	Sāmudranārikela
Sārivā	Tulasī
Makkala	Varuṇa

Ahiputana	Adhaḥpuṣpī
Badarī	Agnimantha
Karañja	Alābū
Rasāñjana	Āmalakī
Triphalā	Amlavetosa
Asana	Apāmārga
Asthma (bālaśvāsa)	Ārdraka
Dhānyaka	Arjuna
Bālagraha	Arka
Neo-natal conjunctivitis	Āsphota
Jambū	Bhallātaka
Cough (bālakāsa)	Bhārnḡī
Dhānyaka	Bilva
Umblicus inflammation	Br̥haṭī
Candana	Cāngeri
Oedema	Citraka
Marica	Dantī
Piercing earlobes	Dhānyaka
(karṇa pāli vedhana)	Eraṇḍa
Pañcavalka	Guḍūci
Promoting ear-lobes growth	Hapuṣa
(Karnapāli vardhana)	Haridrā
Guñjā	Haritakī
Proctitis	Hribera
Poṭola	Jalakumbhī
Rasāñjana	Kaṇṭakārī
Rasāyana (bāla)	Kapittha
Madhuka	Karañja
Māmsi	Kola
Sārivā	Kovidāra
Sarṣapa	Kulattha
Medhya leha	Kuśa
Kuṣṭha	Lāṅgalī
Medhya	Loṇikā
Śankhapuṣpi	Madhuka
Vacā	Mahānimba
Brāhmī	Māmsi
Piles - haemorrhoids (arśa)	Manjiṣṭhā
	Mūlaka

Pañcakola	Kamala
Paṭhā	Karīra
Pīlu	Kāśmarya
Pippali	Kuṭāju
Rāsnā	Mocarasa
Sali	Nāgakeśara
Samaṅgā	Nimba
Śāmī	Palāṇḍu
Śatapuspā	Prśniparṇī
Śatāvari	Rasāñjana
Śaṭi	Vāstuka
Śigru	Poisoning (viṣa)
Snuhī	Ajagandhā
Sunniṣaṇṇaka	Aṅkoṭa
Śuṇṭhī	Aralu
Sūraṇa	Arimeda
Tila	Arka
Triphalā	Aśvattha
Trivṛta	Ativiṣa
Tumburu	Bākucī
Upakuncikā	Bandhūka
Upodikā	Bhallātaka
Uttamāraṇī	Bhārṅgī
Vacā	Bhūrja
Varṁśa	Candana
Varuṇa	Carmakaṣā
Vāsā	Coraka
Vṛddhadārūka	Dāruharidrā
Yavānī	Haṃpadī
Yavāsaka	Haridrā
Bleeding piles (raktārśa)	Jāti
Amlikā	Jimūta
Balā	Jivanti
Candana	Kapittha
Cukrikā	Khadira
Dāḍima	Kṛṣṇavetra
Dugdhikā	Madhuka
Dūrvā	Mallikā
Jhaṇḍū	Māṃsī

Mudgaparnī	(kharjūraviṣa)
Mustaka	Cāṅgerī
Nimba	Poisoned collyrium
Priyaṅgu	(viṣajusṭāñjana)
Putrajivaka	Varuṇa
Śaileya	Rabies
Śaivāla	(Kukkura viṣa)
Śāka	Āsphota
Samī	Ingudi
Saptaparna	Kākādani
Sārivā	Kākamācī
Sarpagandhā	Kośātakī
Sindhuvāra	Śaireyaka
Śirīṣa	Śarapuṅkhā
Śleṣmātaka	Sindhūvāraka
Sprkkā	Śirīṣa
Sukanāsā	Taṇḍuliya
Sunisaṇṇaka	Tilaka
Śvetapunarnavā	Vacā
Taṇḍuliya	Scorpion-sting
Tila	(vṛṣcikadamśa)
Trivṛt	Jīraka
Tulasī	Karaṇja
Vandhyakarkoṭakī	Kārpāsa
Viḍaṅga	Kāsamarda
Artificial poison	Palāśa
(Kṛtrimaviṣa)	Rohisa
Taṇḍuliya	Śaivāla
Bee-poisoning	Śuṇṭhī
(madhumākṣikā viṣa)	Snake-poison
Śatapuspā	(sarpa viṣa)
Insect poisoning (Kīṭaviṣa)	Amlikā
Kaṭabhī	Dravanti
Kṣīri vṛkṣa	Girikarṇikā
Sarṣapa	Hareṇukā
Śirīṣa	Kākojaṅghā
Taṇḍuliya	Kovidāra
Kharjuraka poisoning	Kuṣṭha
	Lajjālu

Mañjiṣṭhā	Pippalī
Mayūrasīkhā	Pūtīka
Nākulī	Rudrākṣa
Pātālagaruḍī	Śīgru
Sindhuvāra	Svarṇakṣīrī
Śvetamarica	(śṛgālakaṇṭaka)
Taṇḍuliya	Triphalā
Triphalā	Vanakārpāsī
Spider-poisoning	Vāsā
(lūtaviṣa)	Vetasa
Arkaparṇī	Rheumatoid Arthritis
Hribera	(āmavāta)
Kārpāsa	Ajamodā
Raktacandana	Āragvadha
Śaivāla	Daśamūla
Sārivā	Dhānyaka
Svarṇakṣīrī	Eraṇḍa
(kaṅkuṣṭhaprabhā)	Gokṣura
Tvak	Guḍūcī
Vikankata	Guggulu
Pox (masūrikā)	Haritakī
Āmalakī	Kulattha
Amlikā	Lakuca
Badarī	Mūlaka
Brāhmī	Muṇḍī
Candana	Nirguṇḍī
Dāḍima	Pañcakola
Gavedhukā	Prasāriṇī
Haridrā	Punarnavā
Hilamocikā	Rāsna
Jāmbīra	Rasonā
Jayā	Śālī
Kāñcanāra	Śuṇṭhī
Khadira	Epitaxis
Kāravellaka	(nāsāgata raktasrāva)
Mātuluṅga	Dūrvā
Pañcavalkala	Palāṇḍu
Paṭola	Yavāsa

Raktapitta	Padmaka
(Intrinsic haemorrhage)	Palāśa
Āmalakī	Pañcapañcamūla
Āmra	Paṭola
Añjīra	Pippali
Arjuna	Plakṣa
Asana	Priyāla
Atimuktaka	Priyaṅgu
Balā	Prśniparṇī
Candana	Pūga
Dāḍima	Raktacandana
Drākṣā	Śaivāla
Durālabhā	Śākhotaka
Dūrvā	Śālmali
Gokṣura	Sārivā
Haritakī	Śatāvarī
Hribera	Satīna
Ikṣu	Sindhuvāra
Ingudī	Śleṣmātaka
Jambū	Śrngātaka
Kokodumbara	Sunniṣaṇṇaka
Kamala	Tālīśa
Karañja	Trapuṣa
Kāśmarya	Trāyamāṇa
Khadira	Triphalā
Kharjūra	Trivṛt
Kirātatikta	Tṛṇapañcamūla
Kovidāra	Udumbara
Kumuda	Upakuñcikā
Laghu pañcamūla	Uśīra
Lājā	Vāsa
Lodhra	Vāstuka
Madayantī	Vaṭa
Madhuka	Vetasa
Madhuyaṣṭī	Vidārigandhādigaṇa
Mallikā	Viṣṇukrāntā
Mocarasa	Yavāsaka
Mudga	Yūthikā
Nimba	

Rasāyana

Aguru
 Āmalakī
 Āñkoṭa
 Asana
 Aśvagandhādigāṇa
 Atibalā
 Bākucī
 Balā
 Bhallātaka
 Bhaṅgā
 Bhṛṅgarāja
 Bilva
 Brāhmī
 Citraka
 Copacīnī
 Darbha
 Dhava
 Gokṣura
 Guḍūcī
 Haimavatī
 Hapuṣā
 Haritakī
 Hastikarṇa
 Kākamācī
 Kamala
 Kāśmarya
 Khadira
 Kumuda
 Kūṣmāṇḍa
 Kuṣṭha
 Madhuka
 Marica
 Māṣaparnī
 Matsyākṣaka
 Mudgaparnī
 Mūrvā
 Nāgabalā
 Palāśa

Pañcapanācamūla

Parnīnī-caṭuṣṭaya

Pippalī

Priyāla

Punarnavā

Rasona

Śālī

Śaṇa

Śara

Śaṣṭikā

Śatapuspā

Śatāvarī

Tālapatrī

Tila

Tiniśa

Triphalā

Tuvaraka

Vacā

Vārāhī

Vāsā

Vatsanābha

Viḍaṅga

Vidārī

Vṛddhadāruka

Yūthikā

Medhya rāsayana

(intellect-promoting)

Āmalakī

Guḍūcī

Madhuka

Maṇḍukaparnī

Matsyākṣaka

Śaṅkhapuspī

Re-pigmentation

(savarnīkaraṇa-

varṇasanjanana)

Bhallātaka

Tinduka

Repilatory	Vaginal pain
Rasāñjana	(yonisūla)
Retention of urine	Apāmārga
(mūtrakṛcchramūtrāghāta)	Bhṛṅgarāja
Darbha	Eraṇḍa
Drākṣā	Mallikā
Vaginal-	Punarnavā
Female genital tract disorders	Upakuñcikā
(yonivyāpad)	Vaginal-uterine displacement
Arka	(Yoni-garbhāśaya bhraṁśa-
Himsrā	cyuti)
Jivakāḍya gaṇa	Ārdraka
Kaṭutumbi	Haridrā
Kṣīri vṛkṣa	Māyaphala
Mūṣikaparṇī	Nirguṇḍī
Nimbā	Veneral diseases
Nirguṇḍī	S.T.D. (Sexually transmitted
Pañcapallava	diseases)
Pattaṅga	Upadamśa
Pippalī	(soft chancre)
Rasona	Āragvadha
Śarkarā	Babbūla
Śatapuspā	Bhṛṅgarāja
Śatāvarī	Dāḍima
Triphalā	Dāruharidrā
Yūthikā	Haritakī
Vaginal burning sensation	Karavīra
(yonidāha)	Kṣīrivṛkṣa
Sūryakāntā	Pūga
Sliny and lax vagina	Rasāñjana
(yonisāithilya)	Śaileya
Āmra	Śallakī
Māyāphala	Sarvagandhā
Bhaṅgā	Śleṣmātaḥ
Udumbura	Tila
Vetasa	Triphalā
Yonikanda-yonyārśa	Vaṭa
(vaginal polypus)	Vitiligo-luecoderma
Koṣātakī	(śvitra-śveta kuṣṭha)

Asana	Māmsi
Bākucī	Masūra
Bhallātaka	Mātuluṅga
Bhrṅgarāja	Mudga
Citraka	Mūrvā
Girikarṇikā	Mustaka
Hribera	Nārikela
Kākodumbara	Parpaṭa
Khadira	Pippalī
Pūtika	Uśīra
Śuṇṭhī	Vāsā
Vomiting	Vaṭa
(Chordi)	Yava
Āmra	Penis inflammation
Āmalakī	(liṅga śoṭha)
Badarī	Kumārī
Bhūstṛṇa	Penile wart
Bilva	Kumārī
Candana	Visūcikā
Dhānyaka	(gastro-enteritis)
Drākṣā	Apāmarga
Durālabhā	Arka
Dūrvā	Kāravellaka
Gavedhukā	Kupīlu
Guḍūcī	Lavaṅga
Haritakī	Mūlaka
Hribera	Palāṇḍu
Jambū	Pippalī
Jātī	Rasona
Jīraka	Sarpagandhā
Kaṇṭakī Karañja	Sarṣapa
Kapittha	Śuṇṭhī
Karañja	Tāla
Karkaṭaśṛṅgi	Trikāṭu
Kharjūra	Sinus
Kiratātiktā	(nāḍivraṇa)
Laghupañcamūla	Apāmarga
Lājā	Bhrṅgarāja
Madhūka	Cañcu

Karañja	Triphalā
Karavira	Vacā
Kodrava	Viśālā
Kumbhika	Skin diseases
Mocarasa	Agaru
Nirguṇḍī	Āmra
Rasāñjana	Arjuna
Snuhī	Arka
Tila	Dhattura
Vaṃsa	Dūrvā
Scrofula (apacī)	Kāsamarda
Bhallātaka	Khadira
Bhr̥ṅgarāja	Kuṭaja
Girikarnikā	Nimba
Lāṅgali	Svarṇakṣīrī
Madhūka	Tāmbūla
Muṇḍī	Tumburu
Śakhoṭaka	Vāsa
Śarapuṅkhā	Sun-stroke
Sarṣapa	(aśūghāta)
Śigru	Āmalakī
Vanakārpāsī	Āḍhakī
Scrotal enlargement	Splenomegaly
(aṇḍavṛddhi)	Amlavetasa
Arka	Āmra
Balā	Arka
Dāruharidrā	Badarī
Eraṇḍa	Bhallātaka
Guggulu	Guḍūcī
Harītakī	Karañja
Indravāruṇī	Kumārī
Jayā	Tila
Kakādanī	Pārijāta
Kośāmra	Pāṭhā
Lajjālu	Rasona
Madhuka	Śālmali
Nākulī	Sarapuṅkhā
Pañcavalkala	Sarṣapa
Śara	Śveta punarnavā

Prameha

Aguru
 Agnimantha
 Āmalaka
 Āragvadha
 Asana
 Aśvattha
 Atasī
 Bhūmyāmalakī
 Candana
 Citraka
 Dāruharidrā
 Dhanvana
 Godhūma
 Guḍūci
 Haridrā
 Haritakī
 Kampillaka
 Kataka
 Khadira
 Kṣīri vṛkṣa
 Kusumbha
 Kuṣṭha
 Madayantī
 Mahānimba
 Mañjiṣṭhā
 Mocarasa
 Mokṣaka
 Nimba
 Nyagrodhādi gaṇa
 Pañcatikta gaṇa
 Pārijāta
 Pāṭhā
 Rājādana
 Rohiṣa
 Rohitaka
 Śākhoṭaka
 Śāka
 Śālasārādi gaṇa

Saptaparṇa

Ṣaṣṭika

Śriveṣṭaka

Śrngātaka

Śyāmaka

Triphalā

Vaṃśa

Vatsanābha

Vikankata

Yava

Yūthikā

Īkṣumeha

(glycosuria)

Jayā

Madhunāśinī

Madhumeha

(diabetes)

Lodhra

Tuvaraka

Diabetic boil

(prameha pīḍikā)

