## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
<th>File</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index to botanical names</td>
<td>181</td>
<td>r.42.6</td>
</tr>
<tr>
<td>Index to Malayalam names</td>
<td>192</td>
<td>r.42.7</td>
</tr>
<tr>
<td>Index to Sanskrit names</td>
<td>199</td>
<td>r.42.8</td>
</tr>
<tr>
<td>1 Introduction</td>
<td>1</td>
<td>r.42.2</td>
</tr>
<tr>
<td>2 Medicinal plants</td>
<td>1</td>
<td>r.42.3</td>
</tr>
<tr>
<td>3 Bibliography</td>
<td>173</td>
<td>r.42.4</td>
</tr>
<tr>
<td>4 Glossary of medicinal terms</td>
<td>178</td>
<td>r.42.5</td>
</tr>
</tbody>
</table>

Indexes are Linked in this Report
Introduction

The origins of herbal medicine predate all existing records. Ancient Indian knowledge on medicinal plants was wide and comprehensive. Vedic literature stands to the proof of their vast knowledge on herbal medicines. Although the ancient systems of herbal medicine was prevalent throughout the country, it suffered a severe setback with the introduction of Allopathy. But currently there is a reawakening which has resulted in a more scientific approach to the Vedic days store of knowledge of medicinal plants.

A good number of medicinal plants are found mentioned in the ancient classical Ayurvedic texts 'Charaka Samhita'. 'Susruta Samhita' and 'Astanga Hrdaya Samhita'. But many of them still remain to be properly identified. During the process of urbanization the contact with plants in their natural habitat was lost, creating confusion in the correct identity of many plants. The indiscriminate use of Sanskrit names and synonyms in later publications which are not given in the ancient treatises, added to this problem. Moreover many irregularities have crept in, in the identity of raw material due to wrong interpretations of the Sanskrit names of medicinal plants. Therefore, medicinal plants differ according to the practitioners. Moreover the preference for the use of traditional plants by them has also led to the use of different plants in various regions under the same Sanskrit name.

The descriptions provided in the ancient treatises are hardly sufficient to confirm the identity of various drug plants. For the common drug plant 'Kuruntotti' three names, viz. bala, athibala and nagabala can be found. All of them are species of Sida. When there are 11 species of Sida in South India. only with the help of an excellent key based on floral characters or with the aid of authentic specimens these species can be correctly identified. When used as a raw drug it is quite difficult to identify the roots of these species based on the morphological characters. No conclusive phytochemical study has been carried out to establish which species of Sida has the most beneficial alkaloid. In the absence of such a study, it is arbitrary if an Ayurvedic practitioner prefers a particular species as the source of 'Kuruntotti'. Apart from the species of Sida, species of Pavonia are also used as Kuruntotti. Thus the first and foremost task in Ayurveda is to establish the correct identity of drug plants.
The destruction and degradation of natural habitats of medicinal plants have led to diminished supply of these valuable raw materials. The poor availability has also resulted in adulteration of raw drug. An example is that of *Kuvalam (Aegle marmelos)* which is of very rare occurrence in Kerala forests. The roots of *Toddalia asiatica* and species of *Limonia* are collected in large quantities and sold as *Kuvalam*. One of the effective ways to check the use of adulterants is to cultivate the much needed drug plants.

Forests of Kerala are endowed with a large number of medicinal plants. An authentic publication on this integral component of forest resources is still lacking and therefore very little information is available on the medicinal properties of many species. The shrinking habitat of the medicinal plants and the ever increasing demand for the raw drugs pose great threats to some species that are in the verge of extinction. Intensive studies on indigenous medicinal plants and germplasm collection of the various species are therefore very effective.

With all these background information, and having realised that the habitat of medicinal plants is and will continue to be the forests, this project was initiated. This report relates to the fulfilment of the objectives of providing correct botanical identity, resolving nomenclatural confusion and compiling information on the medicinal uses.

A checklist of the medicinal plants of Kerala forests was prepared from Ayurvedic texts and Floras. The checklist also included some exotics naturalized in the state and are frequent in forest plantations and forest clearings. Field trips were conducted to various forest areas for the collection of medicinal plants with the help of people engaged in the collection of medicinal plants. Collection of herbarium specimens, raw materials and live plants for the medicinal plant garden in the Institute were made. Comparative studies were also made with raw drugs materials collected from various pharmaceutical agencies. The habitat and field characters were studied and these information were also documented. The materials collected were identified with pertinent literature and authentic specimens. The local names of the medicinal plants were obtained from the people engaged in the collection of drug plants and from literature. The Sanskrit names were obtained from published literature and by consulting Sanskrit scholars. The medicinal properties and uses were compiled from Ayurvedic texts. These were supplemented with information collected from Ayurvedic practitioner- and Tribals.

The species are arranged in alphabetic sequence under respective plant families. The families are arranged according to the system of classification of flowering plants by Bentham and Hooker. The correct botanical name appears in bold face followed by important synonyms, if any, in italics. The local
name(s) and Sanskrit name(s) are given whenever known. The distribution of the plants in Kerala is given by forest types according to the system of classification of forest types by Champion and Seth (1968). Whenever a species is confined only to a particular area; it is specified; otherwise it indicates occurrence throughout Kerala in the type of forests mentioned. A brief description of the plant is provided to facilitate identification in the natural habitat. Photographs have been provided for some species. The height of the trees described as small, medium and large are indicative of the size range: trees below 10 m high as small, 11-25 m as medium and above 25 m as large. The medicinal properties and uses are given under separate heads. A glossary of medicinal terms used in the text has been provided. Separate index for Botanical names, Malayalam names and Sanskrit names have been appended for easy reference.

About 250 species of plants collected for the project as well as the medicinal plants obtained from other sources are maintained in the Medicinal plant garden of the Institute. The raw materials collected for comparative studies were identified and kept as a reference collection in the Institute. The herbarium specimens of the medicinal plants prepared were incorporated in the Institute herbarium.

In order to ascertain the views and problems of Ayurvedic practice and research, a state level seminar on Medicinal plants was organized in the Institute during December 1981. Nearly 100 delegates including leading Ayurvedic practitioners and academicians participated in the Seminar. The papers presented stressed mainly on two aspects, one on the shortage of raw drugs and the other the need for standardization of the drug plants. The proceedings of the seminar was published in 1982.
Ranunoulaceae

Clematis gouriana Roxb.
Mal : Nikida Kodi

Distribution : West coast semi-evergreen and Southern moist mixed deciduous forests above 400 m elevations.

Soil requirements : Rich and deep loamy soil with good drainage.

Description : A climbing shrub reaching to the top of trees, stem vertically grooved. Leaves opposite bipinnate or tripinnate; leaflets ovate or oblong, acuminate, entire or remotely toothed, rounded or cordate at the base, 2.5-10 x 1.5-3.5 cm. Flowers yellowish or greenish white, in much branched panicles. Fruit a head of ovoid achenes with long feathery tails.

Uses : Bruised stem and leaves when applied to the skin cause desiccation. The root is with pungent aromatic smell. The fresh root is crushed and inhaled to get relief from cold by the Tribals of Attappady.

Dilleniaceae

Dillenia indica Linn.
Syn. D. speciosa T hunb.
Mal : Syalitha

Distribution : Reported to occur in Southern moist mixed deciduous forests in North Kerala. Occasionally planted in temple compounds and in households as an ornamental tree.

Description : Small to medium sized tree; bark reddish grey, smooth. Leaves simple, fascicled at the ends of branchlets, oblong-lanceolate, acute, serrate, 15-30 x 7-10 cm; petiole winged. Flowers white, solitary, about 10 cm in diameter. Fruit globose, subtended by the thickened sepals, about 8 cm in diameter.

Properties : Bark and leaves are astringent. Fruit is said to possess tonic and laxative properties.

Uses : Bark is reported to be useful in the treatment of arthrites (Van Reede. 1678). It is also used as an expectorant. A cooling beverage prepared from fruits is administered for fevers.

Tetracera akara (Burm.f.) Merr.
Syn. T. laevis auct. non Vahl
Mal : Nennelvalli

Distribution : West coast tropical evergreen forests.

Description : A climbing shrub with angular branches. Leaves simple, alternate, oblong or lanceolate, entire or remotely toothed, 7-12 cm long. Flowers white, in few to many flowered terminal panicles. Fruit an aggregate of several coriaceous follicles with 1-2 arillate seeds.

Uses : Oecoction of leaves mixed with rice-gruel is given in the treatment of aphthae.

Magnoliaceae

Michelia champaca Linn.
Mal : Champakam
San : Champaka

Distribution : Occasional in West coast tropical evergreen forests.

Soil requirements : Deep moist loamy, medium acidic soil.

Description : Large evergreen tree; bark grey, smooth. Leaves simple, alternate, ovate-lanceolate, acuminate. 15-22 x 5-8 cm. Flowers...
solitary, axillary, yellow, about 5 cm in diameter. Fruit an aggregate of follicle; seeds 1-10. pendulous.

Properties: Bark of the tree is considered as a stimulant, febrifuge, expectorant, astringent, anthelmintic, diuretic, diaphoretic and aphrodisiac. Flowers and fruits are stimulant, antispasmodic, stomachic, carminative, diuretic, bitter and cooling. Dried root and root bark are used as purgatives and emmenagogue.

Uses: Bark in decoction is given with much benefit in low intermittent fevers and mild cases of chronic gastritis. It is used in the treatment of bile and blood afflictions also. Leaf juice is used in colic. Flowers are useful in the treatment of rheumatism and oil from flowers provide an useful application in cephalalgia, ophthalmic and gout. Both flowers and fruits are used in the treatment of dyspepsia, nausea, fever and vertigo. Seeds and fruits are used for healing cracks in feet. Oil of the seeds rubbed over the abdomen relieves flatulence. A decoction of the root is used in cases of unconscious micturition (Mooss. 1978). Root and root bark mixed with curdled milk is applied to cure abscesses.

Michelia nilagirica Zenk
Mal: Kattuchampakam
Distribution: Confined to Southern montane wet temperate forests at Munnar.
Soil requirements: Strongly acidic soil. clay loam, high in organic carbon.
Description: A small to medium sized tree: bark brown with shallow fissures. Leaves simple, alternate. elliptic, acuminate. Flowers white, axillary, solitary. Fruit of many follicles, each about 1.5 cm in diameter with 1-2 scarlet seeds.

Property: Bark and Leaves are considered as febrifuge.

Annonaceae

Sageraea dalzellii Bedd.
Mal: Manjaniara, Kanakaitha
Distribution: West coast tropical evergreen and West coast semievergreen forests.

Soil requirements: Sandy loam soils with good drainage. medium aciditc.

Description: A large tree with straight trunk: bark blackish, smooth, Leaves simple, alternate, narrowly elliptic, glossy, 10-30 x 4-10 cm. Flowers yellowish, axillary or fascicled on woody tubercles. Fruit of 3-5 globose, green carpels.

Properties: Leaves are bitter, astringent and pungent.
Uses: Leaves are used for fermentation.

Uvaria narum (Dunal) Wall. ex Wight & Arn.
Mal: Narumpanal
San: Neelalalli
Description: Occasional in the Southern dry mixed deciduous forests. Also common in the forests associated with temples or 'kavu'

Soil requirements: Sandy loam soil with loose structure, good drainage.

Description: A large woody climber. Leaves simple, alternate,
oblong-lanceolate. acute or acuminate, 7-12 x 2-3 cm. Flowers reddish, solitary. Fruit of numerous carpels.

Uses: Leaves are recommended in rheumatic swellings, jaundice, biliousness and fevers. Root is used in the treatment of jaundice, fever, biliousness and typhoid. A decoction of the root bark is given to women to control fits at the time of delivery. It is also used in rheumatism. bowel complaints of Children and for eczema. Oil Bxtracted from the root. reduces burning sensation of the livet (Van Reede, 1678).

Menispermaceae

Anamirta cocculus (Linn.) Wight & Arn.

