

Family : I - Acanthaceae.**Adhatoda vassica Nees.**

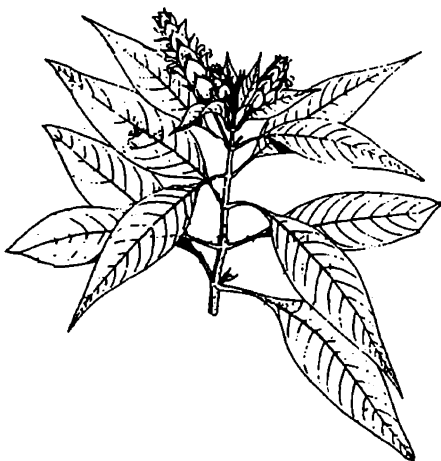
SYNONYMS : *Adennanthera vasika*, *Adhatoda zeylanica* Medic., *Justicia adhatoda* Linn.

ENGLISH : Malabarnut, Vasaka.

INDIAN : Adullasaa, Wasaakaa, Adosh, Arusha, Rus, Bansa.

SANSKRĪTA : Vāsaka, Vāsikā, Vṛṣa, Sinhāśya, Vansa, Vājidanta, Sinhī, Bhiṣaṅgmātā, Pancamukhi, Mātrukā, Sinhaparṇa, Arusak, Vris, Sinhamukhi, Adarsahaḥ.

HABIT : Small tree or large shrub.



HABITAT : All over India. Commonly cultivated as a hedge plant, often grows wild near human inhabitations.

CHEMICAL COMPOSITION : *A. vasica* is a source of quinoxaline alkaloids—vasicolin, adhatodine, vacicolinone, and anisotine. It contains betaine, vasicinone and new alkaloid vasicine (1%); in addition B-sitosterol and tritriacontane in different parts. Leaves, vasicine (0.79%); and flowering tops, 0.47%. Peganine (vasinine)—the chief active principle in quinoxaline alkaloids yield from different leaf

samples from India, 0.54 to 1.11 % dry wt. basis while in foreign samples it is high as 2.18% Adhatodic acid. Alcoholic extract of leaves is useful as hypotensive, bronchodilator, respiratory stimulant, hypoglycemic and antispasmodic. Oil from leaves, flowers and roots is active against Tubercule bacilli. Essential oil from leaves is bronchodilator, also vasicinone and ephedrine, potentiated; anti-insect and juvenile hormone mimicking activity.

Parts used : Roots, leaves and flowers.

Ayurvedic properties :

Rasa - Tikta-kaṣāya. Vīrya - Śīta.
Guṇa - Laghu, Rūkṣa. Vipāka - Kaṭu.

वासको वातकृत्स्वर्यं कफपित्तास्त्रनाशनः।
तिक्तस्तुवरको हृद्यो लघु शीतस्त्वृत्तिकृत्।
श्वसकासज्वरच्छर्दि मेघकुष्ठक्षयपहः॥ (भा.प्र.)

Vāsako vātakṛtsvaryam kaphapittasranāśanaḥ,
Tiktastuvarako hr̥dyo laghu śītastudartikṛt,
Svāsakāsajvaracchardi meghakuṣṭhakṣyāpahāḥ.
(Bhāvaprakāśa)

वासयां विद्यमानायां आशायां जीवितस्यच।
रक्तपित्ती क्षयी कासी श्वासी किमवसीदति॥ (वृन्दमाधव)

Vāsāyām vidyamānāyām āśāyām jīvitasyaca,
Raktapitti kṣayī kāsī śvāśī kimavasīdati.
(Vṛndamādhava)

Actions/Uses : Kaphaghna, Pittaghna, Vātakar.