Udumbura

Śukrameha

Arjuna

Śaivāla

Śarapuṅkhā

Rectal prolapse

(guda bhramśa)

Amlikā

Cāṅgerī

Kamāla

Kāravellaka

Purgative (recana)

Arka

Dantī

Kāravellaka

Kṛṣṇabīja

Pūga

Śaṅkhinī

Tilvaka	Vāstuka
Suppression of urine	Vetra
Āmalakī	Vṛddhādaruka
Aśvagandhā	Yava
Elā	Uṣṇavāta
Kaṇṭakārī	Candana
Kuṅkuma	Uncting
Supra-clavicular diseases	(snehana)
Pippalī	Tila
Swelling	Udararoga
Himśrā	(abdominal disorders)
Swelling caused by Bhallātaka	Ajagandhā
(Bhallātakajanya śoṭha)	Āragvadha
Tila	Ādraka
Syphilis	Aśvagandhā
(phiraṅga)	Babbūla
Akarakarabha	Bilva
Copacīnī	Caṇaka
Urustambha	Cavikā
Agnimanthā	Citraka
Ajagandhā	Jyotiṣmatī
Āragvadha	Dantī
Arka	Devadāru
Aśvagandhā	Dravantī
Bhallātaka	Eraṇḍa
Guggulu	Guggulu
Haritaki	Hapuṣā
Kākamācī	Haritakī
Karañja	Kadali
Pippalī	Kākādani
Samāṅgā	Kodrava
Saralā	Mahat pañcamūla
Sarṣapa	Mānaka
Śrīveṣṭaka	Maṇḍukaparnī
Sunniṣaṇṇaka	Nīlinī
Śyāmāka	Pīlu
Śyonāka	Pippalī
Triphalā	Pūtīka
Tumburu	Śaṅkhinī

Saptalā	Kuṅkuma
Sarṣapa	Madhuka
Ṣaṣṭika	Trivṛt
Śigru	Urticaria
Snuhī	(śītapitta)
Śuṇṭhī	Agnīmantha
Svarṇakṣīrī	Āmalakī
(Kaṅkuṣṭha prabhā)	Ādraka
Śyāmāka	Candana
Śyonāka	Kākamācī
Tila	Kāśmarya
Trivṛt	Kulattha
Udāvartta	Madhuka
Āmalakī	Mūlaka
Amlavetasa	Nimba
Ervāru	Pippalī
Harītakī	Tulasī
Hiṅgu	Yavānī
Kaṇṭakāri	



Pharmacological Glossary

[A-N : Vol. II : P-Y : Vol. III]

Paktā (pācana)	: Digestion
Paktidam (agnivar- dhaka, dīpana)	: Stomachic, promoting gastric power (fire).
Paktināśana (agnināśana, agnišāmaka)	: Causing loss of digestive power.
Pakvaśoṭha prabhedana	: Tearing mature inflammation. (ab- scess).
Pakvātisāraghna- hara-nāśana	: Checking mature diarrhoea.
Pakvāśayaviśodhana	: Intestinal evacuation (purgative)
Pacana-pācana	: Digestion, (pāka) pacanakara diges- tive.
Paṭalāpah	: Alleviating diseases of paṭals in eyes (akṣi or netrapaṭala).
Paṭu (lavaṇa)	: Salt
Pathya (hita, hitakara)	: Wholesome benefecial for mind and body
Paratva (parādi guṇa, prādhānyam)	: Superiority, excellence.
Pariṇataviryāḥ (vīryavāna, vīryayukta)	: Mature, potent.
Paritarpaṇa (santarpaṇa)	: Saturating regimen.
Parimāṇa (parādiguṇa)	: Quantitative measurement.
Paristrāṇsi (anulomana)	: Carminative measurement.
Paristrāṇsi (anulomana)	: Carminative
Paruṣa (khara)	: Rough
Palitaghana-hara- nāśana, palitāpaham	: Alleviating greying of hairs.

Palitāpādana (palitakāraka)	: Causing greying of hairs.
Pavanakṣobhi (vātakṣobhi, vātaprakopaka)	: Aggravating vāta.
Pavananigrahaṇa (vātanigrahaṇa, vātaśāmaka)	: Pacifying vāta.
Vātānulomi, vātānulomana	: Carminative.
Pāka (vipāka, pācana, pāka-śoṭha)	: Digestion, final transformation; suppuration (stage in inflammation-boil or abscess).
Pāki (pācana vraṇaśodhakara)	: Suppurating, inflammatory.
Pācana	: Digestive for food (annapācana); digestive for āmadoṣa (āmadoṣapācana); digestive for āma (āmapācana); maturation of pathos (vikṛtipācana); suppuration (granthipācana); dehydrating wound (vṛṇaśuṣkikaraṇa).
Pācanīyam	: Useful for digestion.
Pāṇḍukarm (vraṇa- tāvca savarṇikaraṇa)	: Producing paleness in skin (restoring normal colour).
Pāṇḍu (roga) ghna- hara-śāmaka (pāṇḍvartijit, pāṇḍvāmaya nut)	: Alleviating (pacifying) pāṇḍuroga (anaemia).
Pārśvaśūlaghna-nut- apaḥ-artinut	: Alleviating chest-pain.
Pālīpoṣaṇam (karṇa pālī puṣṭikara)	: Nurishing the ear-pinnae.
Pālivardhanam	: Promoting development of ear-pinnae.
Picchila	: Slimy
Pittalakara-janana-kṛta	: Increasing pitta (bile).
Pittaghna-hara-nāśana- śāmaka-praśamana	: Pacifying pitta.
Pittarakāvarodhi	: Non-antagonist to pitta (bile) and rakta (blood).
Pittanivarhaṇa	: Eliminating pitta.
Pittānulomana	: Pushing pitta in its passage.

Pipāsāghnī-cihedana-

nāśanam-śamana-

paham-śānti

(tr̥ṣṇa-tr̥ṣa-tr̥ṣ hara) : Allaying or alleviating thirst.

Pīḍana : Pressing agent for wound or causing pain heart; pressing (in general).

Pīḍāhara-śāmaka (etc.): Analgesic.

Pīnasahantā-nāśana-

hara : Alleviating chronic coryza.

Puṇsavana : Drugs which help getting male progeny (puṇsavana ouśadha).

Puṇsavaṇa : A specific ritual (saṅkāra viśeṣa). Measures used for getting male progeny, reversal of sex of foetus during pregnancy.

Puṇsatva : Virility; manhood (puruṣa).

Puṇsatvaghna-nāśana

(puṇsatvopaghātakara

ghāti) : Destroying harming-suppressing virility.

Putrajanana

(putrada-kara) : Producing male progeny.

Punarnavākari : Rejuvenating, renovating.

Purāṇa : Old.

Purīṣajanana : Making the quantity of faeces excessive.

Purīṣabhedana

(purīṣabhedi) : Breaking the faecal mass.

Purīṣavirajāṇiṇi : Eliminating the abnormal colour of faeces.

Purīṣasaṅgrahaṇiṇi : Checking frequency and liquidity of stool, anti-diarrhoeal.

Purīṣasraṇsana

(recana, virecana) : Purgative.

Purīṣānulomana : Pushing faeces for its course.

Puṣṭi, puṣṭikara,

puṣṭidam, puṣṭipradam,

pauṣṭika : Nourishment, development, nourishing.

Pūti, putikoṣṭhaghna : Foul-smell; Removing foul smell.

Pūtigandhapakaṛṣaṇa : Removal or eliminating foul-smell.

Pūtimārutam : Making the flatus foetid.

Pūyavardhana : Promoting suppuration.

Prthakatvam : Separation

Pilavam	: Clear
Paicchilyanut	: Removing sliminess.
Prakāśakarāṇi	: Making light; manifesting, to make glowing.
Prkṛtigurūṇi	: Heavy by nature.
Prkṛtilaghūni	: Light by nature.
Prkrativighāta	: Destruction of cause.
Prkratistha, prkratisthā	
(svāsthya)	: Normalcy (health).
Prkratisthāpana	: Bringing back to normalcy, restoration.
Prkratyanuvartana	: Continuance of equilibrium.
Prakledanam	: Moistening.
Pracchardanam	
(vamana)	: Vomiting.
Prajāsthāpanam	
(garbhasthāpana)	: Conception-promoting foetus-stabilising.
Pratibhāpradam	
(pratibhāda,	
pratibhājanan)	: Inspiring new ideas.
Plīhaśūlaghna	: Removing pain in spleen.
Plīhodarahara-	
nāśana-śāmana	: Alleviating splenomegaly.
Phalavirecana	: Fruity purgative.
Baddhanisyanāda	
(mūtrarodhaka)	: Anti-diuretic.
Baddhavinmūtra	: Constipative and anti-diuretic.
Baddhālpavarcasa	: Causing solid and little faeces.
Bandhakarāṇi,	
bandhakāraka	
(bandhanakara)	: Binding.
Bandhachedana	: Cutting the union.
Bandhyabidhamana	: Separating the unions.
Balam	: Energy and growth (Śaktivṛddhi); Ojas (oja).
Balakara, balakṛta,	
baladam, balajanana,	
balapradam, balavatya:	Promoting strength.
Balya, balāvaham,	
balavardhana-vivardhana,	
balāvaham	: Promoting (body) strength.
Balaprasādana	: Manifesting strength.

Balasthairyam	: Stability to strength.
Balasurakṣī	: Protecting strength.
Balāpaham (balahara-nāśana)	: Causing loss of strength.
Balādāna	: Decreasing strength.
Balasurakṣī	: Protecting strength.
Baloparodha	: Obstructing strength.
Balāsavardhana (kaphavardhana-kapha- janana-vṛddhikara)	: Increasing kapha.
Balāsaghna (kaphaghna)	: Anti-kapha.
Bastirujāpahā (bastiśūlahara)	: Relieving renal and vesicular colic.
Bastirogāpahā, bastirujāpahā	: Alleviating diseases of kidney and urinary bladder.
Bahalam (ghanam)	: Solid.
Bahu	: Profuse.
bahukarmakṛt	: Exerting many actions
Bahutā (ādhikya)	: Abundance.
Bahupurīṣa, bahumala, bahupurīṣa, bahusakṛt,	
bahuvarcāḥ	: Producing faeces in large quantity.
Bahumūtra	: Diuretic.
Bahuvāta	: Wind-forming.
Bahuśukram	: Producing profuse semen.
Bahūsmā (prabhūtośmajanana)	: Generating heat in high degree.
Bimbiśināśana	: Anti-dysenteric.
Bījapoṣaṇa (śukravardhana)	: Promoting semen.
Buddhi	: Intellect.
Buddhikaram, buddhiprada	: Intellect-promoting.
Buddhipravodhana	: Awakening intellect.
Buddhiprasāda	: Purity of intellect.
Buddhibalakara	: Strengthening intellect.
Buddhivivardhana (buddhivardhaka)	: Intellect-promoting.
Buddhisanjejanam	: Irritating intellect, shockproducing.
Buddhyupaghātakarama (buddhihara-nāśana)	: Causing loss of intellect.

Br̥ṇhaṇa	
(śārīravardhana)	: Promoting body-weight.
Br̥ṇhaṇātmaka	: Heaving mature of body-promoting.
Br̥ṇhaṇīya	: Benefecial for body-promoting.
Bodhana	
(sphūrtijanan)	: Awakening, emerging.
Braghnahara,	
braghnanāśana	: Alleviating braghna (inguined hearnia).
Prativiṣam (viṣaghna)	: Anti-dote.
Prapīḍanam	: Pressing wound firmly.
Prapurāṇa	: Too old, quite old.
Prabaddhamūtra	
(alpamūtrakara,	
mūtrahrāsakara)	: Anti-diuretic.
Prabodhanam	
(punarcetanyakara)	: Resuscitation.
Prabhākaram	
(dīptikara)	: Promoting glow
Prabhāva	: Specific potency.
Prabhinnaviṭ	: Breaking faeces.
Prabhūtakrimikara	
(krimivardhana)	: Promoting worms.
Prabhūtamajjakara	
(majjāvardhana)	: Promoting bone-marrow.
Prabhūtamāṃsakara	
(māṃsavardhana)	: Promoting muscles.
Prabhutamedokara	
(medovardhana)	: Promoting fat.
Prabhūtāntarmala	
(purīṣamātra janana)	: Increasing quantity of faeces.
Prabhūtāsṛkkara	: Haematinic.
Prabhottamakaram	
(rasāyana,	
uttamakānti-prada)	: Providing excellent glow.
Pramāthi	
(manthanapūrvaka-	
sancitadoṣaniharana)	: Elimination of accumulated doṣa as if by churning.
Prameghī	: Anti-diabetic. (alleviating prameha group of diseases, esp. madhumeha).
Prayatna (ātmaguṇa)	: Will, effort.
Pralāpa	: Delirium.

Prasanna (svaccha, nirmala)	: Clear, free from impurity.
Prasāvana (prasavakara)	: Inducing parturition.
Prasādana (nirmalikaraṇa)	: To make clear (free from impurity), to purify.
Prasṛṣṭaviṇmūtra- samāraṇtvam	: Normal elimination of faeces (evacuation), urine (urination) and wind (gas passing).
Prasekaśamana	: Anti-silagogue.
Praskandana (virecana)	: Purgative.
Prasransana (virecana)	: Purgative, cathartic.
Praharṣa, praharṣakāri, praharṣaṇam, (citta praphullatā, ati harṣa)	: Exhilaration, exhilarating.
Prahlādana, prahlādakarāṇi (ṛptikara)	: Satiating.
Pragalbhyaprada	: Providing boldness.
Prāṇakara (jīvaniya śaktivardhana, balakara)	: Vitaliser, strengthening.
Prāṇaghna (prāṇaghātakara)	: Fatal.
Prāṇajanana	: Promoting strength.
Prāṇadhāraṇa	: Sustaining strength.
Prāṇapratyānayanam	: Revitalisation.
Prāṇadānahetu	: Chief agent in vitalisation.
Prāṇavardhana	: Strength-promoting.
Prāṇoparodhi	: Obstructing vitality.
Prīṇaṇa (puṣṭiprada, tarpaṇa)	: Nourishing and satiating.
Prītiprada (sukha vardhana)	: Pleasant
Prītisananyogavardhanam	: Promoting pleasure as well as union.
Plihajit (plihavṛddhiśāmaka)	
plihahara, plihāpaham	: Alleviating enlargement of spleen.