Syn. A. paniculata Colebr.
Mal : Polla, Karantakam, Nanchuvalli.

Distribution: West coast tropical evergreen and West coast semievergreen forests.

Soil requirements: Loamy soils with good drainage, medium acidic, low in potash. very low in phosphate and high in organic carbon.

Description: A large climbing shrub. Leaves simple, alternate, broadly ovate-cordate. 12-20 x 8-12 cm. Flowers small, creamy white, in large panicles drooping from nodes of mature stem. Fruit a drupe. obliquely ovoid, about 1-2 cm in diameter, white.

Properties: Leaves are antipyretic. Fruit is considered to be an expectorant.

Uses: Fruit is used in the treatment of rheumatism. Dried fruit is a powerful narcotic and an antidote for morphine and chloral poison.

Juice of fresh fruit is applied to foul ulcers and scabies. The active principle, picrotoxin. from seeds is used to a limited extent to control night-sweats in phthisis. It is also useful in the convulsion treatment of schizophrenia (Martindale, 1941-43).

Cissampelos pateira Linn.

Mal : Malathangi

Distribution: Southern moist mixed deciduous forests. Occasional in scrub jungles.

Soil requirements: Loamy soils with good drainage medium acidic, low in potash and phosphate and high in organic carbon.

Description: A slender climbing shrub. Leaves simple. alternate. orbicular or reniform. cordate at base, pubescent below, 2.5-8 cm in diameter. Flowers small. greenish, in axillary racemes. Fruit globose. about 0.5 cm in diameter. scarlet. (Plate II Fig 1)

Properties: Root is bitter. antiperiodic, diuretic. purgative and stomachic. Root with bark exercise astringent and sedative action on the mucus membranes of genito-urinary organs.

Uses: Leaves are used in the treatment of venereal diseases and heart complaints. Root is given for cough, dyspepsia, diarrhoea, cystitis, dropsy, and prolapsus uterus.

Cocculus hirsutus (Linn.) Diels

Syn. C. villosus (Lamk.) DC.
Mal : Pathalagarudakkodi
San : Pathalagarudi. Mahamoolam

Distribution: Southern dty mixed deciduous forests. Also seen growing among the bushes in villages.
**Description**: A straggling shrub with villous branchlets. Leaves simple, alternate, ovate, obtuse at base, softly pubescent, 4-7 x 2-4.5 cm. Flowers small, pale yellow; male flowers in axillary cymose panicles; female in axillary fascicles. Fruit black purple; seeds tubercled.

**Properties**: Root is refrigerant-blood purifier, laxative, sudorific and alterative. It is also used as a tonic.

**Uses**: Leaf juice is taken internally for gonorrhoea and is used externally for eczema, prurigo and impetigo. Root is used in the treatment of chronic rheumatism and venereal diseases.

Coscinium fenestratum (Gaertn.) Colebr.

Mal: Maramanjal
San: Daruhareedra

**Distribution**: West coast tropical evergreen and Southern hill-top tropical evergreen forests.

**Soil requirements**: Variety of soils with good drainage medium slightly acidic

**Description**: A climbing shrub: bark yellow, with shallow fissures. branches pubescent. Leaves simple, alternate, suborbicular, subpeltate. 12-17 x 10-15 cm, pubescent below. Flowers small, green, in globular heads. Fruit subglobose, villous. about 1 cm in diameter. (Plate II, Fig. 3)

**Properties**: A tincture of wood is said to possess antiseptic properties. Root is aphrodisiac, antipyretic, antiseptic and stomachic.

**Uses**: Tincture of wood is used for dressing wounds and ulcers. Decoction of bark, which is used as a substitute for cinchona, is given in case of intermittent fevers, debility and dyspepsia. Root is used in the treatment of diabetes and excessive bleeding.

**Cyclea peltata** (Lamk.) Hook. f. & Thoms.

Mal: Padakizhangu, Padathali
San: Pada

**Distribution**: Southern moist mixed deciduous, Southern dry mixed deciduous forests and occasionally in scrub jungles.

**Soil requirements**: Sandy loam soils with good drainage slightly acidic.

**Description**: A slender, climbing, pubescent shrub. Leaves simple, alternate, ovate-peltate, 6-12 x 4-9 cm. pubescent. Flowers small, greenish, in axillary panicles. Fruit white, globose, about 0.5 cm in diameter.

**Uses**: Crushed leaves are applied to wounds to stop bleeding. Root is a good nervine tonic. It is used for a variety of ailments like dysentery, piles, flatulence, jaundice, stomach-ache, fever, leprosy, liver complaints, poisoning, asthma and clotting of blood in the abdomen.

**Diploclisia glaucescens** (Bl.) Diels Syn. *Cocculus macrocarpus* Wight & Arn.

Mal: Vatoli

**Distribution**: West coast semi-evergreen and Southern moist mixed deciduous forests.

**Description**: A large woody climber. Leaves simple, rounded, usually broader than long, 5-10 x 6-11 cm, margins thickened, glabrous. Flowers small, yellow, in panicles, arising from mature stem. Fruits
obovate oblong, about 2 cm long. (Plate II Fig.2)

Uses: Powdered leaf with milk is given for biliousness, syphilis and gonorrhoea.

**Tinospora cordifolia** (Willd.) Miers ex Hook. f. & Thoms.


*Cocculus cordifolius* (Willd.) DC.

Mal: Chittamrthu, Amrthu
San: Amrtha, Guluchi

**Distribution**: West coast semi-evergreen and Southern moist mixed deciduous forests.

**Soil requirements**: Loam to sandy loam soils with good drainage. slightly acidic and medium in organic carbon.

**Description**: A climbing shrub; bark papery at first, becomes corky and deeply spirally cleft when old, grey or creamy white. Leaves simple, alternate. orbicular - cordate, 5-7.5 cm in diameter, glabrous. Flowers small. greenish - yellow, in dense racemes.

**Properties**: Juice of fresh plant is diuretic. Stern is astringent to the bowels, stomachic, antiperiodic, antipyretic. expectorant, alterative and aphrodisiac.

**Uses**: The plant is used against general debility, dyspepsia, fevers and urinary diseases. A preparation from the plant is used by the tribals in Bihar to treat fractures. Plant juice is recommended for gonorrhoea. The stem is used in the treatment of giddiness. piles, anaemia, diabetes, vaginal and urethral discharges and enlarged spleen. A kind of starch prepared from the aqueous extract of the stem is used as a tonic and is given in several diseases causing debility. Fruit is given for jaundice and rheumatism.

**Tinospora sinensis** (Lour.) Merr.

Syn. *T. malabarica* (Lamk.) Miers
*Cocculus malabaricus* DC.

Mal: Kattamrthu, Pottamrthu. Peyamrthu

**Distribution**: Southern moist mixed deciduous and West coast semi-evergreen forests, mostly confined to central and northern Kerala.

**Description**: A climbing shrub, young branches covered with white hairs. Leaves simple, ovate-acuminate, cordate; palmately 7-nerved, 10-15 x 7.5-12cm, ‘pubescent on both sides. Flowers greenish. in dense racemes.

**Uses**: Plant is considered to be a tonic. In China fresh leaves and stems are used in the treatment of chronic rheumatism. In Kerala this is not commonly used as it is considered therapeutically inferior (Mooss. 1977).

**Capparidaceae**

**Capparis grandis** Linn. f.

**Distribution**: Southern dry mixed deciduous and Dry teak bearing forests.

**Soil requirements**: Sandy soils, very slightly acidic, medium in potash and very high in phosphate.

**Description**: A small tree, young shoots tomentose. Leaves simple. alternate, elliptic - ovate. obtuse. velvety an both sides. Flowers creamy white, in many flowered terminal corymbs. Fruit Purple. subglobose. about 4 cm in diameter, 2-6 seeded
Uses: Infusion of bark and leaves is used internally for swellings and eruptions.

Crateva nurvala Buch. - Ham.

Syn. religiosa Hook. f. & Thoms.

Mal: Neermathalam
San: Varana

Distribution: Occasional in Southern moist mixed deciduous and West coast semievergreen forests, mostly confined to banks of streams.

Soil requirements: Loamy soils slightly acidic, medium in potash and low in phosphate.

Description: A small to medium sized tree; bark grey, with longitudinal wrinkles. Leaves trifoliolate; leaflets long acuminate, elliptic, 5-15 x 3-6.5 cm. Flowers white, in terminal showy racemes. Fruit a berry, globose or ovate, 2.5-4.5 cm in diameter.

Properties: Bark is demulcent, stomachic, laxative, diuretic, antipyretic and alterative. It has a stimulating action on the liver. Flowers are astringent and cholagogue. Fruit is laxative. Root increases the secretion of bile.

Uses: Bark of the tree is useful in the treatment of calculus affections and disorders of urinary organs. It is reported to be a contraceptive. (Jain. 1965) Decoction of the bark is used for relaxation and flatulence.

**Violaceae**

Hybanthus enneaspermus (Linn.) F. v. Muell.

Syn. Ionidium suffruticosurth (Linn.) Ging

Mal: Orilathamara, Kalthamara

Distribution: Southern moist mixed deciduous forests. Also seen in forest plantations.

Description: A small herb. Leaves simple, alternate, linear or (anceolate, 3.5 x 0.3-0.8 cm. Flowers red, solitary, axillary. Fruit subglobose, 0.5 cm in diameter.

Properties: Plant is reported to possess tonic, diuretic, and demulcent properties.

Uses: Plant is used In the treatment of urethral discharges, diseases of blood, vomiting and epileptic fits. In Africa the plant is added to the food of pregnant and parturient women (Dalziel, 1948). With oil, the Eaves and tender stalks are used In preparing a cooling liniment for the head. Root is given in cases of bowel complaints of children. It is also administered as an infusion in gonorrhoea and urinary affections.

Viola betonicifolia J. E. Sm.

Syn. V. patrinii auct. non Ging

Distribution: Southern mohtane wet scrub and Southern montane wet grasslands.

Soil requirements: Clay loam soils loose, strongly acidic high in organic carbon.

Description: A slender herb. Leaves radical, simple, triangular-ovate, serrate, 7-12 x 1.5-4 cm, petiole long. Flowers lilac, about 1 cm in diameter on slender pedicels.

Uses: Plant juice is applied to ulcers and foul sores. It is also recommended against syphilis and biliiousness. The Chinese and Malays use the flowers for purification of blood. In Chinese medicine it is recommended against Cancer.
dried flowers are used as a purgative. Mixed with tea they are used against cold and cough. Large quantities of floweres are used in Unani medicines.

Viola pilosa Bl.

*Syn.* *V. serpens* Wall, ex Roxb.

*Distribution*: Southern montane wet scrub and Southern montane wet grassland.

*Properties*: The gum obtained from the tree is cooling and sedative. Leaves and flowers are stimulant.

*Uses*: Gum is used in the treatment of eye diseases. It is also recommended for softening the skin.

Cochlospermaceae

*Cochlospermum religiosum* (Linn.) Alston

*Syn.* *C. gossypium* DC.

*Mal*: Appakudukka. *Seema-panjimaram*

*San*: Girisanmalika

*Distribution*: Southern dry mixed deciduous and Southern moist mixed deciduous forests.

*Properties*: Plant is antipyretic, diaphoretic and febrifuge. Flowers are demulcent and emolient. Root is emetic.

*Uses*: Flowers are used in the treatment of biliousness and lung trouble.

Flacourtiaeaceae

*Casearia elliptica* Willd.

*Syn.* *C. tomentosa* Roxb.

*Distribution*: West coast semi-evergreen and West coast tropical evergreen forests.

*Properties*: Bark is bitter. Pulp of the fruit is diuretic.

*Uses*: Bark is used for external application in dropsy.

*Casearia esculenta* Roxb.

*Mal*: Malampavatta

*San*: Bhuthagandhii

*Distribution*: Southern moist mixed deciduous and West coast semi-evergreen forests.

*Properties*: Bark is bitter. Pulp of the fruit is diuretic.