Therapeutics :

Vāsakā is a reputed remedy for all sorts of cough and cold, bronchitis and other respiratory disorders due to its expectorant action. It is the main constituent of cough syrup "Adulsa syrup". Plant is bitter, astringent, diuretic, antispasmodic, expectorant and alterative. It cures vomiting, thirst, dermatosis, jaundice, fever, phthisis and haematemesis. It is particularly useful in fevers associated with bilious and respiratory troubles and also in piles. Roots are expectorant and mild bronchial antiseptic; given in intermittent fever,

pulmonary and catarrhal affections. Leaves and roots are hypoglycemic. Juice of leaves relieves cough by its soothing action on nerves and by liquefying sputum. Fresh leaf juice is beneficial in haemoptysis and menorrhagia. Leaves are useful against Ranikhet disease virus. In haemoptysis it is a grand remedy. Leaves and wood ashes mixed with honey are used for cough and asthma. Juice of leaves mixed with juice of *Feronia limonica* cures nose bleeding. A preparation of leaves in clarified butter is used for glandular tumors. Crude extract is more useful for respiratory ailments. Flowers and roots with ginger are given in ague, rheumatism, constipation, asthma, chronic bronchitis and other chest affections. Shoots are used in liver enlargement. It is one of the constituents of drug "Geriforte" used against senile pruritus and as antifatigue. 'Justica rubrum or Rakta

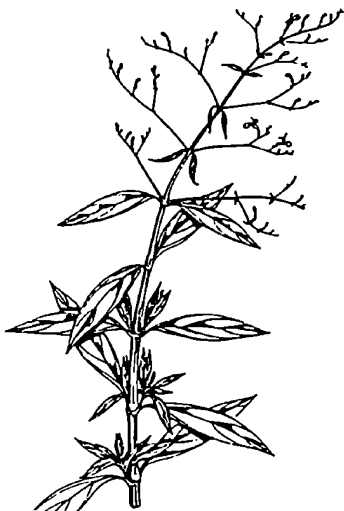
vasaka' is not so common as *A. vasica* but is more largely found in Coochabehar and Darjeeling. It is used in all those complaints and ailments in which generally *A. vasica* is used. But its usefulness and efficacy are more sure and certain where there is more blood with the cough and where there is more expectoration or bloody vomiting in tuberculosis. *A. beddomei* C. B. Clarke is a variety found in Kerala which is more powerful and active than *A. vasica* Nees. and is used as antiemetic, antiepileptic, haemostatic, particularly in haemorrhages.

HOMEOPATHIC USE : Homeopathic preparation from extract of leaves is used for colds coryza, coughs, pneumonia, spitting of blood, fever, jaundice, catarrh, whooping cough and bronchitis.

Andrographis paniculata Nees.

SYNONYMS : *Andrographis subspatulata* Clarke.,
Justicia paniculata Burm.

HABIT : An annual erect, branched glabrous herb.



HABITAT : Common among undergrowths in forests areas and also cultivated in private compounds.

ENGLISH : Creat, Chiretta.

INDIAN : Kalmegha, Kiraayat-oli, Mahatita.

SANSKRĪTA : Bhūnimba, Kirāta, Yavatiktā, Śvetatiktā, Śvetakunha, Sankhini, Sūkmapuṣpa, Tiktaphala, Yaśasvani, Yavi, Kālamegha, Kalpanātha, Mahātikta.

CHEMICAL COMPOSITION : Pigments, andrographin and panicolin from roots. Leaves, β -sitosterol glucoside and unknown compounds. Andrographolide, panicolide, polyphenols, caffeic and chlorogenic acids. Roots, flavones andrographin and panicolin and α -sitosterol. Plant, diterpene glucoside, neoandrographolide. This plant better known as Kalmegha from the bitter substance Kalmeghin which it contains, is different from the well-known Kadakiraaet or chiraaeta of ancient Indian medicine. Kalmegh increased biliary flow and liver weight in rats.

Parts used : All parts.

Ayurvedic properties :

Rasa - Tikta. Virya - Uṣṇa.
Guṇa - Laghu, Rūkṣa, Tiksṇa. Vipāka - Kaṭu.

भूनिम्बो वातलस्तिक्तो व्रणरोपणकारकः।
सरः शीतः पथ्यकरो लघु रुक्षस्तृषापहः॥
कफपित्तज्वरं कुष्ठं कण्डू शोफं कृमीस्तथा।
सन्निपातज्वरं दाहं शूलं मेहं व्रणं तथा॥
श्वासं कासं च प्रदरं शोषं चाश्मरुचि जयेत्। (नि.र.)