Bhaktachandakaram (rucikara)	: Relishing.
Bhaktapācana	: Food (consumed ingested) digestive.
Bhaktārocanam (rucivardhana)	: Promoting relish.
Bhaktabhilāṣakāraka (rocana, rucikara)	: Relish to food.
Bhagandra vināśaka	: Alleviating fistula-in-ano.
Bhagnaprasādhakam, bhagnasādhaka	: Union-promoting in fracture.
Bhayāpaham	: Allaying fear.
Bhāgaśo graha	: Division in parts.
Bhinnavarṇa (puriṣabhedana)	: Breaking accumulated wind.
Bhinnaśakṛta (puriṣabhedana)	: Breaking faeces (purgative).
Bhukta pācanam (pacana)	: Digestion (digestive) of ingested food.
Bhuktaśoṣaṇa	: Promoting absorption of ingested food.
Bhuktāpakarṣana, bhuktāvasādanan (anupānakarma)	: Carrying ingested food down words.
Bhṛṣoṣṇatīkṣṇam (atīśayoṣṇatīkṣṇa)	: Intensely hot and sharp.
Bhedana (piṇḍitamala vidāraṇa, śastrakarma-vidāraṇa)	: Breaking faecal mass or abdominal lump, Incision (surgical process).
Bhedanīya	: Useful for breaking.
Bhoutikam (bhūtopaghātahitakara)	: Useful to disorders caused by bhūtas (evil spirits or micro-organism).
Bhramakara	: Causing vertigo.
Bhramaghna (bhramahara-nāśana)	: Alleviating vertigo.
Maṅgalyam (śubha śarīrahita)	: Promoting development and auspicious.
Majjābhivardhana, majjāvivardhana (majjāvardhana)	: Promoting bone-marrow.

Maṇḍalanut (maṇḍalakuṣṭhahara vināśana)	: Alleviating maṇḍala kuṣṭha (type of leprosy).
Matikaram (buddhi vardhana)	: Promoting intellect.
Madakṛta	: Narcotic, intoxicating.
Madaghna (madanāśana)	: Anti-narcotic.
Madajanana	: Appearance narcotic.
Madāpaha, madavināśinī	: Anti-narcotic.
Madavikāranut, (madarogahara madadoṣahara)	: Alleviating adverse effects of wine.
Madhura, svādu	: Sweet.
Madhura prabhāṇi	: Exerting effect of sweet.
Madhura prāyāni	: Almost sweet.
Madhura vipāka	: Sweet in final transformation.
Manopaghātakaram	: Causing mental disorders.
Manaprabodhana (manajagṛtikara), manasampravodhanam	: Awakening mind.
Manaprasāda, manaprasādakara	: Clarity and happiness of mind.
Manaskaram	: Promoting mental development.
Manojam (sundra, rucikara)	: Pleasing, relishing.
Manobalapraḍa (manobalakara)	: Promoting mental power.
Manobodhana	: Awakening mind.
Manortha	: Objects of mind.
Manovyākulāni (manakṣuvdhakara)	: Mind-agitating.
Manda	: Dull
Mandavīryatva	: Diminished degree of potency.
Malapācana (āma-sāma-pācana)	: Digestant for mala (āma) or faeces (as- sociated with āma).
Malapātanam	: Expelling faeces.
Malapittanut (malabhūtapitta bahirkṣipāṇa)	:

Malabhedana	
(malamūtrasāraka)	: Eliminating urine and faeces.
Malaśodhanam	: Elimination of impurities.
Malānulomana	: Passing urine and faeces in their passages.
Malāpaham	: Removing impurities.
Maṣṛṇam	
(snigdha-cikṇa)	: Smooth.
Mahābhiṣyandi	
(atyābhiṣyandi)	: Producing excessive secretion in channels and resultly obstructing the channels.
[Refer : mā and further terms of ma at proper place]	
Rakṣoghna	
(rākṣasanāśana)	: Destroying rākṣas or evil spirits.
Raktadūṣaṇa	: Blood-vitiating.
Raktanāśana	
(raktaśrāvahara- raktasrāvarodhaka)	: Haemostatic.
Raktanivarhaṇam	
(raktaśrāvārodhaka)	: Haemostatic.
Rakta pittaḥna- nivarhaṇa-śāmaka- nāśana-hara-nut	: Alleviating pacifying-checking raktapitta (intrinsic haemorrhage).
Raktapittaprakopaṇa	: Aggravating raktapitta.
Raktapittapraduṣaṇa	: Vitiating raktapitta.
Raktapittābhivardhana	
vardhana	: Increasing rakta-pitta.
Raktapraduṣaṇa- dūṣaṇa	: Blood-vitiating.
Raktaprasādanam	
-śodhana-śodhaka	: Blood purification.
Raktalā	
(rakta vardhana)	: Heamatinic.
Raktavibhedana	
(pinditaraktabhedana)	: Breaking blood-clot.
Raktaśuddhikara,	
raktaśodhaka	: Blood-purifier.
Raktasaṅgrahaṇam	
(raktastambhana)	: Haemostasis
Raktasāṅgrāhika,	

raktastambhanī,	
raktasthāpana	: Haemostatic (styptic).
Raktātiyogapraśamana	
(tīvra raktastambhana)	: Checking excessive haemorrhage.
Raktāpaham,	
raktastambhana etc.	: Haemostatic
Raktapaśānti-śamana	: Checking haemorrhage.
Rajaḥpradoṣaghna	
(ārtavavikāranāśakahara-	
nut etc.)	: Alleviating menstrual disorders.
Rati (ratiprada)	: Pleasant.
Rajodoṣahara	: Destroying-alleviating menstrual disorders.
Rasaḥ (rasa)	: Taste (rasanārtha-āsvādana)-taste impulse -gustatory-tongue chemical sense of perception).
	Juice, expressed juice (kalpanā pharmaceuticals; niṣpiḍana svarasa).
	First (primary) dhātu in body (ādyadhātu).
	Mercury (pārada, the chemical substance; mineral native and ore).
	Potency (śakti, dravyakarṇa, pharmacodynamics).
	Poison (viṣa)
	Ojas (sāra-oja, sarvadhātu sāra).
	Yūṣa (rasa; soup, cereals, dietetics).
Rasa doṣaghna	
(rasavikārahara)	: Alleviating disorders of rasa.
Rasanāpratighāta	: Injuring gustatory sense.
Rasanāsanvejana	
(jihvākṣobhaka)	: Tongue-irritating.
Rasaviruddha	: Antagonist in rasa.
Rasa vivardhana	
(rasa vardhaka)	: Promoting rasa.
Rasaviśeṣābhijñātva-	
karam	: Helping preception of specific sense.
Rasādiśoṣaṇa	: Absorbing rasa etc.
Rasābhivardhana	
(rasavardhana)	: Promoting rasa.
Rasāyanam (rasāyana	
karṇa cikitsā)	: Rasāyana (promotive therapy e.g. reju-

venation, restorative, alterative, protective. etc.); age-sustaining (vayahsthāpana), anti-aging etc. (under Geriatrics, gerontology, the branch of medicine-aṣṭāṅgāyurveda).

Rāganivāraṇa (raktimānivāraṇa), rāganut	: Removing redness of skin.
Rukpraśamana (vedanāśāmaka)	
Vedanāsthāpana	: Analgesic; alleviating pācan.
Ruci, rucikara	: Desire for food, relish.
Rucikāraka, rucida, ruciprada, rucīṣya, rucya	: Promoting desire for food and relish.
Rujāpaha, rujāghna, rujāhara (vedanāsthāpana- śāmaka-hara pīḍāhara etc.)	: Analgesic; checking alleviating pain.
Rūkṣa	: Dry, rough.
Rūkṣaṇa (roukṣyakara, rūkṣatājanana)	: Roughening (producing or causing dryness).
Rūkṣaṇātmikā	: Having nature of roughening.
Rūpa	: Vision, sight (eye function).
Rūpa (līṅga, lakṣaṇa etc.)	: Symptom (clinical diagnosis).
Rogaghna-hara-nāśana- śāmaka-nivāraṇa	: Curative (clinical measure-treatment of disease).
Rogopaśamana- rogopaśānti	: Cure of disease.
Rocana (rucikara, rociṣṇu)	: Promoting desire for food and relish.
Ropaṇa (vraṇaropaṇa)	: Wound-healing.
Ropaṇīya	: Beneficial for wound-healing.
Rogaśātanam (romanāśana- romāpaharaṇa)	: Depilatory.
Romasanjanana (romapunarutpādana)	: Repilatory.
Roukṣya (rūkṣatva)	: Roughness.

Roukṣyakarāṇi (rūkṣatājanana)	: Roughening.
Laghu	: Light (property-gurvādiguṇa).
Laghuta (laghutva), laghutva (lāghavam)	: Lightness.
Laghupākam (acirapāki)	: Light in digestion, easily digestible; light in final transformation.
Langhana	: Lightening (producing lightness in body).
Lavaṇa (lavaṇa rasa)	: Saline (salt) taste.
Lāghava (laghutvānu- bhūti, sphurtirpradā); śarīra bhārayama hrāsa)	: Decrease in body-weight and volume. Feeling of lightness.
Lāghavakara	: Producing lightness.
Lūtaviṣāpaham, lūtavraṇāpaham	: Counteracting spider-poisoning; allevi- ating wound caused by spider.
Lekhana (śarīra kṛśatākara) karśana, patalikaraṇam (medohara)	: Reducing body weight (slimming). Anti-obesity. (emaciating helping lean body).
Lekhana (vraṇopakrama- śastrakarma)	: Scarification.
Lekhaniya (lekhanahistakara)	: Useful in slimming or reducing body (weight).
Lekhanātmaka (lekhanasvabhāvī), lekhī (brñhaṇa- viparitakarma)	: Slimming nature.
Lomarohaṇa (romasanjanana)	: Repilatory.
Lomaśātanam (romāpanayana)	: Depilatory.
Lomasanvejana (romaharṣaṇa romāncakara)	: Horripilatory.
Samyoga (saṃyoga)	: Conjunction.

Sanrohaṇa (samyak vṛṇaropaṇa)	: Proper wound-healing.
Saṇṣamana	: Proper pacification.
Saṇśodhana	: Proper purification (cleansing) by elimination of impurities.
Saṇskāra (parādigāṇa, guṇāntarādhāna-saṇskaraṇa)	: Processing, refinement.
Saṇskāragura-laghu	: Heavy and (or) light by processing.
Sanstambhanam (samyak stambhana)	: Proper checking remedy.
Sanhanana (sandhānakara)	: Union-promoting.
Sanharṣaṇa	: Proper exhilarating.
Sakaṣāya (īṣat kaṣāya)	: Slightly astringent.
Sakṣāra (kṣāriya)	: Alkaline.
Saṇgrahaṇam (puriṣastambhana), saṇgrahaṇīya, saṇgrāhaka, saṇgrāhī	: Checking, anti-diarrhoeal.
Saṇghātakaram	: Creating mass, form and hardness.
Saṇghātavidhānana	: Disintegrating mass and hardness.
Satiktam (īṣatatiktam)	: Slightly bitter.
Satvorjanam (manobalakara)	: Promoting mental power.
Sadyastarpaṇam (śīghratṛptikara)	: Immediately satiating.
Sadyaḥ prāṇakaram (śīghrabala-kara-prāṇakara)	: Immediately strengthening.
Sadyaprāṇaharam (mahābalanāśaka, sadyabalanāśaka)	: Immediately fatal.
Sadyaḥ śūlanivāraṇam	: Immediately alleviating pain, fast acting analgesic.
Sadyaḥ śūlaharam	: Immediately relieving colic.
Sadyaḥ santarpaṇa (sadyasantarepaka)	: Immediately satiating.
Sadyaḥ sampraharṣaṇam (sadyaḥ harṣalāgaka)	: Immediately exhilarating.
Sadyobalāḥ (sadyaḥ tṛptikara)	: Immediately satiating.

Sadyobalakarāṇī	
(śīghrabalakara)	: Immediately strengthening.
Sandhātr	: Union-promoting.
Sandhānam	: Union of separated (injured) parts.
Sandhānakara	: Union-promoting.
Sandhānakṛt	: Union-promoting.
Sandhāniya	: Wholesome for union promoting.
Sandhi viśeṣakṛt	
(sandhi prthakkarāṇa)	: Causing dislocation, disunion.
Sandhiśaṅślesakāri	: Union-promotion (promoting) in bones.
Sannipātajvarāpaha	: Alleviating sannipāta (type of) fever (jvara).
Sannipātapraśamana	: Pacifying aggregate of three doṣa (tridoṣaja).
Samadhuram	: Sweet, slightly sweet.
Samabhiṣyandi	
(atyabhiṣyandi)	: Excessively increasing moisture.
Samānaguṇāḥ	: Similar in properties.
Samānaguṇabhūyiṣṭha	: Having majority of similar properties.
Sara (gurvādiguṇa, asthira, cala), anulomana	: Carminative, laxative unstable, moving.
Sarvakarmaguṇakṛt	: Performing all actions and providing merits (favourable action).
Sarvagadāpaha	: Panacea.
Sarvagadāvarodhi	: Applicable in all cases.
Śakṛdānulomyam	
(puriṣānulomana)	: Laxative.
Śaktirakṣaṇam	: Preservation of energy.
Śaktyāgamanam	
(śaktiyoga-yogakṣema)	: Acquisition of energy.
Sabda	: Sound.
Śamanam (śāmaka), śamanīyam	: Pacifying.
Śārīrakledopayoktā	
(śārīrakledācūṣaka)	: Consuming in body moisture.
Śārīratāpakara	
(śārīratāpajanana)	: Generating body-heat.
Śārīradhātuvyūhakara	
(dhātusamūhajanaka)	: Producing aggregate of dhatus in body.