*Uses*: Bark is used for external application in dropsy.
Description: A small tree; bark green, mottled with white, smooth. Leaves simple, alternate, elliptic-oblong or lanceolate, acute or acuminate, entire or distantly serrate, 7.5-15 x 3.5-7.5 cm. Flowers small in axillary clusters. Fruit a capsule, about 1.2 cm long, orange-yellow.

Properties: Root is astringent, cathartic, antipyretic and alexiteric.

Uses: Root is used against leucoderma, diseases of blood, bronchitis, asthma and hallucinations.

Hydnocarpus macrocarpus (Bedd.) Warb.

Syn. Asteriastigma macrocarpa Bedd.
Mal: Malankummatti

Distribution: West coast tropical evergreen and West coast semievergreen forests of Central and Southern Kerala.

Soil requirements: Clay loam soil with good drainage, slightly acidic, medium in potash and low in phosphate.

Description: A large evergreen tree. Leaves simple, alternate, oblong, acute, entire, very glossy and dark green above, pale beneath, 15-20 x 6-10 cm. Flowers white, about 2.5 cm in diameter. Fruit woody, globose, dark brown, 12-15 cm in diameter.

Uses: Oil from seeds is believed to be a valuable medicine for skin diseases.

Hydnocarpus pentandra (Buch.-Ham.) Oken

Syn. H. laurifolia (Dennst.) Sleumer
H. wightiana Bl.
Mal: Marotti

Distribution: West coast tropical evergreen. West coast semievergreen and southern moist mixed deciduous forests.

Soil requirements: Variety of soils with good drainage medium to slightly acidic.

Description: A large tree, stem often fluted; bark pale brown with white or grey patches. Leaves simple, alternate, oblong, acuminate crenate, 12-25 x 3.5-7 cm. Fruit globose, woody with tubercles, 5-10 cm in diameter.

Uses: Oil from seeds is used in the treatment of leprosy and other cutaneous diseases. It is also given for ophthalmia and dysentery. This oil is considered to be therapeutically superior among the chaulmoogra oils (Oil of Hydnocarpus and some other Flacourtiaceae are commonly known as chaulmoogra oils):

Pittosporaceae

Pittosporum nepalensis (DC.) Reheder & Wilson

Syn. P. floribundum Wight & Arn.
Mal: Kachapatta

Distribution: Southern montane wet scrub and Southern montane wet temperate forests.

Soil requirements: Clay loam soil loose, strongly acidic and high in organic carbon.

Description: A small evergreen tree with short spreading branches; bark thin, light greenish-grey, lenticellate. Leaves simple, crowded towards the tips of branches, elliptic-oblong, acute or acuminate, 7-12 x 3-5 cm. Flowers yellowish in race-
mose or short panicles. Fruit woody, 0.5-1.2 cm in diameter. 6-seeded.

Properties: Bark when freshly cut, emits a ginger like smell. It is reported to possess expectorant, febrifuge and narcotic properties. The extract of the stem bark has antibacterial and antifungal properties. Oil from the seeds is alterative, tonic and stimulant.

Uses: Bark of the tree is used against chronic bronchitis. Oil from seeds is specific for certain skin diseases. It is used as a local application in rheumatism, ophthalmia, sprains and bruises, sciatica, leprosy and secondary syphilis. Bark is used as an antidot to snake poison.

Polygalaceae

**Polygala arvensis** Willd.

Syn. *P. chinensis* auct. non Linn.

*Distribution*: Southern dry mixed deciduous forests and scrub jungles.

*Soil requirements*: Sandy loam medium acidic soil with good drainage medium in potash. Low in phosphate and organic carbon.

*Description*: A small herb, roots aromatic. Leaves simple, alternate, obovate to linear-oblong, glabrous or pubescent. 1-3 cm long. Flowers yellowish in few flowered axillary racemes.

*Uses*: An infusion of the leaves is prescribed for asthma, chronic bronchitis and catarrhal affections. The root is recommended for fever and dizziness. They are reported to possess antiseptic properties.

**Polygala sibirica** Linn.

*Distribution*: Southern montane wet grasslands and Southern montane wet scrub jungles.

*Soil requirements*: Grows in dry rocky and gravelly areas and dry woods at higher altitudes.

*Description*: A small herb, roots aromatic. Leaves simple, alternate, linear-oblong, 1-2 cm long. Flowers yellowish or pinkish, in short few flowered axillary racemes.

*Uses*: Leaves are used against spermatorrhoea. A decoction of the root is given as an expectorant in cold and cough and bronchitis. It is also used for amnesia, impotency and seminal losses.

**Caryophyllaceae**

**Drymaria cordata** (Linn.) Willd. ex Roem. & Schult.

*Distribution*: Southern hill-top tropical evergreen forests, mostly seen in shady places. Also seen in tea plantations as a weed.

*Soil requirements*: Strongly acidic loamy soils with high moisture retentivity.

*Description*: A slender diffuse, glabrous herb. Leaves simple, orbicular-cordate, 1-2 cm long. Flowers small, greenish, in terminal and axillary panicles.

*Properties*: Plant juice is laxative and antifebrile.

**Polycarpea corymbosa** (Linn.) Lamk.

Mal: Akkaramkolli

*Distribution*: In scrub jungles and in forest plantations.

*Description*: A small erect herb 12-40 cm high. Leaves linear, verticillate. 1-2 cm x 2-3 mm. Flowers small, in terminal corymbose cymes.
Uses: Plant is administered both internally and externally as a remedy for snake bites. Pounded leaves are used as a poultice over boils and inflammatory swellings. It is given with molasses in jaundice. In Malaya, the flowering head along with the portion of stem and leaves is used as demulcent and astringent (Dalziel. 1948).

**Stellaria media** (Linn.) Vill.

*Distribution*: Southern montane wet scrub forests. Also in open areas at higher elevations.

*Soil requirements*: Sandy clay loamy soil, medium acidic high in potash. medium in phosphate and high in organic carbon.

*Description*: A small heib. Leaves simple, opposite, elliptic or lanceolate, 1-2.5 cm long. Flowers small, white. many in terminal dichotomous cymes.

*Properties*: The plant is cooling and binding. In Spain it is used as vulnerary, astringent and resolvent.

*Uses*: The plant is used to plaster broken bones and swellings. The plant is said to be very useful in inflammations of the digestive, renal, respiratory and reproductive tracts as it has a strengthening and soothing action on mucus and dermoid surfaces. It is also useful in severe inflammations of skin and eyes. The leaves are reported to be rich in vitamin A and C. (Wealth of India. 1976).

**Hypericaceae**

**Hypericum japonicum** Thunb. ex Murr.

*Distribution*: Southern montane wet scrub and Southern montane wet temperate forests.

*Soil requirements*: Clay loam soil with plenty of humus, slightly acidic low in potash and very low in phosphate.

*Description*: Annual herbs, stem 4-angled. Leaves simple, elliptic or ovate, auricled at base, 3 - nerved, sessile 6-10 x 3-5 mm Flames yellow, about 0.6 cm in diameter, in terminal cymes.

*Uses*: In China and Indo-China the plant is used as an alterative and astringent. (Kirtikar & Basu, 1935) In Madagascar, it is used against asthma and dysentery. (Burkill, 1935).

**Clusiaceae**

**Calophyllum apetalum** Willd.

Syn. C. wightianum Wall. ex Planch. & Triana  
*C. decipiens* Wight  
Mal: Cherupunna  
*Distribution*: West coast tropical evergreen forests.

*Soil requirements*: Loamy soils. medium acidic. medium in potash. low in phosphate end organic carbon.

*Description*: A moderate sized tree; bark yellowish brown, with vertical fissures. Leaves simple. opposite, ovate-oblong glossy. with numerous parallel lateral veins 5-9 x 3-5 cm. Flowers in axillary racemes. Fruit about 2 cm long, ellipsoid. apiculate, red when ripe.

*Properties*: Oil from seed is antiphlegmatic and anodyne.

*Uses*: Oil from seeds is used to treat leprosy, cutaneous afflictions, scabies and rheumatism.
Calophyllum polyanthum Wall. ex Choisy
   Syn. C. elatum Bedd.
   C. tomentosum auct. non Wight
   Mal : Kattupunna
   San : Vanapunnaga
   Distribution: West coast tropical evergreen. Southern hill-top tropical evergreen and West coast semievergreen forests.
   Soil requirements: Sandy loam soils.
   Description: A lofty tree, unbranched for a great height; bark deeply fissured, yellowish brown, thick. Young twigs tomentose leaves simple, opposite oblong-lancedate. acuminate; lateral nerves numerous and parallel, 7-12 x 3.5 cm. Flowers in panicles. terminal or from the axils of upper leaves. Fruit obliquely ovoid. 2cm long.
   Properties: Gum is reported to be feebly astringent.

Garcinia gummi-gutta (Linn.) Robs.
   Syn. G. cambogia (Gaertn.) Desr.
   Mal : Marappuli, Pinarpuli
   Distribution: West coast tropical evergreen forests.
   Soil requirements: Loamy soils, strongly acidic with high organic carbon.
   Description: A moderate sized evergreen tree; bark surface black, rough, when cut exudes a yellow exudation. Leaves simple, opposite lanceolate to ovate 5-12 x 1.5-3.5 cm. Flowers yellowish, axillary or from the axils of fallen leaves. Fruit globose, with vertical furrows. 5.7 cm in diameter, reddish or yellow.
   Properties: The fruit possesses antiseptic properties. The resin from the tree possesses purgative properties (Chandrasena. 1935)
   Uses: A decoction of the fruit rind is useful in the treatment of rheumatism, bowel complaints, piles and disorders in the womb.

Garcinia indica Choisy
   Mal : Marappuli, Pinarpuli
   Distribution: West coast tropical evergreen forests.
   Soil requirements: Loam and sandy loam, strongly acid and high in organic carbon.
   Description: A slender tree with drooping branches. Leaves simple, opposite oblong-lanceolate. Flowers yellowish axillary or terminal, solitary or in spreading fascicles. Fruit globose entire 2.5-3 cm in diameter purplish.
   Properties: Bark of the tree is astringent. Fruit is antiscorbutic. Cooling, cholagogue emollient, demulcent, anthelmintic and cardiotoxic. The seeds yield a valuable edible fat known as 'kokam butter'. This is demulcent astringent and emollient.
   Uses: Young leaves are given in cases of dysentery. Fruit is used to treat bleeding piles, dysentery and heart diseases. Fat extracted from the seeds is used as a local applicant to ulcerations and fissures of lips and hands etc.

Garcinia morella (Gaertn.) Desr.
   Mal : Pinarpuli
   Distribution: West coast tropical evergreen and southern moist mixed deciduous forests.
   Description: A medium sized evergreen tree. bark brown. smooth exudes an orange-yellow gum when
cut. Leaves simple, opposite, elliptic-obovate to ovate-lanceolate, acute, narrowed at the base. 6-8 cm long. Flowers yellowish, in axillary clusters. Fruit subglobose. about 2 cm in diameter, subtended by the persistent sepals.

Properties: The resin obtained from the tree is hydragogue, cathartic, purgative, anthelmintic and vermifuge.

Uses: The resin is recommended for dropsical afflictions, amenorrhea and obstinate constipation. Juice obtained from the stem is used to remove pimples and boils.

**Garcinia xathochymus** Hook. f. ex T. Anders.

Syn. **G. rinctoria** (DC.) Dunn.

Mal: Vairappuli

Distribution: West coast tropical evergreen forests.

Soil requirements: Variety of soils, loam to clay loam, poorly drained and strongly acidic.

Description: A medium sized tree with drooping branches. Branchlets and young twigs 4-angled; bark brown. thin. Leaves simple, opposite, linear-oblong or oblanceolate. acute or acuminate 20-40 x 5-10 cm. flowers white in clusters of 4-8 in the axils of fallen leaves. fruit globose, slightly pointed at the apex, yellow, 7-12 cm in diameter.

Properties: Fruit is antiscorbutic, cooling, cholagogue. emollient and demulcent.