*Bhunimbo vātalaṣṭikto vranaropaṇa kāraḥ,
Saraḥ śītaḥ pathyakaro laghu rukṣastṛsāpahaḥ.
Kapham pittam jvaram kuṣṭham kṇandum
śopham kṛmimimstathā,
Sannipātājvaram dāham śūlam meham
vraṇam tathā.
Śvāsam kāsam ca pradaram śoṣam
cārśo arucim jayet.
(Nighanturatnākara)*

किरातः सारको रुक्षः शीतलस्तिक्तको लघुः।
सन्निपातज्वर श्वास कफपित्तास्त्रदाहनुत्॥
कासशोफतृषाकुष्ठज्वरव्रणकृमिप्रणत्। (भा. प्र.)

*Kirātaḥ sārako rukṣaḥ śītalastiktako laghuḥ,
Sannipātajvarasvāsakaphapittāśradāhanut.
Kāsaśophatṛṣākusṭhajavaravranakṛmipranut.
(Bhāvaprakāṣa)*

Actions/Uses : Kapha-Pittaghna, Recana, Yakṛtottejaka, Śothahara, Dīpana, Krmighna, Śvedakāri, Jvaraghna.

Therapeutics :

Kirata plant is considered to be useful for children and not so much for older persons. It is a specific for all types of fevers especially intermittent fevers and overcomes Sannipaata type of fever. It is laxative, dry, cooling, bitter, light, tonic and anthelmintic. It is useful in constipation, colic, dysentery and dyspepsia, strangulation of intestine, in spleen complaints and debility. It is a domestic medicine for flatulence and diarrhoea of children. Used in torpidity of liver, neuralgia and convalescence after fever and in advanced stages of dysentery. Powdered plant mixed with sarsoo oil applied in itching. It is the chief constituent of an Ayurvedic drug "SG-1 Switraadilepa" for dermatological diseases. Roots and leaves are tonic, stomachic, antipyretic alterative, anthelmintic, febrifuge and cholagogue. Root combined with pepper and aloes is a tonic, stimulant and gentle aperient and valuable as a remedy in the treatment of several forms of dyspepsia and in torpidity of alimentary canal. Used as curative or preventive in snake venom poisoning.

Barleria prionitis Linn.

INDIAN : Koraanti-piwalli, Katsareya.

SANSKRĪTA : Saireyaka, Kurantaka, Vajradanti, Karunta.

HABIT : A much branched prickly shrub, with 2-3 spines in axil of each leaf. Yellow colored flowers.



HABITAT : Occurs throughout the hotter parts of India. A common undershrub occasionally found wild but generally cultivated as a hedge plant or for its ornamental flowers.

CHEMICAL COMPOSITION : Plant contains β -sitosterol. Flowers, scutellarein-7-rhamnosylglucoside. Leaves and stems showed the presence of five iridoid glucosides; three of them are iridoids, barlerin & Ac-barlerin.

Parts used : All parts, especially leaves.

Ayurvedic properties :

Rasa - Tikta, Madhura. Virya - Uṣṇa.

Guṇa - Laghu. Vipāka - Kaṭu.

सैरेयः कुष्ठवाताकफकण्डुविषापहः।

तिक्तोष्णो मधुरोऽनम्ला सुस्निग्धः केशरंजनः॥

(भा. प्र.)

*Saireyaḥ kuṣṭhavātāsrakaphakandu viṣāpahāḥ,
Tiktoṣṇo madhuro anamlaḥ susnigdhaḥ
keśaranjanaḥ.*

(*Bhāvaprakāṣa*)

Actions/Uses : Kaphaghna, Vātaghna,

Śothahara, Vedanāsthāpan.

Therapeutics :

Saireyaka has antiseptic properties; its decoction is used in dropsy to wash the body. It is especially useful for children. Roots are febrifuge. A decoction of roots is used as mouthwash in toothache and paste is applied to disperse boils and glandular swellings. Leaves are chewed to relieve toothache. Leaf juice is used in urinary and paralytic affections, and stomach disorders; applied to lacerated sole. Juice of leaf administered in a little honey or sugar in catarrhal affections of children, which is accompanied by fever and much phlegm. Tribals apply infusion of leaves to soles of feet to harden them to tolerate extreme heat, cold and rough soil. Crushed fresh leaves applied to wounds; also used for rheumatic pain and itch; juice with coconut oil applied on pimples. Leaves and flowering tops are valued as a diuretic and are rich in soluble potassium salts. Juice of fresh bark is diaphoretic and expectorant and used in anasarca. Dried bark powder with honey is used in cough and whooping cough.