- Śarīrabalaprada
 (baladāyaka-balaprada): Promoting physical strength.
- Śarīrabalasandhānam
 (balasandhānaka) : Restoring physical strength.
- Śarīropaghātakaram
 (vināśakara) : Destroying the body.
- Śarkarānāśana : Alleviating gravels.
- Śākhāvātaharam
 (śākhāgata vāta
 śamana) : Pacifying vāta heated in dhātus and
 skin.
- Śireḥpratipūraṇam
 (śūnyabhūta śira
 punaḥ pūraṇam) : Restoring normalcy to head by remov-
 ing feeling of vacantness-mental
 vaccum, psychic abnormalcy.
- Śiraḥśūlaghnam,
 śulahara-śūlanut-
 śūlaśāmaka, śiraḥ,
 śūlapraśamana : Relieving-alleviating-pacifying head-
 ache.
- Śirastr̥pti (śirastarpaṇa) : Satiation of head.
- Śirorogāpaham (artinut) : Alleviating head-diseases.
- Śīrolāghavam : Lightness in head.
- Śirovireka,
 sirovirecana : Head-evacuation.
- Śirovirecanam,
 śirṣavirecana : Causing head-evacuation, errhine.
- Śirovirecanopaga : Sub-errhine (helping to errhine).
- Śivam (kalyāṇakara
 hānirahita) : Wholesome, safe.
- Śīśirasparśa (śītasparśa) : Cold in touch.
- Śīghra : Fast, fastly acting.
- Śīghrapuṇsatva
 (āsupuṇsatva-vṛṣatva) : Instantaneously aphrodisiac.
- Śīghravirecana : Immediately purgative.
- Śīghraśukravirecanam
 (śīghraśukrapāta) : Causing immediate discharge of se-
 men.
- Śīta : Cold (gurvādiguṇa).
- Śītajvarapraśamana : Pacifying fever with rigour.
- Sitajvarāpaha : Alleviating fever with regour.

Śītataram	: Colder.
Śītanāśana	: Anti-cold, removing cold.
Śītapraśamana	: Pacifying cold.
Śītala	: Cold, causing cold.
Śītavīrya	: Cold in potency.
Śītasparśa	: Cold in touch.
Śītapanayana	: Alleviating cold.
Śītikaraṇa	: Refrigeration.
Śukrakaram, śukrajanaka, śukrakṛta, śukrajanana	: Semen-promoting.
Śukra Kṣayakaram	: Decreasing semen, causing loss of semen.
Śukrajanaka, śukrapravartakam	: Semen-promoting, semen-propelling.
Śukradoṣahara, śukradoṣanāśana	: Removing defects of semen.
Śukranāśana, sukranut	: Causing loss of semen.
Sarvagrahanivāraṇa	: Warding off all grahas.
Sarvadoṣaharam- nibarhaṇam-nāśaka- śāmaka	: Eliminating all doṣas; pacifying, alleviating all doṣas.
Sarvagadāpaha, sarvaroga-vyādhihara (nāśaka-nut- praśamana)	: Alleviating-eradicating all kinds of diseases; panacea.
Sarvamārgānusāriṇī	: Moving through all the channels.
Sarvārthakāri	: Serving all purposes.
Sarvendriya- vibodhanam	: Stimulating all sensory and motor organs.
Savarṇikaraṇa	: Restoring normal pigmentation.
Sasneham (alpasnigdha)	: Slightly unctuous.
Sahasravīryam	: Having numerous potencies.
Sātmyam (svānukūla)	: Suitable to oneself.
Sādana (avasādaka)	: Depressant.
Sādhāraṇa (sāmānya)	: General.

Sāndra (gurvādiguṇa-ghana)	: Solid, thick.
Sāmangyaguṇāḥ	: General properties.
Sāmlam (īṣadamlā)	: Slightly sour.
Sāra	: Property of śleṣma (balātmaka). Constitution of body (mukhyadhātu e.g. raktaśāra etc.)—constitutionally chief dhātu. Strength (bala). Heart-wood of plants (kāṇḍasāra) Taste of potency Rasa and vīrya.
Sāravidhamanana (ojakṣapaṇam)	: Decreasing ojas.
Sārvakārmika	: Useful in all measures.
Sirapraguṇikaraṇam (sirāguṇabala vatikāri)	: Making veins normal and firm.
Siramukhaviviktatvam (sirāmukhavivardhana)	: Expanding the opening of veins.
Sukham (ātmaguṇa, ārogyam, sukhāyu)	: Pleasure; health; happy (life).
Sukhapariṇāmakara (sukhapācana)	: Easily digestible.
Sukhapariṇāmitākaram (sukhapācanakara)	: Promoting easy digestion.
Sukhavirecana (sukhavirecana)	: Simple purgative.
Sukhāyuh kṛt (sukhī jīvanadā)	: Providing happy life.
Sugandha, sugandhi	: Fragrance, pleasant smell; fragrant, aromatic.
Sudarśanakara (surūpajanana, soundaryakara)	: Beautifying, cosmetic, aesthetic.
Suptinut (supti-śūnyatānāśaka)	: Removing numbness.
Sūkṣma	: Fine, penetrating.
Sūkṣmamārgānusāri	: Moving in minute channels.
Sṛṣṭamūtram (mūtrala)	: Diuretic.
Sṛṣṭamūtrapuriṣam sṛṣṭaviṇmūtram	: Diuretic and purgative.
Sṛṣṭaviṭ (virecana)	: Purgative.
Sṛṣṭaśakṛdvāta	: Purgative and carminative.

Srṣṭānilam

(vātānulomana) : Carminative.

Soukoumāryakaram,

sokumāryakaram

(komalatākara) : Softening.

Soukumāryavināśana : Removing softening.

Soumanasya,

soumanasyajanana

(manahprasādajanana) : Pleasing to mind.

Soumya

: Having predominance of the moon (soma-candra prādhanya). Having predominance of water principle (jala-apa pradhāna).

Souṣīryakarāni

: Making porous.

Skandanam

: Coagulant.

Stanyakara,

stanyajanana

stanyasañjanana : Galactagogue.

Stanyadoṣanibarhaṇam,

stanyadoṣahara,

stanyadoṣaviśuddhi,

stanya viśodhana : Galacto-depurant.

Stanyavṛddhikaram : Promoting lactation.

Stanyāmayaghna,

stanyavikāraśāmaka : Alleviating disorders of breast-milk.

Stambhakara

: Stiffening.

Stambhanam

(stambhana), stambhī: Refrigeration; holding back, checking.

Stambhanāśana,

stambhapraśamana,

stambhavidhamana,

stambhaśamana : Removing stiffness anti-stiff.

Stambhanīyam : Wholesome for refrigeration.

Stimīta (ārdra) : Moist.

Sthira, sthairyakara : Stability.

Sthirakaram : Promoting stability in body parts.

Sthūla (gurvādiguṇa,

sanhatā vayava) : Gross, blunt, massive.

Sthulavilekhana : Slimming.

Sthoulyakāri

(sthoulyakar) : Making obese.

Sthoulyavināśana

(sthoulyahara),
sthoulyanāśana,
sthoulyāpakarśaṇa,
sthoulyāpaham

: Anti-obese, anti-obesity; anti-fat or reducing fat (medohara).

Snigdha

(gurvādiguṇa)

: Unctuous.

Sneha (snigdh, tail
tailīya), snehavante

: Unctuous; oil-oily.

Snehavyāpat praśamana

(snehajanya

vikāra-vikṛti nāśana)

: Alleviating complications of the intake of ghr̥ta (unacting material) including hyperlipidaemia (also refer : cholesterolemic manifestation).

Śnehāpah

: Removing unctuousness, anti-lipid.

Snehopaga

: Promoting unctuous.

Sparśa (vaiśeṣikaguṇa)

: Touch.

Sparśājñānam

(supti, śūnyatā),

sparśahāni

: Numbness, anaesthesia.

Sphuṭaśrotsakaram

: Opening the channels (obstruction).

Smṛtikara,

smṛtivarḍhana

(smṛti-smaraṇaśakti

vṛddhikara),

smṛtivarḍhana

: Improving memory; memory-promoter.

Sraṇsana (virecana),

sraṇsanīyam

: Purgative.

Srāvaṇam

(srāvavardhana)

: Promoting discharge.

Srāvanut, srāvāpaham

: Checking discharge.

Srotaḥprasādanam

: Cleansing or opening channels.

Śrotrahitatam

: Most wholesome for ear.

Ślakṣaṇa

(gurvādiguṇa)

: Smooth.

Śleṣmakarṣī

: Drawing kapha downwards.

Śleṣmapariśoṣaṇam

(kaphaśoṣaṇa)

: Drying kapha.

Śleṣmapittajanana

(kaphapittakara)

: Increasing kapha and pitta.

- Śleṣmaprakopaṇa
 (kaphaprapakopaka) : Aggravating kapha.
- Śleṣmapraśamana
 (kaphaśamaka) : Pacifying kapha.
- Śleṣmapraseki
 (kaphasravavardhana): Increasing mucous secretion.
- Śleṣmala, śleṣmajanana,
 śleṣmavardhana,
 śleṣmavivardhana : Increasing kapha.
- Śleṣmavikaranut
 (kapharogahara) : Alleviating disorders of kapha.
- Śleṣmavilayanam : Liquifying kapha (and afterwards eliminating).
- Śleṣmaviṣyandana
 (kaphadravikaraṇa) : Liquifying kapha.
- Śleṣmahara,
 śleṣmaśamana,
 śleṣmanāśaka
 (kaphaśāmaka) : Removing, pacifying decreasing and alleviating kapha.
- Śleṣmākṣiroganut
 (kaphajanya
 netrarogahara) : Alleviating diseases of eye caused by kapha.
- Śvayathukaram,
 (sothakara,
 sothajanana) : Causing oedema.
- Śvayathughna-hara-
 śamana-hṛt-praśamana
 (śothahara etc.) : Alleviating, pacifying and relieving oedema.
- Śvāsavikaraghna-nut-
 hara : Alleviating dyspnoea (bronchial asthma).
- Śvāsahikkānivarhaṇa : Alleviating dyspnoea and hiccough.
- Śvitranāśana,
 śvitrapraśamana : Alleviating-relieving-vitiligo.
- Śvitrahārī,
 śvitṛāpaham : Anti-leucoderma, alleviating vitiligo.
- Ṣaḍ-indriyaprasādana
 (indriyaprasanna-
 praphullakara) : Pleasing to all the six sense (sensory and vital) organs (incl. mind).

Ṣaḍrasa	: Six tastes e.g. madhura (sweet), amla (sour-acid), lavaṇa (salt), kaṭu (pungent), tikta (bitter), kaṣāya (astringent).
Saṅkhyā (parādiguṇa, samprāptibheda; gaṇanā)	: Enumeration (number).
Saṅjīvana (sarvottam jīvanīya)	: Excellent vitaliser.
Sajñāpradānahetuḥ	: Resuscitative.
Sajñāprabodhanam (supta sajñā punarjagrati)	: Reawakening consciousness, resuscitative.
Sajñāsthāpana	: Resuscitative.
Santarpaṇa (santṛptakara), samprīṇana	: Saturating, satiating.
Sandīpanam	: Excellent stomachic-stimulating digestive fire (power-agni).
Sampat (praśasta)	: Excellence, freedom from injury, immunity etc.
Sampācanam (samyak pācana)	: Proper maturation of inflammation.
Sampravartani	: Expelling faeces, purgative.
Samprasādana	: Pacifying aggravated doṣās and lastly restoring normalcy.
Sambr̥ṇhaṇa (samyak br̥ṇhaṇa)	: Proper body-promoting measures.
Śukravirecana	: Causing discharge of semen.
Śukrala, śukravardhana (śukrajanana)	: Causing discharge of semen.
Śukravivardhana	: Specifically promoting semen.
Śukrāśayasodhana	: Evacuating seminal cords.
Śuci (pavitra)	: Clean, pure, holy.
Śuśira (chidrayukta)	: Porous
Śuśka	: Dry
Śūlaghnī (vedenāśāmaka, udaraśūlahara)	: Analgesic, anti-colic.
Śūlapraśamana (udaraśūlahara)	: Relieving colic (abdominal colic).

Śūlanivṛtti (vedanāśamana)	: Relief of pain.
Śūlanut, śulapramardanī, śūlapraśamana	: Relieving colic, intestinal antispasmodic.
Śūla vimokṣaṇa, śūlaharaṇa, śūlahṛt (śūlanāśana)	: Anti-colic, relieving pain (abdominal colic).
Śaityam (śīta)	: Coldness.
Śaithilyakṛta (śaithilyajanana), śaithilyābhi	: Causing slackness.
Śokanāśana (śokahara, aśoka)	: Anti-anxiety, tranquiliser.
śoka vinodakam Śoṇitapittakṛt, śoṇitapittaprakopi	: Causing and aggravating raktapitta (intrinsic haemorrhage).
Śoṇitapraduṣanam; (raktadūṣaka)	: Vitiating blood.
Śoṇitavardhana (raktavardhana)	: Haematinic.
Śoṇita sanghātabhedana	: Breaking blood-clot, anti-coagulant.
Śoṇitarthāpana (raktasthāpana)	: Restoring normalcy of blood, haemostatic.
Śoṇitā sthāpana (raktāvarodhaka)	: Haemostatic.
Śodhana (śārīra malabahirnirgamana)	: Eliminating impurities and thereby making the body pure and healthy.
Śodhana (vraṇaśodhana)	: Cleaning wound by removing pus etc.
Śophaghna, śophajit, śophanut, śophanivāraṇa, śophaprabādhana, śophaharam, śophāpaha (śothahara)	: Anti-inflammatory.

- Śophajanana
 (śophakāraka) : Causing or aggravating inflammation.
 Śophaprasāmana
 (śophaśāmaka) : Pacifying inflammation.
 Śophasphoṭana
 (pakvaśopha-
 vidāraka) : Tearing mature inflammation (ab-
 scess).
 Śośakara (sośajanana) : Causing consumption.
 Śośaghna, sośahara,
 śośanāśana, śośanut : Alleviating consumption.
 Śyāvatvakara
 (śyāvatājanaka) : Causing darkness in skin.
 Śramahara, śramaghna,
 śramanut,
 śramāpanayana,
 śramāpaham, śramahā : Removing tiredness, acopic.
 Srotaḥśodhanam,
 srotoviśuddhi,
 srotaḥviśodhana,
 srotaḥśodhi
 (srota śuddhikara-
 srotavarodhanivāraṇa) : Cleansing of channels (obstruction re-
 moving).
 Srotaḥsampravodham : Restoring normal functioning of chan-
 nels.
 Srotovibandhanut,
 srotovibandhamokṣa
 (srotorodhahara) : Removing obstruction in channels.
 Srotokharikaraṇa : Causing hardness in vessels.
 Srotomārdavakṛt : Providing softness in channels.
 Srotovaiguṇya
 (khavaiguṇya) : Morbidity in channels (pathological
 state-abnormalcy of srotas).
 Svapnakara, svapnakṛt,
 svapnajanana : Hypnotic.
 Svarya, svarakṛt,
 svaraprada : Wholesome for voice. Promoting voice
 Restoring normalcy to voice.
 Svaraprasādanam : Making voice pleasant.
 Svarabodhanam : Re-awakening voice.
 Svara vardhanam : Voice-promoting.
 Svarabhedavināśanam : Alleviating hoarseness of voice.