Uses: Fruit is used to treat heart complaints.

**Mammea suriga** (Buch. - Ham. ex Roxb.) Kosterm.

Syn. **Ochrocarpus longifolius** (Wight) Benth. ex T. Anders.

Mal: Shooram punna

Distribution: West coast tropical evergreen forests, confined to North Kerala.

Description: A large evergreen tree; bark reddish brown. exudes a red gum when cut. Leaves oblong. acute or obtuse, thick, coriaceous. lateral veins not visible, 13-20 x 4.5-6 cm. Flowers white, petals with red streaks, fascicled in the axils of fallen leaves. Fruit is obliquely ovoid. mucronate, about 2.5 cm long.

Properties: Flower buds are astringent and aromatic. Flowers are stimulant. carminative, analgesic and aphrodisiac.

Uses: Flowers are used to treat some forms of dyspepsia, haemorrhoids and leprosy.

**Mesua nagassarium** (Burm. f.) Kosterm.

Syn. **M. ferrea** auct. non Linn.

Mal: Nagapoovumaram, Churuli, Nangu.

San: Nagapushpa

Distribution: West coast tropical evergreen, Southern hill-top tropical evergreen and West Coast semi-evergreen forests.

Soil requirements: Sandy loam soils with good drainage in the slopes of hills and undulating ground along streams.

Description: A medium sized to large tree: bark reddish brown, exfoliating in thin flakes, when cut exudes an yellow gummy exudation. Leaves simple. opposite, oblong, lanceolate or linear: young leaves bright red. Flowers white, solitary or
Properties: Plant is digestive and alexipharmic. Flowers are astringent and stomachic. Unripe fruit is aromatic and sudorific.

Uses: Plant is used to cure biliousness, scabies, small tumours, headache, blood and heart troubles, sore throat, vomiting, dysentery, piles and asthma. Leaves are used in the form of poultice which is applied to head in severe cold. Flowers are prescribed for cough, bleeding piles and burning of the feet. Powdered flowers mixed with rancid butter which has been washed a hundred times in water are said to be an effectual application against burning of the feet. Oil from seeds is applied for cutaneous affluction, sores, boils, ulcers and rheumatic pains.

Dipterocarpaceae

Dipterocarpus indicus Bedd,
Mal: Kalpayin. Vellaaini
San: Garjanam

Distribution: West coast tropical evergreen and West coast secondary evergreen dipterocarp forests.

Soil requirements: Soils having thick humous layer with high moisture content and good drainage. Mostly found in areas having underlying rocks of gneissic complex, often covered with laterites in varying degrees of disintegration from hard rock to fine gravel.

Description: A large evergreen tree; bark smooth, blotched with green and white. Peeling off in round thick flakes. Leaves simple, alternate, elliptic-oblong, acute, cordate or rounded at base 12-25 x 6-7.5 cm. Flowers white, in large, terminal panicles. Fruit oblong, about 5-7 cm long; subtended by the basal calyx lobes.

Properties: Bark is alexipharmic. Resin obtained from the tree is credited with tonic, carminative and expectorant properties. The essential oil obtained from the oleoresin has marked antibacterial property against gram-ve and gram +ve microorganisms (Howes, 1949).

Uses: Bark is used in the treatment of cough, anaemia, ear diseases, urinary discharges, skin eruptions and teprosy. Resin is used against diarrhoea, piles, rheumatism, tubercular glands, gonorrhoea and other veneral infections. The essential oil forms a good emollient for plasters and ointment bases, and a good stimulant.
dressing for carbuncles and other ulcerations.

**Malvaceae**

*Abutilon indicum* (Linn.) Sweet  
**Mal** : Urakam. Venkurunthotti  
**San** : Athibala  
**Distribution** : Southern moist mixed deciduous and Southern dry mixed deciduous forests. Also seen in forest plantations.  
**Soil requirements** : Sandy slightly alkaline soil. medium in potash and very high in phosphate.  
**Description** : An erect tomentose shrub. Leaves simple, alternate. ovate-cordate. acuminate. hairy. 4-7.5 x 2.5-5 cm. Flowers yellow or orange. Carpels 15-20. separating at maturity.  
**Properties** : Bark is astringent. diuretic, febrifuge, anthelmintic and alexiteric. Seeds are laxative. aphrodisiac and demulcent  
**Uses** : Leaves are used in the treatment of gonorrhoea, inflammation of the bladder and bleeding piles. A decoction is recommended for branchites and catarrhal bilious diarrhoea. It is prescribed as a mouth wash in cases of tooth ache and tender gums. Infusion of roots is considered useful in the treatment of strangury. haematuria and leprosy.

*Hibiscus furcatus* Roxb.  
**Mal** : Naranampuli, Pachapuli  
**Distribution** : Southern Moist mixed deciduous and Southern dry mixed deciduous forests. Also seen in forest plantations.  
**Soil requirements** : Variety of soils, loamy sand to loam and slightly acidic to slightly alkaline.

**Description** : A prickly trailing shrub. Leaves palmately lobed, cordate at base, spinescent on the nerves beneath. 5-7.5 cm long. Flowers yellow with purplish centres, solitary.. axillary. Fruit ovoid. pointed, 1.5-2 cm long, subtended by the enlarged calyx.  
**Properties** : Leaves are said to improve digestion and are considered anthelmintic.  
**Uses** : Infusion of roots in water is a cooling drink. The juice of leaves with honey is used for eye diseases.

*Kydia calycina* Roxb.  
**Mal** : Kattavanakku, Vellachattachi  
**Distribution** : West coast semi-evergreen, Moist teak bearing and Southern moist mixed deciduous forests.  
**Soil requirements** : Soils with abundant moisture. slightly acidic, medium in potash, low in phosphate and high in organic carbon.  
**Description**: A small to medium sized tree; bark grey, rough. flaking off in irregular thin flakes. Leaves ovate-cordate, 3-7 lobed, 7-15 cm long. Flowers white or pink in many flowered terminal panicles. Fruit a 3-valved capsule, about 0.5 cm in diameter, subtended by the accrescent bracteoles.  
**Uses** : Leaves are used in the treatment of rheumatism and lumbago and chewed when there is a deficiency of saliva.

*Pavonia odorata* Willd.  
**Distribution** : Southern dry mixed deciduous forests and also in scrub jungles.
Soil requirements: Sandy loam soil with good drainage, slightly acidic, medium in potash, very low in phosphate and high in organic carbon.

Description: A herb, stem and branches covered with viscous pubescence. Leaves simple, alternate, ovate, cordate, slightly 3-5 lobed or angled. 2.5-5 cm long. Flowers pink, solitary, axillary. Fruit with 5 mericarps.

Properties: The herb possesses a musk like odour. Root is astringent, demulcent, carminative and febrifuge.

Uses: Plant is used in the treatment of rheumatism. Root is prescribed in case of nervous and urinary diseases, chronic bowel complaints and disorders of the blood and bile.

Sida acuta Burm. f.
Mal: Cheruparuva

Distribution: Moist teak bearing, Southern moist mixed deciduous and Southern dry mixed deciduous forests. Also in forest plantations.

Soil requirements: Sandy loam soil with good drainage, slightly acidic, medium in potash, low in phosphate and high in organic carbon.

Description: An undershrub. Leaves simple, alternate, elliptic, acute. 2.5-6 x 1-1.5 cm. Flowers yellow, axillary, solitary or paired. Fruit about 0.5 cm in diameter. carpels 5-9, each with two awns. (Plate II Fig. 1)

Properties: Leaves are considered to possess demulcent and diuretic properties. Root is astringent, bitter, cooling, febrifuge, stomachic and aphrodisiac.

Uses: Leaves are used in rheumatic afflictions and to hasten suppuration. The leaf pice is boiled with oil and applied in elephantiasis. In Bengal the leaf juice is used in the form of an electuary in the treatment of intestinal worms. A decoction of leaves and roots is given in haemorrhoids and impotence. Root is prescribed in case of nervous and urinary diseases, chronic bowel complaints and disorders of the blood and bile.

Sida cordata (Burm f.) Borss.
Syn. S. veronicaefolia Lamk.
S. humilis Cav.
S. pilosa Retz.
Mal: Vallikkurunthotti

Distribution: Moist teak bearing, Southern moist mixed deciduous and West coast semievergreen forests.

Soil requirements: Variety of soils.

Description: A small trailing undershrub with slender branches. Leaves simple, alternate, cordate, serrate, sparingly hispid on both surface, 1-5 cm long. Flowers yellow, axillary, solitary, long pedicelled. Fruit gai-brous. 5-carpedal, carpels slightly two lipped. (Plate II Fig. 2)

Uses: Leaves are used in the treatment of diarrhoea during pregnancy and used as a local applicant to cuts and bruises. Flowers and unripe fruits are recommended for burning sensation in micturition.

Sida cordifolia Linn
Syn S. herbacea Cav.
S. rotundifolia Cav
S. althaefolia Swartz
Mal: Katturam, Velluram, valia-kurunthotti

Distribution: Southern dry mixed deciduous forests, mostly confined to South Kerala.
Soil requirements: Loamy soil with good drainage, strongly acidic medium in potash, low in phosphate and high in organic carbon.

Description: An undershrub. Young parts and leaves velvety pubescent. Leaves simple, alternate, cordate, crenate, 2.5-5 cm long. Flowers yellow, axillary, solitary or in clusters. Fruit globose, carpels 7-10, each with 2 awns which are as long as carpels.

Properties: Decoction of leaves is emollient, diuretic. Seeds are aphrodisiac. Decoction of root is a febrifuge.

Uses: Juice of the whole plant is recommended for spermatorrhoea. Along with the juice of *Borassus flabellifer* it is used in elephantiasis. Leaves are reported to be used against dysentery and for poulticing sores. Seeds are administered in gonorrhoea, colic and tetanus. Root juice is used for healing wounds and administered in fever accompanied by shivering. Root bark is effective in curing cases of facial paralysis, sciatica, frequent micturition and leucorrhoea.

*Sida rhombifolia* Linn. ssp. *retusa* (Linn.) Borss.

Syn. *S. retusa* Linn.
Mal: Kurunthotti
San: Bala

Distribution: Moist teak bearing. Southern moist mixed deciduous and Southern dry mixed deciduous forests. Also seen in forest plantations.

Description: A shrub, stem minutely stellately hairy. Leaves simple, alternate, ovate to oblong, rhomboid, very variable in size. Flowers yellow, solitary or in clusters of 3-5. Axillary. Fruit globose, carpels 9-10, each with 2 short awns. (Plate II. Fig. 3)

Properties: Stem is demulcent and emollient. Both leaves and roots are aphrodisiac and are used as tonic.

Uses: A decoction of the roots in milk is beneficial in rheumatism, arthritis and allied complaints. The decoction of roots is administered to facilitate child birth.

*Sida spinosa* Linn.
Mal: Mayirmanikkarn

Distribution: Southern dry mixed deciduous and Southern moist mixed deciduous forests. Also seen in forest plantations.

Description: An undershrub. Leaves simple, alternate. Elliptic, serrate, up to 5 cm long, often with 1-3 small recurved spines beneath the petiole. Flowers yellowish. Solitary or in axillary clusters of 2-4. Fruit with 3 (rarely 6) carpels, each with 2 awns about half the length of the carpels.

Properties: Leaves are refrigerent and demulcent. Fruit is credited with astringent and cooling properties. Root is diaphoretic (Mudaliar & Rao, 1955).

Uses: Leaves are useful in cases of gonorrhoea, gleet and scalding urine. Root is used against debility and fever. Root with bark in decoction is used as a demulcent in irritability of the bladder and in gonorrhoea (Mudaliar & Rao, 1955; Williamsan, 1955).

*Thespesia lampas* (Cav.) Dalz. & Gibbs.
Syn. *Hibiscus lampas* Cav.
Mal: Kattuparathi. Kattupoo-varasu
San: Parisa

**Distribution**: West coast semi-evergreen, Southern moist mixed deciduous and Moist teak bearing forests. Also found in forest plantations.