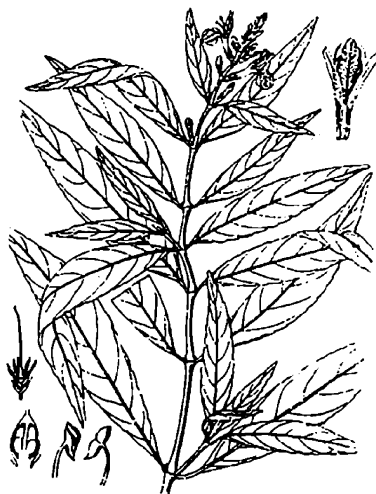
Gendarussa vulgaris Nees.

SYNONYMS : *Justicia gendarussa* Burm.

INDIAN : Adullasaa-kaalla, Udisanbhalu, Nilinargandi, Bakas, Tao.

SANSKRṬA : Nīlanirgudi, Nīlamanjari, Kṛiṣṇa nirguda.

HABIT : An erect branched shrub. Flowers creamish-white.



HABITAT : Native of China. Cultivated as a hedge plant and often found wild as an escape from cultivation.

CHEMICAL COMPOSITION : Roots yield B-sitosterol. Leaves B-sitosterol and an alkaloid.

Parts used : Leaves.

Ayurvedic properties :

Rasa - Tikta, Kaṣāya. Vīrya - Uṣṇa, Śīta.
Guṇa - Laghu. Vipāka - .Kaṭu.

नीलानिर्गुडिका तिक्ता रुक्सा चोष्णा कटुः स्मृता॥

आघ्नानवानं प्रदरं क्रासंशोथं कफं हरेत्।

वातनाश करीप्रोक्तामुनिभिर्गुणपार गैः॥

(निघण्टु रत्नाकर)

*Nīlānīrgudikā tiktā rūksā coṣṇā kaṭuḥ smṛtā,
Ādhmānavānam pradaram kāsamsōtham kapham
haret.*

*Vātanāsa karīproktā munibhirguṇapara gaiḥ.
(Nighantu Ratnākara)*

Actions/Uses : Vātakāraka, Svedakāri, Vāmaka,

Recana, Tivra, Jvaraghna, Selsmānisāraka.

Therapeutics :

Nīlanīrgudi is pungent, bitter, hot and dry. It is a strong medicine not to be used for children or old persons freely as it causes vomiting and diarrhoea. It is used for lung diseases. Useful in dyspepsia; tympanitis, inflammations, eye diseases and as febrifuge, emetic, emmenagogue and diaphoretic in bronchitis and also for vaginal discharges. Root boiled in milk is used in chronic indigestion, dysentery, rheumatism and fever. Leaves are antiperiodic, alterative and insecticide. Juice of leaves, in coughs of children, also efficacious in colic of children. 2 to 4 leaves with ash of *Achyranthus aspera* and honey are used in acute cough. Leaves and tender shoots are diaphoretic and are given in the form of decoction in chronic rheumatism. Infusion of leaves given internally in cephalagia, hemiplegia and facial paralysis. Juice of leaves for earache. Leaves made into paste and applied on fractured or dislocated bones. Bark is a good emetic.

Hygrophilia spinosa T. And.

SYNONYMS : *Asteracantha longifolia* Nees.; *Bahel schulli* Ham. *Hygrophilia auriculata* Heine.

INDIAN : Kollasundaa, Taalimkhaanaa, Gokshura.

SANSKRITA : Kokilākṣa, Iksūra, Śrungāli, Śrunthalā, Tailakantaka, Śhrugālaghanti, Vajrakantaka, Pikekṣaṇa.

HABIT : An erect stout herb. Stems thickened at nodes. Axillary branches reduced into sharp spines.



HABITAT : A common herb throughout India around ponds, on sides of rivers and in marshy areas.