Svaraviśodhana	: Alleviating defects of voice.
Svarahitatama	: Most wholesome for voice.
Svalpamūtrakara (mūtrālpavakara)	: Decreasing the quantity of urine.
Svasthanirvāṇam	: Maintaining and promoting health.
Svasthanitam	: Wholesome for health and healthy.
Svādu (madhura, abhiṣṭa, svādiṣṭa)	: Palatable.
Svāpanam (nidrājanana)	: Inducing sleep, hypnotic.
Svastyakārī, svāsthyakara	: Health-promoting.
Svāduprāya (prāyaḥ madhura)	: Almost sweet.
Svedakaram (svedana), svedakṛt, svedajanānī, svedapradam	: Diaphoretic.
Svedāpanayana (svedaharam), svedāpaha)	: Anti-diaphoretic.
Svedāsrāva (svedapravṛtti), svedī	: Sweating.
Svedopaga (svedana sahāyaka)	: Co-diaphoretic.
Tatra yogyatvam (yogyata)	: Effectivity.
Tanu, (avahalam- asāndra; kṣatā)	: Thin, lean.
Tandrākara (tandrājanaka)	: Causing drowsiness.
Tandrā paharam (tandrānāśana)	: Removing drowsiness.
Tandropaśamanam (tandrāśāma)	: Pacifying drowsiness.
Taruṇaprāyam	: Almost fresh.
Taruṇyaḥ (abhinava)	: Young.
Tarpanaḥ (tṛptikara)	: Satiating.
Tarpaṇam (tarpaṇa)	: A specific dietary preparation.
Tarpaṇīya	: Useful for satiation.
Tarṣaṇa	: Causing thirst.
Tāpana, (tāpajanaka)	
Tāpanakaram	: Producing heat.

Tāmaka (tamaḥ praveśakāraka)	: Causing feeling of darkness.
Tāluśoṣaghna	: Removing dryness of palate.
Tikta (rasa viśeṣa nimbavṛkṣa)	: Bitter (taste) : Bitter plant (nimba).
Tikṣṇa (gurvādiguṇa, tīvra; kuṣa, vanaspati viśeṣa); taikṣṇyam	: Irritant, sharp. : Specific plant (kuṣa); sharpness.
Tikṣṇavirecanam (tīrvavirecana)	: Drastic purgative.
Tivrarūkṣāḥ	: Fast and rough.
Tulyaguṇa (samānaguṇavāna)	: Having similar properties.
Tuvara (kaṣāya rasa viśeṣa; vṛkṣa, viśeṣa-tuvaraka)	: Astringent (taste). : specific plant (tuvaraka).
Tuṣṭidam, tuṣṭipradam, tṛptikara	: Providing contentment, satisfying.
Tṛptighna	: Alleviating feeling of satiety.
Tṛṣṇānigrahaṇa- praśamana-śamanam- praśāntiḥ-haram, traṣṇāghna, tṛṣṇātiyoga- praśamanam	: Allaying thirst; pacifying excessive thirst.
Tṛṣṇākara-janana	: Causing thirst.
Tejorūpā vāham (teja rupa dāyaka)	: Providing glow and complexion.
Tridoṣapraśamani- śamani-śamana- hara-nāśana	: Pacifying alleviating three doṣas (trio- body humors).
Tvakapraduṣaṇam	: Affecting skin and causing diseases (in skin).
Tvakprasādakaram	: Making skin pleasant.
Tvaksthirīkaraṇa	: Providing firmness of skin.
Tvagnitejanam (tvacāgatāgni- tīvrakara)	: Stimulating heat of the skin.

Tvakgrahaṇam (tvacādhāraṇa)	: Attaining (covering of) skin.
Tvagdoṣapradhāvanah	: Checking skin diseases.
Tvagdoṣāpanayanam (carmarogahara)	: Alleviating skin diseases.
Tvagiśuddhikara	: Purifying skin.
Tvacya (tvace hitaḥ)	: Benefecial of skin.
Vaktrakledanāśana (mukhārdratāhara),	
vaktrakledāpaham	: Removing moistening of mouth.
Vaktradourgandhya- nāśanam,	
(mukhadurgandhahara)	: Removing foul smell of mouth.
Vaktraprahlādana (mukhālhlādakara)	: Pleasing to mouth.
Vaktraviśodhanam, (mukhaśodhaka)	
vaktraśuddhikara,	
vaktrasamśodhana	: Mouth-cleansing.
Vadanapriyaḥ (svādu, mukhapriya)	: Palatable.
Vandhyāsutapradam (vandhyātvahara- nāśaka)	: Anti-sterility.
Vapurvivardhana (śarīravṛddhikara)	: Promoting physical development.
Vamanam	: Emesis.
Vamanopaga (vamanasahāyaka)	: Sub-emetics.
Vamighnam (chardighna)	: Anti-emetic.
Vayaḥsthāpana; vayaḥsthayitā (vayobalakara)	: Age-sustaining.
Vayorhitatam	: Wholesome for age-sustaining.
Varcasamhatikaraṇa (puriṣabandhanakara)	: Making stool formed (solid).
Varco-anulomanam (puriṣānulomana)	: Pushing faeces in course.
Varcodoṣaśithilikaraṇam (gaḍha-kāṭhina puriṣa mṛdu-karaṇam)	: Softening hard stool.

Varcobhedahitam (sāraṅka), varcobhedi	: Wholesome for laxative.
Varcovibandha gṇam (vibandhaṇāśaka)	: Relieving constipation.
Varcovibandhanut (sāraṅka)	:
Varcovivardhanam (prabhūtapuriṣajanana)	: Increasing the quantity of faeces.
Varṇakaram (varṇa janaka),	
varṇaprasastakara	: Causing complexion; beautifying.
Varṇakṛt (varṇakara), prasastavarṇakara,	
varṇadam	: Promoting complexion, beautifying.
Varṇaprasāda (varṇa prasāda vaimalya)	: Beautifying.
Varṇaprasādana (varṇavimalikaraṇa)	: Making complexion clear.
Varṇavardhanam (varṇavṛddhikara)	: Promoting complexion.
Varṇavināśana (varṇanāśana)	: Decreasing or causing loss of complexion.
Varṇaviśodhana (varṇaśodhana)	: Purifying complexion.
Varṇahitatama (varṇa param hitakārī)	: Most benefecial for complexion.
Varṇottamkaram	: Promoting excellence of complexion.
Varṇoparodha (varṇa kṣaya)	: Loss of complexion.
Varṇya	: Promoting complexion; wholesome for complexion.
Vardhanam (vṛddhikara)	: Promoting, increasing, enhancing (in general).
Valipalitanāśanam (vali palita hara)	: Removing wrinkles and greying (hairs).
Balyāpādana (vali janaka-kāraṅka)	: Causing wrinkles.
Vastrakriminut	: Destroying insects (mite) of clothes.
Vahnidīpāna (dīpāna-agnidīpāna)	

- vahnisandhukṣanam : Stimulating digestive fire (power).
 Vahnināśana
 (agnisādana),
 Vahnividhamana : Causing loss of digestive power.
 Vākpradam : Promoting excellent speech.
 Vakṣaṅga
 (vāṇi avarodhakara) : Loss of speech, aphasia.
 Vaṅganigrahaṇa
 (vāṇi avarodhakar) : Causing obstruction of speech.
 Vājikaraṇa : Aphrodisiac.
 Vātaghna, Vātahara,
 Vātanāśaka, Vātanut,
 Vātaśāmaka : Alleviating, pacifying, vāta (in aggravated state).
 Vātajanana,
 vātaprakopaṇa : Increasing vāta, vāta-aggravating.
 Vātanulomana,
 vātanulomyam : Carminative.
 Vāminī : Emetic.
 Vikāśi : Fastly spreading (in body).
 Vicarakarāṇi
 (gatikāraka) : Causing movements.
 Vicchedana : Disintegrating, separating.
 Vijjala (picchila) : Slimy.
 Viṭakarṣi : Drawing faeces to its passage.
 Viṅganulomana
 (purīṣānulomana) : Pushing faeces in passage.
 Viṅgabhedī (virecanas,
 purīṣabhedana) : Purgative, breaking faecal mass.
 Vidāraṇa
 (vidīrṇakara) : Tearing mature inflammation (abscess).
 Vidāha : Burning sensation.
 Vidāhajanaka : Causing burning sensation.
 Vidāhi (vidāhajanaka) : Causing burning with hyperacidity and poor digestion.
 Viparītaguṇa : Having antagonistic properties.
 Viparītaguṇabhūyiṣṭha : Having majority of antagonistic properties.
 Vipāka
 (pāka caram pariṇati) : Final transformation after digestion.
 Vipākaviruddha : Antagonist in vipaka.

Vibandhanāśaka, vibandhaghna, vibandhanut, vibandhabhedanī	: Relieving constipation, breaking constipation.
Vibhakti	: Separating by cutting.
Vibhāga	: Disjunction.
Vimala	: Clear, clean, pure.
Viyoga (prthakkikaraṇa, vibhāgaviśeṣa)	: Disjoining, elimination.
Virajanīyam	: Removing abnormal colour (in urine or stool).
Virasa (vikrtarasayukta)	: Having abnormal taste.
Virūkṣaṇam (medonāśaka- viśeṣarūkṣatākara), virūkṣaṇakara	: Roughening, anti-obesity.
Virūkṣaṇīyam	: Benefecial for roughening.
Virecanam, vireka	: Purgative.
Virecanopaga (virecana sahāyaka)	: Sub-purgative.
Villaṅghanam (viśeṣarupeṇa laṅghana)	: Specifically lightening.
Viśada (picchilitā rahita-gurvādiguṇa)	: Non-slimy.
Viśeṣaśītam (atyarthaśītam)	: Progressively cold.
Viśodhanam (malanirharaṇa śarīraśuddhi; vraṇapūyanirharaṇa śodhana)	: Cleansing by evacuation; purification; cleansing of wound (by removal of pus).
Viśoṣaṇam, viśoṣi	: Specifically drying.
Viśleṣaṇa	: Separation, disjoining.
Viśaghna, viśaharaṇam (viśanāśaka- viśāpaha-viśahara), viśavināśana, viśasūdana	: Anti-poison, anti-dot.
Viśapradūṣaṇa	: Aggravating poison.
Viśa praśamana (viśa śāmaka)	: Pacifying poison.

Viṣamajvaraghna-
nāśana-hara-
praśamana

: Alleviating irregular fever, anti-malarial.

Viṣavardhana,
viṣavṛddhikara

: Aggravating poison.

Viṣtambhi
(viṣtambhakara)

: Wind-forming, flatulent.

Viṣtambhajit
(viṣtambhanāśana)

: Checking formation of mind and flatulent.

Visyandakarāṇi
(śrāvakāraka)

: Promoting oozing.

Visyandanam
(sravaṇa)

: Oozing.

Visram
(āmagandhayukta)

: Having fishy smell.

Visraṇsanam

: Carrying wind etc. down; carminative, laxative.

Visraṇsasamartham
(sāraṇa)

: Laxative.

Vihatasaṇdhānam
(kṣatasandhāna)

: Promoting union in injured part.

Virya (śakti)

: Potency.

Viryakarī (śaktiprada)

: Energizer.

Viryadam

: Energizer; semen-promoting.

Vīrya viruddham

: Antagonist in vīrya (potency).

Vīryoparodha

: Deterioration of energy.

(śaktihṛāsa)

Vīryoṣṇa

: Hot by potency.

Vṛttikaram

: Maintaining body.

(śarīrasthirakara)

Vṛṣatā (pauruṣa)

: Virility, sexual potency.

Vṛṣya (śukra),

vājīkaraṇa)

: Semen-promoting, aphrodisiac.

Vṛṣyatamaḥ

: Aphrodisiac in higher degree.

(atiśaya vṛṣya)

Vedanāpaha,

vedanāśamanam,

vedanāsthāpana,

vedanopośama

: Analgesic.

Vepathu

: Removing shivering.

Vaimalyam	: Cleanness, purity.
Vailakṣaṇyam (jātigata pāṛthakya)	: Class separation.
Vaivarnyakāri, vaivarnyakṛt	: Causing abnormal complexion.
Vaiśadyam (paicchilyarāhitya)	: Non-sliminess.
Vaiśadyakara, vaiśadyakāraka	: Causing, non-sliminess.
Vaiśeṣikaguṇāḥ	: Specific property.
Vaisvaryakṛt (svarabhahara)	: Alleviating hoarseness of voice.
Vyaktalavaṇam (prakṛṣṭalavaṇam)	: Prominently salty.
Vyuktasnehanam (susnigdha)	: Prominently unctuous.
Vyaktāmlam (prakṛṣṭāmlam suspaṣṭāmlarasa)	: Prominently sour.
Vyavāyavardhanam (vājikaraṇa, mithunaśaktivardhana)	: Improving sexual potency.
Vyavāyi	: Easily assimilable after ingestion or application.
Vyādhikara (rogajanaka)	: Pathogenic.
Vraṇamārdava (vraṇamṛdutā śāmaka)	: Removing softness of mind.
Vraṇaropaṇam (vraṇaśaiśithilyakara)	: Wound-healing.
Vraṇaśaiśithilyaprasādana (vraṇaśithilatākara, vraṇaśaiśithilyaprasādana)	: Causing slackness to wound.
Vraṇaśaiśithilya śamanam	: Removing slackness of wound.
Vraṇaśodhana (wound-healing)	: Wound-cleansing.
Vraṇasoukumārya- prasādhana	: Causing softness in wound.
Vraṇahā (vraṇanāśaka)	: Alleviating wound.
Vraṇāsādanam	: Wound-depressing.
Vraṇya (vraṇahitakāri)	: Wholesome for wound (helping to relief of wound).

Yuktiḥ	: Raionale (yukū); rationale potentiating (sayuktika yojanā).
Yogavāhi	: Synergistic, potentiating.
Yogyatvam (prayogoyogyatā)	: Effectivity, applicability.
Yonidoṣahara, yonyāmayaghna, yonidoṣahṛt, yoniroganibarhaṇa, yoniroganivāraṇa yonivyāpadahara	: Alleviating disorders of female genital organs (tract).
Yoniviśodhana (yonīśodhana, yoni-garbhaśaya śodhana)	: Cleansing vagina (and uterus).
Yoniśūlapraśamana (yonīśūlaśāmaka)	: Alleviating pain in vagina and uterus.
Yonyāsrāvavināśana (yonīsrāvahara)	: Checking vaginal discharge.