**Soil requirements**: Sandy loam soil, well drained, medium acidic.

**Description**: A shrub. Leaves simple, alternate, ovate, cordate, about 8 cm in diameter. Flowers yellow with purplish centre, solitary, axillary. Fruit oblong, acuminate, 2.5-3.5 cm long.

**Uses**: Fruits and roots are used in the treatment of gonorrhoea and syphilis.

**Urena lobata** Linn. ssp. lobata
Mal: Vatturam, Uthiram

**Distribution**: Moist teak bearing, Southern moist mixed deciduous and West coast semi-evergreen forests. Also found in forests plantations.

**Soil requirements**: Sandy clay loam soil with good drainage, slightly acidic. medium in potash and organic carbon and very low in phosphate.

**Description**: A shrub. Leaves simple, alternate, ovate-cordate. serrate or toothed, pubescent on both surfaces, basally 5-7 nerved, 3-7 cm in diameter. Flowers axillary, solitary or in groups of 2-3. Fruit a capsule, covered with glochidiate spines.

**Properties**: Flowers are expectorant and root is a diuretic.

**Uses**: Flowers are given in dry and inveterate coughs. A decoction of the stem and root is used in Brazil for severe colic. Root is used as an external application in rheumatism. (Mudaliar & Rao. 1955).

**Bombacaceae**

**Bombax ceiba** Linn.


Mal: Elavu. Poola. Muililavu
San: Sanmali

**Distribution**: West coast semi-evergreen, Southern moist mixed deciduous and Moist teak beaiing forests.

**Soil requirements**: Sandy loam soils with good drainage slightly acidic, low in potash, phosphate and organic carbon.

**Description**: A very large deciduous tree, often buttressed; bark grey, often covered with sharp, conical prickles. Leaves digitate; leaflets 7-9, ovate, lanceolate, 8-17 cm long. Flowers bright red, large. Fruit oblong, 8-12 cm long; seeds numerous, embeded in white cotton.

**Properties**: Gum of the tree is astringent, aphrodisiac. alterative, demulcent and haemostatic. Young fruits are expectorant, stimulant and diuretic. Root is considered as tonic, stimulant, aphrodisiac, diuretic and emetic. Powdered bark with lime juice checks inflammation. Gum is used to treat diarrhoea, dysentery, menorrhagia and influenza. Dry flowers are prescribed in case of haemorrhoids and used externally in the treatment of boils, sores and itches. Young fruits are reported to be beneficial in calculous afflictions and chronic inflammations and ulcerations of the bladder and kidney. Seeds are
used in the treatment of chronic cystitis and catarrhal afflictions.

**Sterculiaceae**

**Helicteres isora** Linn.

- **Mal**: laampiri. Vaiampiri
- **Distribution**: Moist teak bearing, West coast semievergreen and Southern moist mixed deciduous forests.
- **Soil requirements**: Sandy medium acid soils with good drainage.
- **Description**: A large shrub or a small tree. Leaves obovate, obliquely cordate, serrate, 7-12 x 5-9 cm. Flowers red at first, changes to pale blue, axillary or from the axils of fallen leaves. Fruit spirally twisted, 4-6 cm long, (Plate II Fig, 4)
- **Properties**: Bark and fruit are considered to be demulcent and astringent. Root with bark is expectorant, demulcicent, astringent and anti-galactagogue.
- **Uses**: Bark is prescribed in cases of dysentery and diarrhoea. Fruit and bark lessen the griping of bowels and flatulence in children. Root juice is used in the treatment of diabetes emphyema. Root with bark is used as a cure for scabies.

**Pterygota alata** (Roxb) R. Br.

- **Syn. Sterculia alata** Roxb.
- **Mal**: Kavalam, Anathonti
- **Distribution**: West coast tropical evergreen and West coast semi-evergreen forests.
- **Soil requirements**: Sandy clay loam soils, usually in the depressions medium acidic and high in organic carbon.
- **Description**: A large evergreen tree; bark pale grey about 2.5 cm thick. Leaves simple, ovate-cordate, entire, 9-25 x 7-17 cm. Flowers rusty brown, in short panicles from the axils of fallen leaves. Fruit of 5 sub-globose, woody follicles.
- **Uses**: Plant is used in Sylhet as a substitute for opium.

**Sterculia foetida** Linn.

- **Mal**: Pottakavalam.
- **Distribution**: Occasional in Southern dry mixed deciduous forests.
- **Description**: A large, deciduous tree; bark smooth, grey or whitish. Leaves digitate; leaflets 5-9, oblong lanceolate, at both ends. 7-17 x 3.5-5 cm, petiole 15-23 cm long. Flowers orange red, in erect racemed panicles. Fruit of 1-5 woody follicles, bright red when ripe; seeds ovoid-oblong, 2 cm long with a small yellow caruncle.
- **Properties**: Bark and leaves are repellent, aperient, diaphoretic, and diuretic. A decoction of fruit is mucilaginous and astringent. Oil from seeds is laxative and carminative.
- **Uses**: The chief use of the plant is as a fumigant. In itches and other skin diseases it is given internally and its paste is applied externally. In Java the fruit is used in the treatment of gonorrhoea.

**Sterculia urens** Roxb

- **Mal**: Thonti
- **San**: Balika
- **Distribution**: Moist teak bearing, Southern moist mixed deciduous and Southern dry mixed deciduous forests
- **Soil requirements**: Loose soil with good drainage, medium acidic.
**Description**: A small to moderate sized tree: bark very smooth, white or greenish grey, flaking off in large thin papery flakes. Leaves palmate, 15-20 cm in diameter, 5-7 lobed. Lobes entire. Velvety pubescent below. Flowers yellow in terminal panicles. Fruit of 4-6 follicles. Ovoid-oblong, densely pubescent.

**Uses**: Gum is used to treat throat afflictions, *Waltheria indica* Linn.

**Distribution**: Southern dry mixed deciduous and Laterite thorn forests.

**Soil requirements**: Sandy loam, slightly acidic soils.

**Description**: An undershrub, leaves simple, alternate, ovate, serrate, pubescent, 2.5-5 x 2-3.5 cm. Flowers yellow in dense axillary heads. Fruit enclosed by the calyx; seed solitary. Black, smooth.

**Properties**: Plant is considered to be febrifugal, purgative and emollient.

**Uses**: Plant is used as a powder to heal wounds and against cough. A decoction of aerial parts is used for cleansing the wounds. The root is chewed to control the internal haemorrhages. The root is said to have effect similar to aspirin (Watt & Brandwijk. 1962).

**Tiliaceae**

**Grewia microcos** Linn

*Syn*. *Microcos paniculata* Linn  
*Mal*. Kottam  
*San*: Paphana

**Distribution**: Southern moist mixed deciduous and Moist teak bearing forests.

**Properties**: Bark is aphrodisiac. Wood is emetic.

**Uses**: Bark is used externally to remove the irritation from cow-itch. It is used to treat throat complaints. Biliousness, cough and diseases of the blood. It is an antidote to opium poison.

**Grewia villosa** Willd.

**Distribution**: Southern dry mixed deciduous and Laterite thorn forests.

**Soil requirements**: Variety of soils, favours sandy loam soils with adequate supply of moisture.
Description: A shrub. Leaves simple, alternate. orbicular-cordate, serrate, ciliate at the margin; 5-ribbed, velvety pubescent below, 3.5-7 cm in diameter. Flowers pale yellow in axillary or leaf opposed cymes. Fruit yellow, globose, stellately hairy, 1.2 cm in diameter.

Uses: Juice of fresh bark is made use of in the treatment of urinary complaints with irritability of the bladder. Root is given against diarrhoea.

Triumfetta rhomboidea N. Jacq.

Distribution: Southern moist mixed deciduous and Southern dry mixed deciduous forests. Also in forest plantations.

Soil requirements: Sandy clay loam soil slightly acidic. medium in potash and organic carbon and very low in phosphate.

Description: An undershrub. Leaves simple, 3-5 iobed. tomentose beneath. Flowers small. yellow, in terminal and leaf-opposed dense cymes. Fruit about 0.4 cm in diameter. covered with hooked bristles.

Properties: Leaves, flowers and fruits are mucilaginous. demulcent and astringent. Root is Sitter and diuretic.

Uses: A decoction of the plant is used in the treatment of skin diseases. Bark and fresh leaves are recommended for diarrhoea and dysentery. Leaves and flowers are used against leprosy. while these two, along with fruits are used to treat inveterate cases of gonorrhoea. A hot infusion of roots is taken to facilitate child birth and to hasten the inception of parturition when it is delayed. Roots are also given in cases of tuberculosis (Watt & Bayer Brand-wijk, 1962)

Elaeocarpaceae

Elaeocarpus serratus Linn.

Mal: Karamavu, Nalla - Kaia, Valiakara

Distribution: West coast tropical evergreen and Southern hill-top tropical evergreen forests.

Soil requirements: Variety of soils. favours clayey soils, strongly acidic and high in organic carbon.

Description: A small to medium sized tree; bark smooth, grey. Leaves simple, elliptic, ovate, serrate, glabrous, 4.5-10 x 2.5-5 cm. Flowers creamy white, in axillary and extra axillary racemes. Fruit 2.5-3cm long, oblong, narrowed to the base; seed one, oblong, pointed, tubercled (Plate III Fig. 1)

Properties: Leaf is an antidote to poison.

Uses: Bark and leaves are reported to be used against rheumatism. Fruit is given in cases of dysentery and diarrhoea.

Elaeocarpus tectorius (Lour.) Poiret

Syn. E. oblongus sensu J. E. Sm. non Gaertn.

Mal: Kattukara, Kara

Distribution: West coast tropical evergreen forests.

Description: A medium sized to large tree. Leaves simple. broadly elliptic, glabrous, glandular beneath, , becomes red when old, 7-10 x 4-5 cm. Flowers creamy white in racemes. axillary or from the axils of fallen leaves. Fruit oblong, narrowed
at both ends; stone 2-seeded (Plate III, Fig. 2).

**Properties**: Fruit is emetic.

**Uses**: Fruit is administered in the treatment of rheumatism, pneumonia, ulcers, leprosy, dropsy and piles.

**Elaeocarpus tuberculatus** Roxb  
**Mal**: Navathi, Kara  
**Distribution**: West coast tropical evergreen and West coast semievergreen forests.

**Properties**: Root is febrifugal and anthelmintic.

**Uses**: Root is used externally in reducing inflammatory swellings.

**Erythroxylaceae**

**Erythroxylum moonii** Hochr.

*Syn. E. acuminatum* (Arn.) Walp.  
**Distribution**: Southern dry mixed deciduous and Laterite thorn forests.  
**Soil requirements**: Sandy loam soils, loose, slightly acidic, medium in potash, low in phosphate and high in organic carbon.

**Description**: A shrub. Leaves simple, alternate, lanceolate, caudate, acuminate, membraneous. 2.5 - 3.5 cm long; stone compressed tubercled. (Plate III Fig. 3)

**Uses**: Leaf juice is used as an anthelmintic in Sri Lanka.

**Erythroxylum monogynum** Roxb.  
**Mal**: Velutha Devatharam  
**Distribution**: Southern dry mixed deciduous, West coast semievergreen and laterite thorn forests.  
**Soil requirements**: Loose loamy sand, slightly acidic soil medium in ootash and organic carbon and very low in phosphate.

**Description**: A shrub. Leaves simple, alternate, ovate, obtusely acuminate, coriaceous. Flowers small, axillary, whitish. Fruit an oblong drupe, obscurely 3-sided.

**Properties**: Infusion of Wood and bark is stomachic, diaphoretic.
stimulant and diuretic. Leaves are refrigerant.

*Uses*: Infusion of wood and bark is used to treat dyspepsia and fever.

**Malpighiaceae**

*Hiptage benghalensis* (Linn.) Kurz  
*Syn.* *H. madabolta* Gaertn.  
*Mal*: Madhavi  
*San*: Madhavi  

*Distribution*: Southern moist mixed deciduous forests above 500m altitude.  