CHEMICAL COMPOSITION : Diuretic properties of seeds are due to large amount of mucilage and potassium salts. Seeds contain 23% of a yellow semi-drying oil; they also contain diastase, lipase and protease. Xylose and uronic acids from oil of seeds; lupenol, stigmasterol and straight-chain hydrocarbons from lipid extract of plant. Palmitic (7.2), stearic (0.8), oleic (11.9) and linoleic (80.1%) acids in seed oil.

Parts used : Roots, seeds, salts and other parts.

Ayurvedic properties :

Rasa - Madhura. Vīrya - Śīta.

Guṇa - Gurū, Snigdha, Picchila.

Vipāka - Madhura.

कोकिलाक्षस्तु मधुरः शीतः पित्ताश्मरिप्रणुत्।

वृष्यः कफहरो बल्यो रुच्यः संतर्पण परः॥

(रा. नि.)

Kokilākṣatu madhuraḥ śītaḥ pittāśmaripranut,
Viṣaḥ kaphaharo balyo rucyaḥ santarpana paraḥ.

(*Rājanighaṇṭu*)

Actions/Uses : Pittaghna, Vātaghna.

Therapeutics :

Kokilākṣa is a reputed remedy for arthritis. It is sour, bitter, cold, aphrodisiac, roborant and demulcent. It promotes strength and appetite, cures oedema, ascites, thirst, bladder stones, eye diseases and dysentery. Root is a cooling bitter, tonic, diuretic, demulcent and refrigerant. Decoction of roots is diuretic. Seeds given in gonorrhoea and with milk and sugar in spermatorrhoea. Seeds are tonic and aphrodisiac. Leaves, roots and seeds are diuretic and are employed for jaundice, dropsy, rheumatism, anasaraca and diseases of urinogenital tract. Plant is useful in cancer and tubercular fistula and juice in anaemia. Leaves and roots alongwith flowers of *Stuea frondosa* taken in leucorrhoea. It is a source of Ayurvedic drug "Kokilaksha"; Unani drug, Talimkhana; and a Siddha drug "Neermulli". Herb ingredient of indigenous drug "Speman" having anabolic-cum androgen-like activity.

Justicia procumbens Linn.

SYNONYMS : *Rostellularia procumbens* Nees.

INDIAN : Ghatipittapaapadaa, Karambal, Kalmashi, Pitpapada.

SANSKRĪTA : Parpaṭa, Pittapāpadā.

HABIT : A procumbent, diffuse, slender, branching annual.



HABITAT : A common herb among the grasses and along the road-sides, Konkan, Western Ghats of Maharashtra and Madras; coast of Madras to Travancore. The plant is eaten in some parts of Maharashtra.

CHEMICAL COMPOSITION : Leaves contain an essential oil which is antifungal; Justicidins A & B (major), diphyllin and lignan neojusticin.

Parts used : All parts.

Ayurvedic properties :

Rasa - Katu, Tikta. Vīrya - Uṣṇa.

Guṇa - Laghu, Rūkṣa. Vipāka - Kaṭu.

Actions/Uses : Vātakara, Pittahara, Kaphahara, Vamakanibandha, Jvaraghna, Svedakāri, Mūtrajanana. Properties are similar to those of *Rungia repens* Nees.

Therapeutics :

Pittapapāda is considered as a laxative, diaphoretic, diuretic, alterative, expectorant, anthelmintic and febrifuge. An infusion of herb is given in asthma, cough, rheumatism, backache, plethora, flatulence and lumbago. Decoction with some bitter principle is used in bilious fever; after perspiration, burning of body is relieved, and after urination and one or two diarrhoic stools inflammation and pain of liver is reduced. Juice of leaves is squeezed into the eye in cases of ophthalmia. Leaf decoction is used in curvature and diseases of bones. Properties and uses are the same as *Fumaria oaevilflora*. Used as a substitute for true Pithpapara (*Fumaria officinalis*) and for *Fumaria parviflora*.

Rhinacanthus nasutus Kurz.

SYNONYMS : *Rhinacanthus communis* Nees.; *Justicia nasuta* Linn. *Hygrophila auriculata* Heine.

HABIT : An annual or biennial undershrub.



HABITAT : Cultivated in gardens in the southern States. All over Maharashtra, especially in Konkan and Mahableshwar.