DRUGS WITH SIDDHA MEDICINE TERMS

Ayurveda

Ākarakarabha
Akṣoṭa
Aguru
Agastya
Agnimantha
Aṅkola
Ajagandhā
Atasi
Atibalā
Ativiṣā
Adhaḥpuṣpī
Ananāsa
Annāmaya
Aparājitā
Apāmārga
Āmrātaka
Amplaparnī
Amlavetasa
Amlikā
Aranyajīraka
Aralu
Arimeda
Ariṣṭaka
Arka
Arjuna
Alarka-rājārka
Aśoka
Aśvakarṇa
Aśvagandhā
Aśvattha
Asana-Bijaka
Asthisamhāra

Siddha

Akkirakaram
Akrottu
Agil
Agathi
Thamthalai
Azhinjil

Alisidirai
Patatir
Athividayam
Kalnudaitumbai
Annasi
Ergot
Kakkānam
Nayuruvi
Mambulici
Nattirevaichini

Adavi jilakara
Peruppi
Valval
Ponnamgottai
Erukku
Maruthu, Marutai
Pallerukku
Asoku
Sara
Amukkara
Arasu
Pirasaram
Pirandai

Āsphota	Abini
Ahiphena	Thovany
Āḍhaki	Nellikkaina
Āmalaki	Mangamaram, Mamaram
Āmra	Mangaiinji
Āmrāgandhiharidrā	
Āragavadha	
Ādraka	Ingi
Āvartaki	Avaram
Bṛhadelā	Periyadan
Śaṭi	Seemaikichikkighaga
Śatapatrī	Iroja
Śatapušpā	Sadakuppai
Śatāvari	Seemeithannervittan
Śarapunkhā	Mullukaivelai
Śallaki	Parangisambirani
Śāka	Tekku
Śakhoṭaka	Pirai
Śāla	Kungilyam
Śālīparṇī	Pulladi
Śāli	Neb
Śālmali	Purani
Śigru	Murungi
Śirīṣa	Vagai
Śuṇṭhī	Chukku
Śṛṅgāṭaka	Singara
Śaileya	Karpasi
Śleṣmāṭaka	Naruvilli
Sosdāpuṣpā	Nithiyakalyani
Saptaparnā	Pala
Samudranārikela	Kadathenagi
Sarja	Kundurukam
Sarala	Seemaidevadaru
Sarpagandhā	Amalpori
Sahadevi	Sahadevi
Sārivā	Nanniari
Śinśipā	Sisu
Sudarśana	Vishamoongi
Sūraṇa	Karnsa

Saireyaka	Chemmulli
Somavalli	Somagam
Śunṭhī	Uhaikkali
Svarṇakṣirī	Bramadandu
Svarṇapatrī	Nilavarai
Haridrā	Munjal
Haridru	Majakadambu
Harītakī	Kadukkai
Himsrā	Karunsurāi
Hiṅgu	Perurkayam
Avartani	Valamburi
Ikṣu	
Ikṣvāku	
Ingudī	
Indravaruṇī	
Isvari	
Iṣadgola	Isappa
Udumbura	Athi
Upakuñcikā	Karum seeragm
Upodikā	
Uśīra	Vetiver
Ṛddhi	
Ṛṣabhaka	
Eraṇḍa	Ammanakka
Eraṇḍakarkaṭī	
Ervāru-karkaṭī	Mulampazham
Elavāluka	
Elā	Ilam
Kaṅkuṣṭha	Iravakhinni
Kaṅkola	Valmilagu
Kaṭphala	Maruthu
Kaṭuka	Kaduguragini
Kaṭuparṇī	
Kaṇṭakikaraṇja	Kazharchi
Kaṇṭakārī	Kandamkathiri
Khadira	
Kataka	Thettran
Kadamba	Venkadambu
Kadali	Vazhai

Kapikacchu	Poonaiikkali
Kamala	Ambel
Kampillaka	Kamel
Karañja	Pungu
Karamarda	Nathuthagarai
Karavira	Alari
Karira	Chengan
Karkataśṛṅgi	Karkatagasingi
Karcūra	Kichili Kizhangu
Karpura	Indu
Kalambaka	Maramanjai
Kaseru	Karudan
Kakajanghā	
Karṇasphoṭā	Mudukottam
Kākanāsā	Uppilankodi
Kākamāci	Manattakkali
Kakoli	
Kāñcanāra	Sivappumanchori
Kārpāsa	Paruthi
Kalambaka	Maramanjai
Kāseru	Karudan
Kākamāci	Manattakkali
Kakodumbara	Peyathi
Kāñcanāra	Sivappumanchori
Karpāsa	Paruthi
Karavellaka	Pagal
Kāsamarda	Nahuthagarai
Kāsanī	Kasinikeerai
Kiratatikta	Nilavembu
Kiṭamāri	Kattusuragam
Kukundara	Narakka
Kunkuma	
Kuṭaja	Kudasappalai
Kupilu	Etti
Kumāri	Kattrazahi
Kumuda bheda (nīlotpala)	Neelotpalam
Kumbhi	
Kulanjana	Kanda
Kulattha	Kollu

Kuśa	Tharubai
Kuṣṭha	Kottam
Kusumbha	Chendurakam
Kūsmāṇḍa	Poosani
Kṛṣṇajīraka	Semai Seearagam
Kṛṣṇa sārivā	Kattupala
Ketaki	Tali
Kebukā	Krravam
Kokilākṣa	Neelothpalam (?)
Kodrava	Varegu
Kośātaki	Pikunkai
Kośāmra	Kolama
Kozuppa	Pulitarai
Khadira	Kalippaku
Kharjūra	Periya itcham
Gangerukī	Achu
Gaṇdhaprasāriṇi	Talanili
Gambhārī	Kattanam
Guggulu	Kungilyam
Guṇjā	Kundrimati
Guḍūci	Seenthil
Gundrā (Eraka)	Jambo
Goraksagaṇjā	Serupeelai
Gokṣura	Sirunenunji
Gojihvā	Unujni
Gorakṣa	
Cakramarda	Thagarai
Caṇaka	Kodalai
Candana	Chandhanam
Candraśūra	Ahvirai
Campaka	Sambangi
Cakṣuṣyā	Mulaippal virai
Cāṅgeri	Pulai kiri
Citraka	Venkodiveli
Cirabilva	Jya
Canda	Chengan
Chatraka	Venkodiveli
Chilahinṭa	Kattukkodi
Jaṭāmānsī	Sadamanjil

Japā	Sambarathai
Jambīra	Elumishchai
Jambū	Naval
Jayantī	Sembai
Jalakumbhī	Agasatamarai
Jalapippalī	Paduthalai
jalavetasa	Attupalai
Jātiphala	Masikkai
Jāti	Pichippu
Jayapāla	Neervalam
Jiraka	Seeragam
Jivantī	Palakudai
Tavakṣīra	Kua
Tambūla	Nagavalli
Tarkārī	Thaluthalai
Tāla	Panai
Tālamūli	Nilappankkizhangu
Tālīśa	
Tiniśa	Narivenguyam
Tila	El
Tilaparnī (śveta)	Kadugu
Tumburu	
Tulasī	Thulasi
Tuvaraka	Maravattai
Trivṛta	Sivathai
Taila parṇa	Karpooramaram
Trapuṣa	Vellarikkai
Tvak (darusitā)	Kiramboo
Dantī	Neeradimuthu
Dāḍima	Mathulai
Daruharidrā	Maramanjal
Dugdhikā	Ammanptharisi
Dūrva	Arugan
Devadaru	Devadhari
Dravantī	Neervalam
Droṇapuspī	Thumbai
Dhattūra	Ervakku
Dhātakī	Velakkai
Dhānyaka	Kothamalli

Dhāmārgava
 Nala
 Nandivṛkṣa
 Nāḍīhiṅgu
 Narikela
 Nicula (hijjala)
 Nimba
 Nirguṇḍī
 Nīlinī
 Paṭola
 Patrāṅga
 Paruṣaka
 Paṇabīja
 Paṇayavānī
 Parpaṭa
 Palaṇḍu
 Palāśa
 Pasupāsī (jātikōṣa)
 Pāṭalā
 Pāṭhā
 Pārasīka yavānī
 Pārijāta
 Pāribhadra
 Pāśāṇabheda
 Pippalī
 Pītakaravīra
 Pītamūla (mamira)
 Pīlu
 Putrajīvaka
 Punarnava
 Punnāga
 Pūga
 Pṛśṇiparṇī
 Priyāla
 Plakṣa
 Phalgu (anjīra)
 Bakula
 Badari
 Babbūla

Peerkkku
 Moongil
 Kagoti
 Tikkamalli
 Thennai
 Kadappasi
 Vembu
 Noohi
 Neeli
 Kombupudalai
 Patungana
 Palisa
 Ranakkali
 Karpoor valli
 Tusa
 Vellai vengayam
 Parasa
 Kallanchadi
 Pathiri
 Appatta
 Khurosani oman
 Pavajha mattigai
 Kalyanamurunga
 Padanbethi
 Tippili
 Pachaialari

 Parngoli
 Karupali
 Mukkarattai
 Punnam
 Kamugu
 Sithiopala
 Mudaima
 Kurugu
 Semaiattai
 Magilam
 Ilandi
 Karuval

Barbarī	Karunthu
Balā	Nilathuththi
Bākucī	Karpoogaarisi
Bibhitaka	Thandri
Bimbi	Koovai
Bilva	Vilvam
Bijapūra (mātuluṅga)	Kadaranathai
Bṛhatī	Papparanulli
Bola	Vellaibolam
Brāhmī (aindrī)	Neer Brami
Bhaṅgā	Kanja
Bhāṇḍīra	
Bhūnimba (Kālamegha)	Angara valli
Bhūrja	
Bhṛṅgarāja	Karrisalai
Manjiṣṭhā	Manjitti
Maṇḍūkaparnī	Vauarai
Matsyākṣaka	Ponnankai
Madayantikā	Maruthondri
Madhūka	Kattuiluppu
Marica	Milagu
Mallikā	Malligi
Masūra	Masurpurpu
Mahābalā	Tannacham
Mānsarohiṇi	Somadanam
Mādhavi	Adigam
Māyaphala	Maiskkay
Māṣa	Patchaipayaru
Miśreya	Sogikeenai
Mucakunda	Vennanga
Munjātaka	Silamishri
Muṇḍī	Kottaikaranthai
Mudga	Panipayaru
Mudgaparnī	
Muśalī	Koraikkizhangu
Mūlaka	Mullangi
Methikā	Vendhayam
Meṣaśṛṅgi	Sirukurinjan
Yava	Baillarisi

Yavānī	Omam
Yaṣṭimadhu	Athimathuram
Yuthiparṇī	Nagamalli
Raktacandana	Chanchandan
Rasona (laśuna)	Poondu
Rājabalā	Pazhampasi
Rāsnā	
Lakuca	Illangu
Lankā	Milakkay
Lajjālu	Thottal, chinungi
Latākastūrī	Kattu kasthuri
Lavaṅga	Kirambu
Lāngali	Akkinichalam
Varṇśa	Moongi
Vacā	Vasambu
Vaṭa	Ali
Vatsanābha	Nabi
Vantrapuṣī	
Vanpalāṇḍu	Marovemgayam
Vanyaharidrā	Kasthuri manjal
Vandaka (bandāka)	Phulluri
Varuṇa	Maralingan
Varṣābhū	Sharunai
Vākeri (ghṛtakaraṇja)	
Vāsā	Adathodai
Vikankata	Sirukala
Viḍaṅga	Vaivilangam
Vidārī	
Virataru	Vidathalai
Vṛkṣāmla	Mugal
Vṛddhadāruka	Nilapoosani
Bṛhat Gokṣura	Peruneraṇji



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Aṣṭāṅga Saṅgraha	अष्टाङ्ग संग्रह
Arka Pakāśa	अर्कप्रकाश
Āyurveda Prakāśa	आयुर्वेद प्रकाश
Bhāvaprakāśa	भावप्रकाश
Bhāvaprakāśa Nighaṇṭu	भावप्रकाश निघण्टु
Bṛhannighaṇṭu Ratnākara	बृहन्निघण्टु रत्नाकर
Bhaiṣajya Ratnāvali	भैषज्यरत्नावली
Baṅgasena	बंगसेन
Cakradatta	चक्रदत्त
Cikitsā Kalikā	चिकित्सा कलिका
Caraka Saṁhitā	चरक संहिता
Dhanvantari Nighaṇṭu	धन्वन्तरि निघण्टु
Gadanigraha	गदनिग्रह
Dravyaguṇa Saṅgraha	द्रव्यगुण संग्रहः
Hārīta Saṁhitā	हारीत संहिता
Kākacaṇḍīśvara-kalpatantram	काकचण्डीश्वर कल्पतन्त्रम्
Kalyāṇakāraka	कल्याणकारक
Kṣemakautūhala	क्षेमकौतुहल
Kaiyadeva Nighaṇṭu	कैयदेव निघण्टु
Kāśyapa Saṁhitā	काश्यप संहिता
Nighaṇṭu Ratnākara	निघण्टु रत्नाकर
Madanapāla Nighaṇṭu	मदनपाल निघण्टु
Paribhāṣā Pradīpa	परिभाषा प्रदीप
Puṣpāyurveda	पुष्पायुर्वेद
Rasaḥṛdaya Tantra	रसहृदयतन्त्र
Rasaratnākara	रसरत्नाकर
Rājamārtanḍa	राजमार्तण्ड
Rāja Nighaṇṭu	राजनिघण्टु
Rājavallabha Nighaṇṭu	राजवल्लभनिघण्टु
Rasaratnasamuccaya	रसरत्नसमुच्चय

Rasārṇava	रसार्णव
Rasatarāṅgiṇī	रसतरंगिणी
Rasakāmadhenu	रसकामधेनु
Siddhabhaiṣajyamaṇimālā	सिद्धभैषज्यमणिमाला
Sārṅgadhara Saṁhitā	शार्ङ्गधर संहिता
Śoḍaśāṅga hṛdaya	षोडशाङ्गहृदय
Śoḍhala Nighṇṭu	शोढल निघण्टु
Suśruta Saṁhitā	सुश्रुत संहिता
Siddhasāra	सिद्धसार
Sahasrayoga	सहस्रयोग
Vaidyaka Śabda Sindhu	वैद्यक शब्द सिन्धु
Vaidyamanoramā	वैद्यमनोरमा
Vaidyajīvana	वैद्यजीवन
Vṛndamādhava	वृन्दमाधव
Yoga cintāmaṇi	योगचिन्तामणि
Yoga tarāṅgiṇī	योग तरङ्गिणी
Yogarātnākara	योगरत्नाकर



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TECHNICAL-MEDICAL TERMINOLOGY

Abhiṣyanda	: Conjunctivitis, a kind of eye-diseases.
Ādhmānakara(ī)	: Causing flatulence, abdominal abnormal condition.
Ādhmāna	: A disorder in which there is an excessive collection of gas in the stomach; gas in the digestive tract due to fermentation or decomposition, vitiation-aggravation of Vāta.
Ānāha, Āṭopa	: Different stages or ailing conditions of Ādhmāna and related disorders of gastro-intestinal tract. Condition characterized in hardness in abdomen caused by wind in excess in bowels.
Adhimāmsa	: Swelling, big and painful, in molar teeth causing salivation.
Ahipūtanaka	: Scabies in anus.
Ajakājata	: Staphyloma, a kind of eye-diseases.
Āmavāta	: Rheumatic arthritis.
Amla	: Sour, acidic
Amlapitta	: Acid gastritis, or known as Hyper-acidity characterized by hyperacidity, burning sensation, abnormal feeling of stomach, abdominal pain, biliary nausea and other symptoms.
Anyatovāta	: A disease of eye having intense pain in eye-brows or eye-ball due to aggravated Vāta.
Apacī	: Scrofula; glandular enlargement.
Apatantraka	: A vātic-disorder characterized by fits or convulsions with loss of consciousness.
Ardhāṅgavāta	: Hemiplegia.
Ardita	: Facial paralysis.