*Soil requirements*: Variety of soils; favour sandy loam with good drainage, slightly acidic.  

*Description*: A large climbing shrub; bark brown. peels off in thin scales. Leaves simple, opposite. oblong or ovate-lanceolate. scuminate, coriaceous, 10-22 cm long. Flowers yellowish in terminal and axillary panicles. Fruit with three unequal wings.  

*Properties*: Leaf juice has insecticidal property.  

*Uses*: Leaves are used in the treatment of chronic rheumatism, skin diseases and asthma.

**Zygophyllaceae**

*Tribulus terrestris* Linn  
*Mal*: Njerijnil  
*San*: Gokshura  

*Distribution*: Southern dry mixed deciduous and Moist teak bearing forests.  

*Soil requirements*: Loose soil with good drainage favours slightly acidic condition very low in potash and very high in phosphate.  

*Description*: A small. prostrate. pubescent herb. Leaves usually opposite, sometimes alternate. pinnate. leaflets 5-7 pairs, oblong, 0.5-1 cm long. Flowers yellow axillary, solitary. Fruit woody, globose. with prickles. (Plate IV, Fig. 1)  

*Properties*: Leaves posses stomachic properties. Fruits are cooling, diuretic, and aphrodisiac. They are also used as a tonic. Root is aperient.  

*Uses*: A paste prepared from the leaves is given for the treatment of bladder stones. The fruits form a constituent of the well known 'Dasmoolarishta'. Fruit is recommended in the treatment of painful micturition, Calculus affections, urinary discharges. impotence, gout and kidney troubles.

**Oxalidaceae**

*Biophytum sensitivum* (Linn.) DC.  
*Mal*: Mukkutti. Thintanazhi  
*San*: Anjalikari. Vipareethalajjalu;  

*Distribution*: Southern moist mixed deciduous and Moist teak bearing forests.  

*Soil requirements*: Medium acidic soils with poor drainage and permeability.  

*Description*: A small herb. Leaves pinnate, crowded at the tip of stem: leaflets 8-25 pairs, about 1 cm long, the terminal pair the largest. oblong, obliquely rounded and apiculate at apex. glabrous. Flowers yellow. in long pepuncled umbels.  

*Properties*: Leaves are diuretic. Leaves and roots are astringent. antipyretic and antiseptic.  

*Uses*: Powdered leaves and seeds are applied to wounds. Deco-
ction of roots is given against lithiasis.

**Oxalis corniculata** Linn.
- **Mal**: Puliyarila
- **San**: Charngeri

**Distribution**: Common in exposed areas in forests and also in forest plantations.

**Soil requirements**: Variety of soils with good drainage and permeability.

**Description**: A small herb. Leaves alternate, digitately 3-foliolate; leaflets obcordate. 1.5-2.5 cm long. Flowers yellow, small, in umbels. Fruit a linear-oblong, five angled capsule, about 2 cm long.

**Properties**: Plant is astringent, antiseptic and vermifuge. Leaves contain vitamin C and carotene.

**Uses**: Plant is beneficial in dyspepsia and piles. The leaves boiled in butter milk is commonly used against indigestion and diarrhoea and prolapse of the rectum. An infusion of leaves is used to remove opacities of the cornea. Leaf juice is also given to counteract the effects produced by the seeds of *Datura*.

**Balsaminaceae**

**Impatiens chinensis** Linn.

**Distribution**: Southern montane wet scrub and Southern montane wet grasslands.

**Description**: A small, succulent herb. Leaves simple, opposite, linear-oblong, serrate, very variable in size. Flowers pink, solitary or fascicled in the axils of leaves. Fruit ellipsoid, 1-2 cm long; seeds numerous, smooth, black.

**Uses**: Plant is used to treat gonorrhoea. It is used externally for burns.

**Rutaceae**

**Acronychia pedunculata** (Linn.) Miq.
- **Syn**: *A. laurifolia* Bl
- **Mal**: Muttanari

**Distribution**: West coast semi-evergreen forests.

**Soil requirements**: Loamy soils, medium acidic.

**Description**: A small tree; bark grey. Leaves alternate, 1-3 foliolate; leaflets elliptic-oblong or obovate, acute or obtusely acuminate, gland-dotted. 7-12 x 3-5 cm. Flowers small, white, in axillary corymbose cymes. Fruit a drupe. 0.8 cm in diameter. Slightly lobed; seeds black.

**Uses**: Bark is used as an application to sores and ulcers.

**Aegle marmelos** (Linn.) Corr.
- **Mal**: Koovalam
- **San**: Vilva

**Distribution**: Occasional in Southern dry mixed deciduous forests. Grown in homesteads and temple compounds.

**Soil requirements**: Loamy soils with good drainage slightly acidic; high in potash, phosphate and organic carbon.

**Description**: A small to medium sized spinescent tree; bark grey, corky. Leaves 3-5 foliolate; leaflets lanceolate or elliptic-lanceolate 2.5-7 x 2-3.5 cm, gland dotted. Flowers white, in axillary panicles. Fruit globose. 5-12 cm in diameter, rind woody. 8-15 celled; seeds embedded in orange coloured pulp.
Properties: Pulp of the ripe fruit is aromatic, cooling and laxative. Unripe fruit is astringent, digestive and stomachic.

Uses: Leaves are recommended in cases of asthma. Ripe fruit when taken fresh, is useful in habitual constipation, chronic dysentery and dyspepsia. Root bark is used to treat intermittent fevers. Root is one of the 'Dasamula' A decoction of bark and small roots cur's hypochondriac melancholy and palpitation of the heart.

Atalantia malabarica (Rafin.) Tanaka
Mal: Kattunarakam
Distribution: West coast tropical evergreen and West coast semievergreen forests.

Soil requirements: Variety of soils strongly acidic.

Description: A small thorny tree. Leaves simple, alternate, ovate, obtuse or retuse, coriaceous, gland dotted 2.5-7 x 1 3.5 cm. Flowers white, in small axillary cymes. Fruit a berry, globose. about 2.5 cm in diameter, 2-4 celled, cells 1-seeded.

Properties: Roots are considered to be antiseptic and stimulant.

Uses: Leaf juice is an ingredient in a compound liniment used in hemiplegia. Oil obtained from berries is used externally in chronic rheumatism and paralytic.

Chloroxylon swietenia DC.
Mal: Varimaram
Distribution: Southern dry mixed deciduous forests.

Soil requirements: Clay loam soils with good drainage, slightly acidic, high in potash, phosphate and organic carbon.

Description: A small to medium sized tree; bark greyish yellow, corky. Leaves pinnate; leaflets 10-20 pairs. oblong. obtuse. 2-3 x 1 cm. gland dotted. Flowers small, yellowish, in axillary and terminal panicles. Fruit an oblong capsule. (Plate IV. Fig. 3)

Properties: Bark is astringent.

Uses: Leaves are applied to wounds. They are also useful in rheumatism.

Citrus medica Linn.
Mal: Ganapathi narakarn, San: Mathujamga
Distribution: West coast semi-evergreen forests in Central Kerala.

Soil requirements: Variety of soils: favours loamy strongly acidic to slightly alkaline soils with good drainage.

Description: A small tree with Stout axillary spines; bark thin, greenish grey, smooth. Leaves simple, elliptic or ovate lanceolate, entire or crenuata, gland dotted, 7-15 cm long; petiole winged. Flowers white, fragrant, solitary or in axillary cymes. Fruit ovoid, oblong or globose. 5-10 cm in diameter.

Properties: Flowers and buds are stimulant and astringent. Ripe fruit is stimulant. Fruit juice is refrigerant and astringent. Root is anthelmintic.

Uses: Powdered rind of the fruit is usually a remedy for dysentery. Root is used to treat constipation, vomiting and urinary calculus.

Euodia Iunu-ankenda (Gaertn.) Merr.
Syn E roxburghiana Benth

24
Mal : Kampili, Kanala, Nasakam
Distribution : West coast tropical evergreen, West coast semievergreen and Moist teak bearing forests.
Soil requirements : Sandy loam soil with good drainage, medium acidic, medium in potash and phosphate and high in organic carbon.

Description : A small to medium sized tree, bark smooth, grey, lenticellate. Leaves opposite, trifoliolate, leaflets obovate or oblong lanceolate. acuminate, 5-12 x 3-6 cm. Flowers small, greenish. in axillary paniculate cymes, seeds black.

Properties : infusion of leaves and flowers is a tonic and emmenagogue.

Uses : Leaf juice is recommended in cases of fever. Decoction of root with bark is given to improve complexion.

Feronia limonia (Linn.) Swingle
Mal : Vilamaram
Distribution : Southern dry mixed deciduous forests.

Description : A small to medium sized tree with sharp spines. Leaves alternate, pinnate; leaflets 3-9. cuneate or obovate, often crenulate at apex, 2-5 x 1-2.5 cm; petiole and rachis narrowly winged. Flowers small. in lateral and terminal pubescent panicles. Fruit globose, woody, 5-6 cm in diameter; seeds embeded in pulp.

Properties : Leaves are aromatic and carminative. Fruit is astringent, stomachic, stimulant and antiscorbutic.

Uses : Bark of the tree is prescribed for biliousness. Unripe fruit is used in the treatment of diarrhoea and dysentery. The pulp of the fruit is used for afflictions of the gum and throat.

Glycosmis pentaphylla (Retz.) DC
Mal : Panal
San : Kupilu

Distribution : Southern moist mixed deciduous and Moist teak bearing forests.

Description : A shrub Leaves alternate, 1-5-foliolate, leaflets ovate or obovate, very variable. Flowers white in axillary short panicles. Fruit white, about 0.5 - 0.8 cm long

Properties : Root is antipyretic.

Uses : Juice of the whole plant is given in cases of fits in pregnant women. A decoction of root is given against diarrhoea and rheumatism.

Murraya koenigii (Linn.) Spreng
Mal : Kariveppu
San : Kalasakah

Distribution : Occasional in West coast tropical evergreen forests.

Soil requirements : Loamy soil with good drainage medium acidic, low in potash and phosphate and high in organic carbon.

Description : A small tree. Leaves pinnate; leaflets cuneate at base, entire, with aromatic smell. Flowers small, creamy, white. in terminal corymbs. Fruit a berry. ovoid. black.

Properties : Plant juice is used as a tonic stomachic and laxative. Bark and roots are stimulants.

Uses : Green leaves are eaten raw against dysentery and vomiting. They are applied externally to cure
eruptions. A decoction of leaves and petiole is given against rheumatism, leprosy, internal poison, piles, diarrhoea and fever. Leaves and roots are used in the treatment of leucoderma and blood disorders. In Assam the juice of the root is used against pain associated with kidney.

**Murraya paniculata** (Linn.) Jack.

Syn. *M. exotica* Linn.

**Distribution**: Occasional in West coast. tropical evergreen and West coast semievergreen forests.

**Soil requirements**: Variety of soils, favours loamy soils with good drainage. medium acidic. low in potash and phosphate and high in organic carbon.

**Description**: A small tree; bark thin, corky. grey. Leaves alternate, leaflets obliquely rhomboid, acuminate. Flowers white. fragrant, axillary. solitary or in clusters. Fruit ellipsoidal. red, 5 mm long.

**Properties**: Stem and roots are antidiarrhoeal, Leaves are stimulant and astringent.

**Uses**: Powdered leaves are applied to cuts and administered in diarrhoea and dysentery. A decoction of leaves is taken against dropsy. Leaves and root bark are sometimes used against rheumatism, coughs and hysteria.

**Paramigyna monophylla** Wight

**Distribution**: Southern moist mixed deciduous and West coast semievergreen forests.

**Description**: A thorny climbing shrub: older branches armed with recurved spines. Leaves ovate-oblong or elliptic. obtuse at apex, rounded at base. 4-9 x 2-5 cm. Flowers white, axillary. Fruit subglobose. 2.5 cm long; seeds numerous.