INDIAN : Gajakarnni, Yuthakaparnni, Palak juhi.

SANSKRITA : Yuthakaparni, Juthikaparni.

CHEMICAL COMPOSITION : Roots and bark contain Rhinocanthin which is similar to Chrysophanic acid.

Parts used : Root, leaves, seeds and bark.

Ayurvedic properties :

Rasa - Kaṭu, Tikta. Vīrya - Uṣṇa.

Guṇa - Laghu, Rūkṣa. Vipāka - Madhura.

गजकर्णी स्यादुपाका तिक्ता चोष्णा कफापहा।

शीतज्वरं च वातं च नाशयेदिति कीर्तिता॥

कन्दोऽस्या पाण्डुशोघार्शः कृमिगुल्मोदरा पहा।

आनाहवातं प्लीहां च ग्रहणीमपि नाशयेत्॥

(निघण्टु रत्नाकर)

Gajakarni svādupāka tiktā coṣṇā kaphāpahā,

*Śītajvaram ca vātam ca nāsayediti kīrtitā.
Kando asyā pāndusodharsaḥ kṛmīgulmodarā,
Ānāhavātam pīhām ca grahaṇīmapī nāśayet.
(Nighanturatnākara)*

Actions/Uses : Kaphavātasamaka, Raktaśodhaka, Uttejaka, Vājikara, Krimighna, Visagna, Kuṣṭhagna, Dadruḥna.

Therapeutics :

Yuthakaparnī possesses antiseptic properties.

Roots boiled with milk is used as aphrodisiac. Root powdered and made into a paste with lime-juice useful for eczema, ring-worm and Dhobie itch. Juice of leaves is efficacious when applied to eczema. Leaves crushed with salt are externally applied for ringworm. Leaves when chewed have a pungent taste and are used against cancer. Root, leaves and seeds are useful remedies for ringworm and other skin diseases.



Rungia repens Nees.

SYNONYMS : *Justicia repens* Linn.

INDIAN : Ghatipitta; Paarpaatha. Kharmor.

SANSKRĪTA : Parpatha.

HABIT : A sub-erect or diffuse perennial herb.



HABITAT : A rare herb in shady places throughout the warmer parts of India.

CHEMICAL COMPOSITION : Flowers, Luteolin-7-glycoside and delphinidin, besides luteolin and another flavone - chrysoeriol.

Parts used : All parts

Ayurvedic properties :

Rasa - Tikta. Vīrya - Śīta.
Guṇa - Laghu. Vipāka - Kaṭu.

पर्पट, शीतलस्तिक्त, संग्राही वात कोपनः।

लघुः पाके च कटुको हरेत्पित्त कफक्षित कफज्वरान्॥

रक्त दोषा रुचिदाह ग्लानिभ्रममदान्जयेत्॥

प्रमेहषमितृङ्गरक्तपित्तानां च विनाशकः॥

अस्यशाकं तु संग्राहि शीत वातकरं लघु

तिक्तं रक्तरुजं पित्तज्वरं तृष्णां च नाशयेत्॥

कफं भ्रमं च दाहं च नाशयेदिति कीर्तितम्। (नि. र.)

*Parpatāh śītalastiktāḥ sangrāhi vātakopanaḥ,
Laghuḥ pāke ca kaṭuko haretpitta kaphatpitta
kaphajvarān.*

*Raktadoṣa rucidaha glānibhramamadānjayet,
Pramehaviṣmitṛṅgaraktapittānaṁ ca vināśakah.
Asyaśākam tu sangrāhi śītavātakaram laghu,
Tiktam raktarujam pittajvaram tṛṣṇam ca nāśayet.
Kapham bhramam ca dāham ca nāśayediti
kīrtitam. (Nighanturatnākāra)*

Actions/Uses : Vātakara, Kaphapittaghna, Grāhi, Krimighna, Jvaraghna, Svedakāri, Mūtrala.

Therapeutics :

Parpatha is diuretic and vermifuge and is given in snake bite. Plant dried and pulverized and given in fevers and cough and is considered to be a vermifuge. Fresh leaves, bruised and mixed with castor oil are applied to scalp in cases of tinea capitis.