Arjuna	: Subconjunctival haemorrhage, a kind of eye-diseases.
Arma	: Pterygium; a kind of eye-diseases.
Avabāhuka	: Pain in arms caused by aggravation of Vāta in shoulder joint.
Ākhuṣa	: Rat-poisoning
Āmadoṣa	: It broadly refers to food intoxication usually associated with faulty digestion (and impaired metabolism).
Atisāra	: Diarrhoea; diarrhoeal complains.
Āyuskara	: Promotion of life.
Agnidipana	: Stimulating the factor of gastrointestinal digestion.
Agnidagdha	: Burn
Aguru	: Light (not heavy).
Anuṣṇa	: Not hot or less (little) hot.
Ajīrṇa	: Indigestion
Annadravaśūla	: Gastric ulcer, Acute gastritis
Anulomana	: Regulating the bowel movement or function, intestinal function (e.g. Vātānulomana as carminative), helping in putting or sending in right direction.
Apsmāra	: Epilepsy, Epileptic.
Arśa	: Piles; haemorrhoids or haemorrhoidal.
Āyuvardhana	: Promoting life, longevity.
Aruci	: Anorexia, anorectic.
Asthibhagna	: Bone fracture.
Asthisandhāniya	: Promoting healing of bone fractures.
Aparāpātana (niṣkramaṇa)	: Expulsion of placenta (delivery of foetus); Obstetrics.
Alarka, śvāna- kukkura daṁṣṭra- Viṣa	: Dog-bite, rabies.
Asra-rakta	: Blood.
Āsmarī	: Calculus, stone; various kinds of Mūtrāśmarī-urinary organs and Pittāśmarī-gall bladder.

Atisāra-Āmāṭisāra	: Diarrhoea, dysentery; gastro-enteritis.
Āsyavairasya-mukhavirasatā	: Tastelessness of mouth; Tasteless state of vocal cavity (mouth orific-tongue taste sense).
Agnimāndya	: Achylla, Dyspepsia (Mandāgni).
Āntrasula	: Intestinal colic.
Āntraśoṭha	: Enteritis (Grahāṇī).
Arbuda	: Tumour
Anśughāta	: Sun-stroke.
Atyagni, Tivrāgni	: Excessive hunger.
Adhimantha	: Glucoma
Apathya	: Unwholesome, Unsuitable, Unfavourable (harmful).
Bālagraha	: Seizures in children causing various syndromes (grahavādhā, Bhūtavādhā).
Bhaṣmaka	: Excessive hunger and digestion causing loss of dhātus, emaciation and debility.
Bālaroga, Bālāmaya,	
Bālavikāra	: Children diseases; Paediatrics.
Baddhamūtra	: Anurea.
Balya	: Promoting, body strength, muscular strength, resistance to diseases tonic, decay and degeneration; combating the virulence of the disease and capacity to inhibit or neutralise the cause of the diseases.
Bandhyātva	: Sterility.
Bhagandara	: Fistula-in-ano.
Bhedana	: Purgation, purgative.
Bhrama	: Giddiness, mental confusion and delusion.
Bṛñhaṇa	: Promoting body buck.
Bodhana	: Awakening or arousing.
Buddhiprada	: Promoting intellectual faculties.
Bhūtavādhā	: Demnological effects to cause ailing condition.
Bhagaśoṭha	: Vulvitis.

Carmadala	: Psoriasis; the skin disease.
Cakṣuṣya	: Benefecial to the eyes.
Chardi	: Vomiting
Carmoroga	: Skin diseases.
Chedana	: Expectorant
Cirapāki	: Taking a long time to get digested.
Caturthika/	
Viṣama jvara	: Malarial periodic/quartan fever.
Caladanta	: Loose teeth.
Dhūpana	: Fumigation.
Duṣṭavraṇa	: Indolent, foul and sloughy ulcers.
Dāhahara,	
Dāhapraśamana	: Refrigerant, relieving burning sensation.
Dadru	: Ringworm; scaly and exudative affections of the skin.
Dantaroga	: Dental diseases.
Dantya	: Dentrifice, promoting teeth or dental health, curing dental ailments.
Dīpana-pācana	: Gastro-stimulant and digestive.
Dīpana, Dīpaniya	: Gastro-stimulant, improving digestion.
Dhātupuṣṭikara	
Dhātuvardhaka	: Nourishing improving and promoting body tissues; nutrient tissue homologous nourishing the tissue.
Drṣṭiprasādana	: Capable or potent for improving and protecting vision.
Carmadala	: Psoriasis, the tedious skin diseases; common chronic inflammation of the skin, marked by rounded reddened patches which are covered with dry silvery scales.
Galagaṇḍa	: Goitre; a disease of thyroid gland.
Gaṇḍamāla	: Cervical adenitis causing a chain of swollen gland in neck.
Grahaṇiroga	: A kind of disorders of intestineal or digestive tract particularly Grahaṇī (organ), the seat of agni, causing loss of appetite, indigestion, constipation

attenuating with diarrhoea and malabsorption. Malabsorption, syndrome/chronic, amoebiasis/colitis.

Granthi visarpa : A type of erysepalas causing inflammation of gland with high fever, pain and other associated signs and symptoms.

Gulma : Abdominal lump caused by accumulation of wind and other causes.

Garbhāśayaśodhana,
Garbhāśayaśamso-
dhana : Indicated to cleanse the uterus.

Garbhāśayaśaithilya
(śithilitā) : Uterine Inertia.

Garbhapātana : Inducing abortion.

Garbhapātakara : Abortifacient.

Garbhasthāpana : Promoting conception (pregnancy).

Grahavādha : Psychiatric involvement and its bad effects behind anomalies of abnormalcy (bodily, psychosomatic or psychic).

Granthiroga : Glandular enlargement, swelling and other symptoms.

Grāhī : Astringent property.

Galaroga-śoṭha : Throat affections (also tonsillitis, pharyngitis.)

Gudaroga : Rectal ailments; proctological disorders.

Gṛdhrasī : Sciatica.

Guṇa : Properties, physical qualities of substances.

Hikkā : Hiccough

Hṛdroga : Heart-diseases; heart trouble.

Hṛdrujā : Heart pain; angina-pectoris.

Hṛdya : Cordial, Cardiac or Cardiac tonic.

Hṛdyāvasādaka : Cardiac depressant.

Hṛllāsa : Nausea (Utkleśa).

Halīmaka : Advanced stage or case of Jaundice.

Ikṣumeha : Glycosuria

Indralupta	: Baldness
Jālakagardabha	: A syndrome like erysepalas causing fever and swelling.
Jalodara	: Ascites (Dakodara)
Jantughna, jantunāśana	: Anthelmintic, vermifuge, also referring anti-microbial, antiprotozoal, anti-bacterial, antiparasitic, disinfectant etc. and other similar actions (kṛmighna).
Jaraṇa	: Digestive
Jirṇajvara	: Chronic fever
Jvaraghna	: Antipyretic, antiperiodic or febrifuge
Jihvājādyā	: Stiffness (palsy) of tongue.
Jivaniya	: Promoting life.
Kikkisa	: Stria gravidarum.
Kiṭibha	: A skin disease causing darkness, roughening and hardness of skin.
Kṣataksīṇa	: Wasting condition of body in general due to chest-wound.
Kukkurakās	: Whooping cough.
Kukūṇaka	: Ophthalmia neonatorum, a kind of eye diseases, characterized by inflammation of eye in new born child.
Kunakha	: Onychia (Cippa)
Kuṣṭha	: Generally disease of skin and particularly leprosy (the former known as kṣudrakuṣṭha) and the latter as mahākuṣṭha.
Kuṣṭhaghna	: Anti-leprotic.
Kāmalā	: Jaundice, also related to hepatitis.
Kadara	: Corns.
Kaṇḍū	: Skin condition(s) associated with itching; scabies.
Kaṇḍughna	: Anti-pruritic; indicated in skin affections e.g. scabies, itchy troubles and other similar complaints.
Kaṇṭhya, kaṇṭhaviśodhana (śodhana)	: Curing, cleaning and improving throat

disorders for function. Soothing to the throat (Svarya-soothing to in the throat and voice).

Kāsa	: Cough, bronchitis.
Kṣāra	: Alkaline, alkalies, ash.
Kīṭaviṣa	: Insect poison.
Kapha	: Primal constituent of living body; generally known as phlegm; a component of Tridoṣa, tri-humours of (Vāta, Pitta and Kapha).
Karṇanāda	: Tinnitus; a kind of ear diseases.
Karṇaśūla,	
Karṇapiḍā	
(Karṇārti)	: Earache, a symptom or type of ear disorders.
Karṇapiḍi(a)kā	: Furuncles in the ear.
Karṇabādhirya	: Deafness; Ear disease.
Karṇapūya,	
Karṇasrāva	: Otorrhoea; bleeding, pus formation in the ear; a kind of ear diseases.
Kaśāya	: Astringent.
Klaibya, Klibatā	: Impotency.
Karṣaśna	: Promoting slimming of the body.
Karkaṭārbuda	: Cancer.
Kaṭu	: Pungent, in taste.
Kaṣṭārtava	: Dysmenorrhoea.
Kīṭamāraka	: Insecticidal, anthelmintic, vermifuge. (Krmighna and jantughna).
Kṣaya, Yakṣmā-	
rājayakṣmā	: Pthisis, consumption (Tuberculosis, pulmonary tuberculosis).
Kṛmighna,	
Krimighna	: Anthelmintic.
Keśya	: Promoting the growth of hairs.
Kuṣṣiśūla	: Abdominal colic.
Kṣudaśamani	: Hunger.
Mukhaśodhana	: Indicated or useful to cleanse the mouth.
Mukhapāka	: Stomatitis, Aphthas.

Makkala	: Post-partum pain.
Marutaparyaya	: A disease of eye causing pain in eyelids, brow and eye ball alternately.
Maṣaka	: Mole
Madakārī, Mādinī,	
Mādaka	: An intoxicating effect; Intoxication, toxicating exhilarating.
Madhura	: Sweet.
Madhumeha	: Diabetes; diabetes mellitus. Hypoglycaemia.
Madātyaya	: Alcoholism; effect of excessive use of alcohol.
Madhumehaghna,	
Madhumehahara	: Hypoglycaemic action.
Mada	: Necrosis.
Medhya, Medhājana,	
Medhyakara,	
Medhākara	: Promoting memory and intellect.
Mādaka	: Narcotic.
Maṣṭiṣkabalya	: Brain tonic; promoting, strengthening faculties, function and organ (brain in general).
Masūrikā	: Variola; Measles, Pox.
Mūtrakṛchrahara	: Indicated in dysuria.
Mūḍhagarbha	: Difficult and delayed labour. Abnormal posture of foetus.
Mukhaśodhana	: Indicated or useful to cleanse the mouth
Mūrchā	: Spells of fainting.
Mūtradoṣahara	: Indicated to cleanse the urine.
Mūtravirecanīya	: Promoting increased micturition.
Mṛduvirecaka,	
Mṛdurecaka	: Laxative, mild-purgative.
Mukharoga	: Diseases of the oral cavity; ailments of (under E.N.T. diseases) mouth.
Laghu	: Light; easy to digest.
Lūtahara	: Indicated, useful in and countering spider-bite poisoning effect.
Lavaṇa	: Salt, salty; saline.

Lekhana	: Aids in reducing corpulency; act of scraping, reduction of body eight.
Netra roga, Cakṣuroga, Nayanaroga, Locanavikāra	: Diseases of the eye; ophthalmic diseases (ophthalmology).
Netrya	: Beneficial to the structure, function and preventive, (also hygiene) of eyes and their ailments (also curative).
Naktāndhya Nidranāśana, Nidrājanana	: Night blindness.
Nāsāroga	: Causing insomnia.
Nāḍivraṇa	: Nasal diseases (E.N.T.)
Naṣṭārtava	: Sinus or Fistula.
Phakkaroga	: Amenorrhoea.
Pothakī	: Rickets (Bālaroga).
Pitta	: Trachoma.
	: Primal constituent of the living body, a component of Tridoṣa, tri-humours (vāta-pitta-kapha); generally known as bite.
Phiraṅga	: Syphilis; the venereal disease (S.T.D.).
Plīhodara	: Splenomegaly.
Pravāhikā	: Sprue (Grahāṇī).
Padminīkaṇṭaka	: Pale spots in skin surrounded by thorny structures.
Pakṣmakopa	: Entropion.
Pariṇāmaśūla	: Abdominal pain during digestion or on empty stomach.
Pilla	: Chronic eye diseases resulting in watering and itching of eye and blurred vision.
Piṣṭaka	: A disease of the characterized by elevated white spot in conjunctiva.
Pūyameha	: Gonorrhoea.
Pradara	: Excessive discharge of menstrual blood menorrhagia.
Prameha	: A group of diseases kinds or

syndromes of anomalies of urine mainly or commonly with increased frequency and turbidity of urine; characterised by specific symptoms (in different types of Prameha).