**Properties**: Root is alterative and diuretic.

**Toddalia asiatica** (Linn.) Lamk.


Mal: Karamullu, Kakkathutali.

Thutali

San: Thikshnaksha

**Distribution**: West coast semi-evergreen, Southern moist mixed deciduous and Southern dry mixed deciduous forests.

**Description**: A thorny. climbing shrub, stem with corky protuberances bearing curved spines. Leaves 3-foliolate; leaflets sessile, obovate, gland-dotted, 3.5-8 x 2-3.5 cm. Flowers small, in axillary and terminal cymes, Fruit globose, orange coloured. about 0.5 in diameter, 3-5 grooved; seeds reniform. (Plate IV, Fig. 2)

**Properties**: Plant is a febrifuge. Root bark is bitter, aromatic. stimulant, antiperiodic.

**Uses**: Flower juice is applied to stings of wasps which is said to give immediate relief. Unripe fruit and root are used to make a stimulant liniment for rheumatism. Root bark is given as a weak infusion in cases of constitutional debility and in convalescence. In Africa, the macerated root bark is used for the treatment of cough and influenza.

**Vepris bilocularis** (Wight & Arn.)Engl.

Mal: Karakil. Muthassari

**Distribution**: West coast tropical evergreen and West coast evergreen forests.
Soil requirements: Loamy soil with impeded drainage, slightly acidic.

Description: A large tree. Leaves 3-foliolate; lanceolate or ovate, sub-sessile, 7.5-16 x 3.5-7 cm. Flowers greenish yellow in terminal panicles. Fruit globose, 1.5 cm in diameter.

Uses: A decoction of wood boiled in oil, is used for eye and ear diseases, rheumatism and asthma. Decoction of the root is given against biliousness.

Zanthoxylum rhetsa (Roxb.) DC.
Syn. Z. budrunga Wall
Mal. Karimurukku, Mullilam
Distribution: West coast semi-evergreen. Moist teak bearing and Southern moist mixed deciduous forests.

Soil requirements: Sandy loam soils with good drainage, medium acidic, low in potash and phosphate and high in organic carbon.

Description: A medium sited tree; stem with stout conical prickles. Leaves pinnate, crowded at the ends of branches; leaflets 8-20 pairs, ovate-oblong, acuminate, 7-12 x 4-5 cm. Flowers greenish yellow in terminal paniculate cymes. Fruit tubercled with aromatic smell; seeds globose bluish black, smooth.

Properties: Fruit is astringent, stimulant and stomachic. Root bark is a purgative.

Uses: Fruit is prescribed in dyspepsia, diarrhoea, rheumatism, asthma, bronchitis, piles and heart diseases. The essential oil obtained from seeds is used for the treatment of cholera.

Simaroubaceae

Ailanthus excelsa Roxb.
Mal: Matti, Pongiliyam
Distribution: Southern dry mixed deciduous forests.

Soil requirements: Sandy loam soils with good drainage, very slightly acidic, medium in potash and high in phosphate and organic carbon.

Description: A large tree; bark light greyish brown, rough. Leaves 25-30 (60) cm long, pinnate. Leaflets 8-14 pairs, subopposite, unequal at base, coarsely toothed, glandular pubescent beneath. Flowers small, yellow, in terminal and axillary panicles. Fruit winged, about 5 x 1.3 cm, reddish.

Properties: Bark is a tonic, febrifuge, expectorant, antispasmodic and astringent.

Uses: Bark is used in the treatment of chronic bronchitis, asthma and dyspeptic complaints.

Ailanthus triphysa (Dennst.) Alston
Syn. A. mlabarica DC.
Mal: Matti, Pongiliyam, Per.
San: Katvanga
Distribution: West coast semi-evergreen and Southern moist mixed deciduous forests.

Soil requirements: Variety of soils, favours sandy loam soil with good drainage, medium acidic.

Description: A large deciduous tree, bark grey, thick, exudes a brownish resin when cut. Leaves 40-60 cm long, pinnate; leaflets 10-24, ovate-oblong or oblong-lanceolate, entire, glabrous. Flowers small, yellow, in terminal and axillary panicles.

Properties: Bark is a tonic, febrifuge, expectorant, antispasmodic and astringent.

Uses: Bark is used in the treatment of chronic bronchitis, asthma and dyspeptic complaints.
icles. Fruit with large membraneous wings, 5-7 x 1-2 cm.

**Properties**: Bark is carminative, ionic and febrifuge.

**Uses**: Leaves are recommended against cephalalgia and gastralgia. Resin obtained from the bark is used in the treatment of dysentery.

**Quassia indica** (Gaertn.) Nooteb.
- **Syn.** *Samedera indica* Gaertn.
- **Mal**: Njota, Karinjotta
- **Distribution**: West coast tropical evergreen and West coast semi-evergreen forests.

**Soil requirements**: Variety of soils. favours loamy soils, medium

**Description**: A small evergreen tree. Leaves simple. elliptic lanceolate or oblong, up to 25 x 7 cm, with two glands at the base. Flowers yellowish red, in dense umbels on long pendulous peduncles. Fruit flattered, red, 5-6 cm in diameter with narrow wings. 1-seeded.

**Properties**: Bark is a febrifuge. Infusion of wood is tonic. stomachic and emmenagogue. Infusion of leaves has insecticidal properties.

**Uses**: An infusion of leaves is used to kill lice, fleas, and white ants. Seeds are used against bilious fever and are used as a purgative and emetic. Oil from seeds is used as an external application in rheumatism.

**Ochnaceae**

**Ochna obtusata** DC.
- **Syn.** *O. squarrosa* auct. non Linn.
- **Distribution**: West coast semi-evergreen forests in South Kerala.

**Properties**: Bark is considered to be a tonic. Leaves are emollient.

**Uses**: Leaves are used as an emollient in cataplasm. A decoction of root is given in menstrual complaints. tuberculosis and asthma.

**Gomphia serrata** (Gaertn.) Kanis
- **Syn** *G. angustifolia* Vahl
- **Ouratea angustifolia** Gilg
- **Mal**: Valarmani
- **Distribution**: West coast tropical evergreen, Southern hill-top tropical evergreen and Southern moist mixed deciduous forests.

**Soil requirements**: Variety of soils from coarse to fine textured, slightly acidic, medium in organic carbon.

**Description**: A large evergreen tree; bark grey or white, rough and flaky; exude a resin when cut, turning black on drying. Leaves large, pinnate, leaflets entire or serrate. pubescent beneath. Flowers yellow in axillary panicles. Fruit an ellipsoidal drupe, 2.5-5 cm long.

**Uses**: Gum is used in the treatment of rheumatism and chronic skin diseases.

**Bursarceae**

**Garuga pinnata** Roxb.
- **Mal**: Annakkara
- **San**: Krishnamlika
- **Distribution**: Southern moist mixed deciduous, Moist teak bearing
and Southern dry mixed deciduous forests.

**Soil requirements**: Sandy loam soil, medium acidic and high in organic carbon.

**Description**: A medium sized to large deciduous tree; bark thick, grey or brown, flaking off in large irregular thin flakes. Leaves 15-40 cm long, crowded at the ends of branches, pinnate, pubescent; leaflets 6-10 pairs, ovate-lanceolate, acuminate, crenate. Flowers yellow in terminal panicles. Fruit globose, fleshy. 1.5-2 cm in diameter.

**Properties**: Bark is astringent. Fruit is stomachic.

**Uses**: Juice of the stem cures opacities of the conjunctivitis. Leaf juice along with honey is given for asthma. A decoction of the root is used in Philippines for pulmonary afflictions.

### Meliaceae

**Aglaia elaeagnoida** (Juss.) Benth.

*Syn.* A. *roxburghiana* Miq.

Mal: Punyava

**Distribution**: West coast tropical evergreen forests.

**Soil requirements**: Loamy moist soils. strongly acidic.

**Description**: A moderate sized evergreen tree; bark thin, smooth, greenish or grey brown. Leaves pinnate; leaflets 5-7, elliptic or oblong, entire, glabrous, 5-10 x 2.5-5 cm. Flowers small, orange-yellow, in axillary and terminal short panicles. Fruit a berry, 1-2 cm long, pyriform.

**Properties**: Fruit is cooling and astringent.

**Uses**: Fruit is recommended in cases of inflammation and leprosy.

**Aphanamixis polystachya** (Wall.) Parker

*Syn.* A. *rohita* (Roxb.) Wight & Arn.

Mal: Chennmaram
San: Rohithaka

**Distribution**: West coast tropical evergreen and West coast semievergreen forests.

**Soil requirements**: Variety of soils; favours loamy soils with impeded drainage, medium acidic.

**Description**: A middle sized evergreen tree with large spreading crown; bark thin, grey. Leaves pinnate. 30-70 cm long; leaflets 9-17, elliptic oblong, entire. Flowers yellowish; male in long panicles; female in short spikes. Fruit pale yellow or reddish, 2.5-3.5 cm in diameter. (Plate IV, Fig. 4)

**Properties**: Bark is astringent. Seeds are refrigerant. laxative and anthelmintic. Seed extract shows significant antibacterial activity (Bhatt & Saxena. 1980).

**Uses**: Bark is used to treat enlarged liver and spleen, tumours and abdominal complaints. Seed oil is used as liniment in rheumatism and also to treat ulcers and diseases of the ear and eyes.

**Azadirachta indica** A. Juss.

*Melia azadirachta* Linn.

Mal: Ariveppu, Veppu
San: Nimba

**Distribution**: Occasional in Southern dry mixed deciduous forests. Often grown in homesteads.

**Soil requirements**: Loamy sand, slightly acidic soil with good
age, low in potash and phosphate and medium in organic carbon.

**Description**: A medium sized to large tree; bark dark brown, rough, exudes gummy exudation when cut. Leaves pinnate. 15-30 cm long; leaflets 9-15, lanceolate, often falcate. serrate, glabrous. Flowers white. in axillary panicles. Fruit oblong, 1-2 cm long; 1 seeded.

**Properties**: Bark of the tree which is more than hundred years old is found to have more medicinal value (Narayana Aiyar et al., 1957). It is antiperiodic, alterative and tonic. An aqueous extract of the bark causes immobilization of humanspermatozoa. Gum acts as a tonic and demulcent. A decoction of leaves is antiseptic, insect repellent and insecticidal. Dry flowers are tonic and stomachic. Fruit is purgative, emollient. anthelmintic. Oil from seeds is stimulant, antiseptic and alterative.

**Uses**: Plant is used in the treatment of leprosy, piles and urinary diseases. Gum is used against catarrhal afflictions. Leaves are used as a poultice for boils and are applied externally to ulcers and eczema. Oil from seeds is used in the treatment of skin diseases and rheumatism.

**Chukrasia tabularis** A. Juss.

Mal : Chuvanna akil. Malaveppu
San : Mahanimba

**Distribution**: Sporadic in the West coast semievergreen and Southern moist mixed deciduous forests.

**Soil requirements**: Sandy loam soils, slightly acidic.

**Description**: A large deciduous tree; bark brown, deeply cracked,

**Leaves**: pinnate, 25.45 cm long; leaflets 10-24, obliquely ovate-acuminate. pubescent beneath. Flowers yellowish white, in Terminal panicles. Fruit an ovoid 3-valved capsule. brown, 3.5 cm long.

**Properties**: Bark is astringent.

**Dysoxylum malabaricum** Bedd. ex Hiern

Mal : Vella akil

**Distribution**: West coast tropical evergreen and Southern hill-top tropical evergreen forests.

**Soil requirements**: Variety of soils usually in moist areas. loam to clay loam. medium to slightly acidic.

**Description**: A large evergreen tree; bark dark grey with white warts. Leaves pinnate. rachis angular. 20-45 cm long; leaflets 7-11, elliptic-oblong, acuminate 8-20 cm long. entire. Flowers greenish yellow, fragrant, in axillary panicles. Fruit an yellow pear-shaped capsule, 5-7 5cm long. (Plate V. Fig. 1)

**Uses**: Decoction of wood is used in the treatment of rheumatism. The oil obtained from wood is used to treat ear and eye diseases.