- Punsavana** : Measures prescribed for reversal of sex in foetus during the pregnancy period.
- Pācana** : Digestive
- Pāmā** : Scabies
- Pañcamahābhuta** : Five-elemental theory of structural and functional (basic constituents composing all the substances-universe)
- Pāṇḍuroga** : Anaemia
- Pathya** : Wholesome, suitable.
- Pāṇḍuhara,**
Pāṇḍughna : Anti-anaemic; indicated in treatment of anaemia (Pāṇḍuroga).
- Paramavṛṣya** : Promoting optimum virility.
- Pinasa** : Chronic rhinitis.
- Pināsahara,**
Pinasaghna,
Pinasanāśinī : Indicated in the treatment of chronic rhinitis.
- Picchila** : Sticky, gummy.
- Pārśvaśūla** : Chestpain.
- Pipāsāśamana** : Relieving polydipsia.
- Piḍikā** : Boil.
- Pittaśāmaka** : Anti-bilious.
- Pittavirecana** : Cholagogue (Pittasāraka)
- Pradara,**
śvetapradara : Leucorrhoea.
- Plīharogahara,**
Plīhodara : Indicated in splenomegaly.
- Prasekaśamana** : Palliative of excessive salivation.
- Pratiṣa** : Antidote to poison.
- Prabhāva** : Specific and characteristic action.
- Raktagulma** : A lump formed in uterus due to accumulation of menstrual blood in females (other types of gulma)

Rasāyana	: Alterative, restorative, rejuvenation.
Raktapitta	: Intrinsic haemorrhage due to vitiation of rakta (blood) and pitta (bile).
Raktameha	: Bilharzia.
Raktapradara	: Metrorrhagia
Rasa	: Taste.
Rohiṇī	: Diphtheria; a disease (infections), diseases of the throat and the air passage which becomes inflamed and swollen and are coated with a fibrinous exudate.
Rucya, Rucikara,	
Rocana	: Appetizer, increasing appetite.
Śaiśaviya vāta	: Poliomyelitis
Śankhaka	: Severe encephalitis causing intense headache particularly in temples (often fatal).
Sidhma	: A type of Kuṣṭha characterized by white or coppery circular spots like flowers of bottle-gourd often in chest leaving dust or rubbing.
Snehana	: Uncation.
Sirāharṣa	: Advanced stage of śirotpāta (paninus).
Śītapitta	: Urticaria, an allergic disease of systemic origin marked by rashes, redness painful and itching elevations of the skin.
Stanotthāpana	: Elevation of breasts.
Somaroga	: A woman disease causing increased flow of urine with incontinence and consequent dehydration and debility. (variously interpreted as gynaecological, hormonal and/or metabolic disease).
Śukra	: Corneal opacity (avraṇa śukra) and corneal ulcer (savraṇa śukra); the eye-diseases (of cornea).
Śūla	: Colic, ache, pain; disease or symptom.
Sūryāvartta	: A type of headache beginning with sun-

rise and increasing gradually with the movements of the sun and subsiding at sunset.

Śuṣkākṣipāka	: Blepharospasm.
Śrama	: Exertion (Klānta).
Stambhaka (rakta)	: Haemostatic, styptic; anti-haemorrhagic.
Soumya, saumya	: Promoting steady state equilibrium (of doṣās-sārīra and mānasa).
Sandhivīślesa	: Dislocation of joint(s).
Sarpaviṣa,	
sarpadaṁśa	: Snake-bite poison; venom.
Sarvakaṇḍū	: Pruritis of multiple etiology.
Śarkarānīśūdana	: Hypoglycaemic (madhuraka-śamana).
Sarkarāśmarī	: Urinary gravel.
Śiroroga	: Cranial diseases; ailments of headache.
Śuklameha	: Albuminuria.
Śiraḥśūla	: Headache.
Śodhana	: Purification, radical elimination of morbid substances.
Śvayathu-śopha	: Inflammation (śoṭha).
Śvitra	: Leucoderma (vitiligo).
Śvāsa	: Asthma; dyspnoea, bronchial asthma.
Stanārbuda	: Breast tumour.
Śukrakṛta	: Spermatogenetic, spermogeny
Śvāsahara	: Anti-tussive, anti-asthmatic.
Stanaśoṭha	: Inflammation of breast.
Stanyajanana	: Galactagogue
Svedajanana	: Diaphoretic; promoting perspiration or diaphoresis.
Śukra-retas-vīrya	: Semen
Śukravikāra	: Seminal diseases.
Śoṭha	: Oedema; General Anasarca
Sarvāṅga-śoṭha	: Ekāṅgaśoṭha-Localised inflammation, oedema swelling.
Timira	: Defects of vision. Cataract.
Tikta	: Bitter.
Tṛṣṇānigrahaṇa	: Relieving thirst.

Tūṇī	: Colicky pain occurring in the iliac or pelvic region of the abdomen.
Tvagvikāra	: Cutaneous affections; skin diseases.
Tvacya	: Promoting the skin health; palliative for skin diseases, preventive and curative.
Tridoṣa	: Doctorine of Tridoṣa consisting Vāta, Pitta and Kapha; the tri-humoral theory of Āyurveda. Three basic factors in the living body responsible for health and disease (equilibrium or balance maintaining health and disturbance in equilibrium or imbalance causes disease in body).
Tr̥ṭ(d)	: Thirst.
Udara	: Abdominal enlargement.
Udāvarṭta	: Upward movement of vāyu.
Unmantha	: Swelling with itching in earpinnae.
Upadamśa	: Soft-chancres; a venereal disease.
Upakuśa	: Inflamed gums with haemorrhage and foul smell.
Urustambha	: Paraplegia.
Uṣṇavāta	: Dysuria associated with burning sensation yellow urine or haematuria.
Unmatta	: Inducing psychotropic effects (i.e.) (stimulating the central nervous system.)
Udaraśūla	: Abdominal colic.
Udarda	: Śītapitta, Koṭha-Udarda; allied to urticaria and advanced or severe stage patches on skin.
Uṣṇa	: Hot, heat.
Unmāda	: Insanity, mental disease.
Utkleśa	: Nausea, retching (Hṛllāsa).
Ubhayatobhāgahara	: Purification-Saṃśodhana (Adhobhāgahara-Urdhvaabhāgahara : Purgation-Emesis).
Udgāra	: Eructation.

Vātaghna	: Anti-vāta; indicated in diseases of nervous system.
Varāhadamṣṭra	: A syndrome causing inflammation in skin with burning : redness, intense pain, itching and fever.
Vātarakta	: A disease caused by vitiation of vāta and rakta, and characterized by rashes, anaesthetic patches and pain in joint, Gout.
Vātavyādhi	: A group of diseases caused specifically by aggravated vāta such as pain, convulsion, paralysis and other several symptoms.
Vertigo	: Bhrama.
Vidārikā	: Inflammation of lymphatic glands in axilla and groin.
Vṛddhi	: Scrotal enlargement.
Viśūcikā	: Gastro-enteritis with piercing pain.
Viśalya	: Extracting foreign body.
Vyaṅga	: Dark shade on face caused by stress and excessive exercise.
Vīrya	: Potency, energy, power.
Vājīkaraṇa	: Aphrodisiac; sexual tonic.
Vāta	: A principal, prime and dominant component of Tridoṣa, tri-humours (the causative factors of normalcy as well as abnormalcy of body). general known as wind or gas.
Vamanopaga	: Emetic, aid to emetics or emesis.
Varnya	: Useful in promoting complexion of the skin. (pigmentation).
Vastiroga	: Diseases of urinary system, particularly urinary bladder.
Vaṅkṣaṇagranthi	: Inguinal glands.
Vayasthāpana	: Promoting longevity, anti-aging.
Vedanāsthāpana	: Analgesic, anodyne, local anaesthetic.
Vipāka	: Digestion and metabolism.
Vibandha	: Constipation
Vidāhi	: Causing burning sensation.

Vikāsi	: Spreading rapidly in body.
Virecana	: Purgative, cathartic, purging, purgation.
Vraṇaropana	: Wound-healer.
Viṣa	: Poison
Viśaghna	: Anti-dote.
Yakṛdroga	: Liver disorders
Yonivyāpat	: Disorders of female genital tract.
Yoniviśodhana	: Useful to cleanse the uterus.
Yośidvikāra	: Gynaecological disorders.
Yonidoṣa	: Vaginal/uterine disorders.
Yoniśoṭha	: Vaginitis.
Yonidrāvaṇa (dravanārtham)	: Inducing vaginal secretion (relevant to sexual intercourse-hastening vaginal discharge); Vājikaṛaṇa.
Yonigādhikaraṇa (gadhyārtham)	: Useful to check slackness of vagina.



General Suffix pattern

(Pharmacological, pathological, clinical and therapeutical terminology in the texts of Indian medical science)

A. Śama, śamana, śamaka hara, hāraka, hṛt Nāśaka, nāśana, vināśana ghna, Nut, praṇut, etc. Jit, Apha Arī.	Curing, anti, eradicating, pacifying alleviation, reducing, allaying destroying, palliative indicated, useful, countering etc.
B. Janana, janaka, ja kara, kāri(ī) prada, etc.	Promoting; helping, enhancing producing, inducing, increasing, prompting, stimulating etc.



PRINCIPAL AYURVEDA NAMES OF HERBAL DRUGS

CLASSICAL-SANSKRIT-NAMES

शास्त्रीय-संस्कृत-नाम

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<i>Prunus amygdalus</i> Batsch.	820
<i>P. armenica</i> Linn.	734
<i>P. cerasoides</i> D. Don.	1
<i>P. communis</i> F.	820
<i>P. dasycarpa</i> Ench.	734
<i>P. vulgaris</i> Linn.	734
<i>P. puddum</i> Roxb.	1
<i>Pueraria tuberosa</i> Dc.	850
<i>Putranjiva roxburghii</i> wall.	209
<i>Pyrus communis</i> Linn.	613
<i>P. malus</i> Lin.	476
<i>P. purifolia</i> (Burm. f.) Nikoi.	614
<i>R. serpentina</i> B. & K.	410
<i>Rauwolfia beddomoei</i>	411
<i>R. densiflora</i> Benth.	411
<i>R. micrantha</i>	411
<i>R. serpentina</i> Benth & Kurz.	410
<i>R. tetraphylla</i>	411
<i>Rhamnus wightii</i> W. & A.	254
<i>Rhus mysorensis</i> Heyne.	651
<i>R. parviflora</i> Roxb.	649
<i>R. sinuata</i> Thunb.	651
<i>Rosa centifolia</i> Linn.	616
<i>Ruta angustifolia</i> Pers.	425
<i>R. bracteosa</i> Dc.	425
<i>R. chalepensis</i> Linn.	425

<i>R. graveolens</i> Linn.	424
<i>R. graveolens</i> var. <i>angustifolia</i> Hook. f.	424
<i>Saccharum arundinaceum</i> Hook. f.	375
<i>S. bengalense</i> Retz.	375
<i>S. cillare</i> Anders.	375
<i>S. munja</i> Roxb.	375
<i>S. sara</i> Roxb.	375
<i>Salacia chinensis</i> Linn.	367
<i>S. latifolia</i> wall. ex M. Lens.	367
<i>Salix caprea</i> Linn.	831
<i>S. tetrasperma</i> Roxb.	832, 834
<i>Salmalia malabarica</i> Schott. & Endl.	336
<i>Salvadora oleoides</i> Decne.	112
<i>S. persica</i> Linn.	111
<i>Salvia plebeia</i> R. Br.	355
<i>Schrebera swietenoides</i> Roxb.	77
<i>Sesamum indicum</i> Linn.	621
<i>Shorea robusta</i> Gaertn.	305
<i>Sida cordata</i> (Burm. f.) Boiss.	147
<i>S. humilis</i> var. <i>veronicaefolia</i> (Lam.) Mart.	147
<i>Spinacea oleracea</i> Linn.	7
<i>Stereospermum suaveolens</i> DC.	75
<i>S. veronicaefolia</i> Linn.	147
<i>Streblus asper</i> Lour.	298
<i>Styrax officinale</i> Linn.	
<i>Taxus baccata</i> Linn.	522
<i>T. wallichiana</i> Zucc.	522
<i>Tecoma undulata</i> G. Don.	253
<i>Tectona grandis</i> Linn. f.	293
<i>Tephrosia hamiltonii</i> Drumm.	386
<i>Tephrosia maxima</i> Pers.	388
<i>T. purpurea</i> Pers.	386
<i>T. spinosa</i> Pers.	387
<i>T. villosa</i> Pers.	387
<i>Terminalia alata</i> Heyne ex Roxb.	306
<i>Thalictrum foliolosum</i> Dc.	
<i>Thespesia populnea</i> Soland ex Correa	48
<i>Toona ciliata</i> Roem.	693
<i>Trachyspermum ammi</i> (Linn.) sprague.	887

<i>Trapa bispinosa</i> Roxb.	525
<i>T. natans</i> Linn.	525
<i>T. natans</i> var. <i>bispinosa</i> (Roxb.) Makino.	525
<i>Trianthema crystallina</i> (Forsk.) Vahl.	186
<i>T. portulacastrum</i> Linn.	181, 185
<i>T. monogyna</i> L.	185
<i>T. obcordata</i> Roxb.	185
<i>T. triquetrum</i> Rottl. ex Willd.	186
<i>Trichosanthes dioica</i> Roxb.	90
<i>Uraria lagopoides</i> Dc.	168
<i>U. picta</i> Desv.	168
<i>Valeriana hardwickii</i> Wall.	578
<i>V. jatamansi</i> Jones.	577
<i>V. wallichii</i> Dc.	577
<i>Vateria indica</i> Linn.	405
<i>Vernonia cinerea</i> Less.	269
<i>Vetiveria zizanioides</i> (Linn.) Nash	740
<i>Vinca major</i> Linn.	266
<i>V. minor</i> Linn.	266
<i>V. pubescens</i> Linn.	266
<i>V. pusilla</i> Murr.	266
<i>V. rosea</i> (Linn.) Reichb.	265
<i>Viola biflora</i> Linn.	778
<i>V. canescens</i> Willd.	778
<i>V. odorata</i> Linn.	777
<i>V. pilosa</i> Blume.	778
<i>V. serpens</i> W. & R.	778
<i>Zanthoxylum acanthopodium</i> Dc.	687
<i>Z. alatum</i> Roxb.	686
<i>Z. armatum</i> Dc.	686
<i>Z. limonella</i> (Denst.) Aiston.	687
<i>Z. sativa</i> Gaertn.	516
<i>Z. vulgaris</i> Linn.	516