**Melia dubia** Cav.

Syn. *M. composita* Willd.

Mal : Malaveppu

**Distribution**: Southern moist mixed deciduous and Moist teak bearing forests.

**Soil requirements**: Sandy loam soils. slightly acidic.

**Description**: A large deciduous tree with a spreading crown; bark dark brown, flaking off in large rectangular flakes; blaze purplish red outside, white inside. Leaves bipinnate. 25-75 cm long; leaflets
lanceolate, serrate, sometimes entire. Flowers greenish white, slightly fragrant, in axillary and extra-axillary panicles. Fruit an ovoid drupe. 2.5-3.5 cm long. (Plate V. Fig. 2)

Properties: Bark is said to have digestive property.

Uses: Juice of green fruit is applied to skin diseases. Pulp of the fruit is recommended in cases of colic and is useful as a cholagogue in malarial fever.

Nuregami alata Wight & Arn.

Mal: Nilanarakam

Distribution: Southern moist mixed deciduous. Southern dry mixed deciduous and Moist teak bearing forests.

Description: A herb. woody at base. Leaves 3-foliolate, petiole winged. leaflets sessile. cuneate, obovate. 2-4 cm long. Flowers white, axillary. solitary or binate, 2.5-4 cm long.

Properties: Root is emetic, cholagogue and expectorant

Uses: Whole plant is used against rheumatism. A decoction of leaves and stems is given for biliousness. Root is useful in case of acute dysentery.

Toona ciliata Roem.

Syn. Cedrela toona Roxb.

Mal: Madagirivembu, Vedi Vembu

San: Nandi vriksha

Distribution: West coast tropical evergreen. Southern hill-top tropical evergreen, West coast semi-evergreen and occasionally in Moist teak bearing forests.

Soil requirements: Variety of soils, loam, clay-loam, medium slightly acidic.

Description: A large tree; bark thin, brown, flaking off in large thin flakes. Leaves pinnate. up to 90 cm long leaflets 8-20 pairs, lanceolate or ovate-lanceolate, acuminate. entire or serrate, often with domatia in the axil of veins beneath. Flowers white. in large terminal panicles. Fruit an oblong capsule, about 2 cm long. (Plate V. Fig. 3)

Properties: Bark is astringent. antiperiodic and aphrodisiac. Flower is an emmenagogue.

Uses: Bark is recommended in cases of chronic infantile dysentery. It is also used as an external application for ulcers and leprosy.

Trichilia connaroides (Wight & Arn.) Bent.

Syn. Heynea trijuge Roxb.

Distribution: West coast tropical evergreen forests.

Soil requirements: Clay Loam soil poorly drained. strongly acidic.

Description: A small evergreen tree; bark thin. rough. reddish-brown or grey, lenticellate. Leaves pinnate, 15-35 cm long; leaflets 7-9; ovate, acuminate. entire. glabrous. Flowers white. in axillary, long peduncled corymbose panicles. Fruit pink, globose. 1-1.5 cm long.

Properties: Bark and leaves are bitter and are considered to be a tonic.

Uses: A decoction of leaves is taken against cholera.

Turraea villosa Benn.

Distribution: West coast tropical evergreen forests.

Description: A large shrub. Leaves simple. ovate. acuminate.
entire, pubescent, 5.10 x 3.5-5 cm. Flowers white, up to 5 cm long in few flowered axillary clusters. Fruit a globose capsule, about 1 cm in diameter. (Plate V. Fig. 4)

**Uses**: Root is administered internally in leprosy.

**Walsura trifolia** (A. Juss.) Harms

**Syn.** *W. piscidia* Roxb.

**Mal**: Perillappacha

**Distribution**: West coast tropical evergreen forests.

**Soil requirements**: Variety of soils, favours medium acidic loamy soils with good drainage.

**Description**: A moderate sized tree; bark greyish brown. Leaves 3-foliolate; leaflets ovate, entire, glabrous. 5-15 x 2.5-6cm. Flowers greenish yellow in long peduncled axillary and terminal racemes. Fruit a berry, red, ovoid tomentose. about 1.2 cm long.

**Properties**: Bark is astringent, expectorant, emmenagogue and emetic.

**Uses**: Bark is used in the treatment of skin diseases.

**Fcacinaceae**

**Sarcostigma kleinii** Wight & Arn.

**Mal**: Odal. Vellodal

**Distribution**: West coast tropical evergreen. Southern hill-top tropical evergreen and West coast semievergreen forests.

**Description**: A large climbing shrub. Leaves simple, alternate, oblong-lanceolate, entire, 10-25 x 5-8 cm. Flowers very small, orange-yellow, in slender spikes. Fruit an oblong drupe. 2.5-4 cm long. orange-yellow.

**Celastraceae**

**Cassine glauca** (Rottb.) Kuntze

**Syn.** *Elaeodendron glaucum* (Rottb.) Pers.

**Mal**: Keruvali

**Distribution**: Occasional in Southern dry mixed deciduous forests.

**Soil requirements**: Slightly alkaline soils.

**Description**: A moderate sized tree; bark grey, flaking off in small scales. Leaves opposite or subopposite, elliptic, serrate, glabrous, 5-12 x 2.5-5 cm. Flowers yellowish green in axillary, few flowered corymbose cymes. Fruit an ovoid, apiculate drupe, yellowish green, 1 cm long.

**Properties**: Leaves are strenutatory. Roots are emetic.

**Uses**: Powdered leaves are used as snuff to relieve headache. Fresh root bark is applied to swellings.

**Celastrus paniculatus** Willd.

**Mal**: Kilithheeni panji

**San**: Peethathaila

**Distribution**: Southern moist mixed deciduous and Southern dry mixed deciduous forests.

**Description**: A large climbing shrub; bark yellowish, corky. Leaves simple, alternate, obovate, crenate, 5-10 x 2.5-5 cm. Flowers greenish, in lax terminal panicles. Fruit a globose capsule, 0.6 cm across; seeds yellow, enclosed in red aril (Plate VI, Fig. 1)

**Properties**: Bark is abortifacient. Leaf is an emmenagogue. Seeds are powdered bark mixed with honey is given in rheumatism. Oil from seeds is used against rheumatism, leprosy and piles.
bitter, laxative, emetic, stimulant. and aphrodisiac. Oil from seeds is diuretic and diaphoretic.

**Uses**: Leaves and roots are used as a poultice to relieve headache. Seeds are used in the treatment of rheumatism, leprosy and gout. Oil from seed is given against beriberi, cough and asthma.

**Hippocrateaceae**

**Salacia oblonga** Wall.

Mal: Ponkoranti

*Distribution*: West coast tropical evergreen and West coast semi-evergreen forests.

*Description*: A straggling shrub. Leaves simple, opposite. elliptic-oblong, rounded or obtusely acuminate, 7-15 x 2.5-5 cm. Flowers small yellow, in short axillary cymes. Fruits globose or somewhat pyriform, about 5 cm in diameter, orange when ripe.

*Properties*: Plant is said to have mild antiseptic property.

*Uses*: Root bark is used in the treatment of rheumatism and skin diseases.

**Rhamnaceae**

**Rhamnus wightii** Wight & Arn.

*Distribution*: Southern montane wet scrub and Southern montane wet temperate forests.

*Soil requirements*: Loamy sand, slightly acidic soils, with good drainage, low in potash and phosphate and high in organic carbon.

*Description*: A shrub or small tree. Leaves simple, opposite. elliptic or oblong, acuminate, finely serrate, 4.7 x 1.5-2.5 cm. Flowers small, greenish. fascicled in the leaf axils.

**Ventilago denticulata** Wild.

Syn. *V. calyculata* Tul.

*Distribution*: Southern moist mixed deciduous and Southern dry mixed deciduous forests in North Kerala.

*Description*: A large woody climber with tendrils. Bark dark grey, branchlets grey pubescent. Leaves alternate. ovate or elliptic-oblong, unequally rounded at base, crenate. 5-12 x 2.5-5 cm. Flowers small, greenish in terminal panicles. Fruit winged, 3.5-5 cm long, wings yellow, pubescent.

*Uses*: Juice of bark and young shoots is applied to the body to get relief from pain which accompany malarial fever. Bark is powdered and applied on sprains. Sap is used to treat deafness. (Dressers, 1951).

**Ventilago maderaspatana** Gaertn.

Mal: Vernpadam
San: Dinesavalli

*Distribution*: Rare in Kerala forests. Mostly seen on the eastern slopes of Western Ghats.

*Description*: A climbing shrub. Bark dark grey with vertical cracks, red inside. Leaves alternate. ovate or lanceolate. crenate, 5-10 x 2.5-3.5 cm. Flowers yellowish in pubescent terminal panicles. Fruit winged, 3.5-5 cm long, wings brown, linear-oblong.

*Properties*: Root bark is carminative, stomachic and stimulant.

*Uses*: Root bark is used in the treatment of dyspepsia, debility and mild fever.
Ziziphus glabrata Heyne ex Roth
   Syn. Z trinervia Roxb.
   Mal: Karkataka maram
   Distribution: Southern moist mixed deciduous forests.
   Soil requirements: Clay loam soil with good drainage. Slightly acidic. High in potash, phosphate and organic carbon.
   Description: A small unarmed tree. Leaves, simple, alternate elliptic, obtuse or slightly acute at apex, basally 3-5 nerved. Glabrous or pubescent on the veins beneath. 2.5-7x 2-3.5 cm. Flowers small, greenish in short sessile, axillary cymes. Fruit globose, yellow, 1.3-2 cm in diameter.
   Uses: Decoction of leaves is given to purify blood in cases of cachexia and as an alternative in venereal diseases.

Ziziphus mauritiana Lamk.
   Syn. jujuba (Linn.) Gaertn.
   Mal: Ilantha. Lantho
   San: Kolah
   Distribution: Occasional in the Southern dry mixed deciduous forests.
   Soil requirements: Loamy sand, slightly acidic soil. Low in potash and phosphate and medium in organic carbon.
   Description: A small thorny tree. Branchlets tomentose; bark dark grey or black with vertical cracks, reddish inside. Leaves simple alternate, basally 3-5 nerved, entire or serrate. Densely tomentose beneath. 2.5-5 cm. Flowers small, greenish in axillary sessile, axillary cymes. Fruit globose, yellow, 0.6 cm long.
   Uses: Fruit is used as an ingredient of pills against stomach ache. A decoction of root bark is used to heal fresh wounds.

Ziziphus oenoplia (Linn.) Mill.
   Mal: Kottavalli. Mulli
   San: Karkka
   Distribution: Southern dry mixed deciduous and Laterite thorn forests.
   Soil requirements: Sandy loam soil with good drainage, slightly acidic, low in potash and phosphate and medium in organic carbon.
   Description: A straggling prickly shrub; bark dark grey, rough. Leaves alternate, ovate, lanceolate, base oblique, 3-5 nerved basally, densely brown tomentose beneath. 2.5-5 x 2.2-5 cm. Flowers small, greenish in axillary sessile, dichotomous cymes. Fruit black 0.6 cm long.
   Uses: Fruit is used as an ingredient of pills against stomach ache. A decoction of root bark is used to heal fresh wounds.

Ziziphus rugosa Lamk.
   Mal: Cheruthutali, Malanthutali, Thutali
   San: Karkkandhu
   Distribution: Southern moist mixed deciduous, Moist teak bearing and West coast semievergreen forests.
   Soil requirements: Loamy sand, slightly acidic soil, with good
drainage, medium in potash and phosphate contents.

**Description**: A large prickly straggling shrub. Leaves simple, alternate, elliptic, rounded or cordate at base, serrate, basally 3.6 nerved. 5-12 cm long. Flowers small, yellow in terminal and axillary panicles. Fruit ovoid, 0.6 cm long, red.

**Uses**: Flowers are recommended for menorrhagia.

**Vitaceae**

**Ampelocissus araneosa** (Dalz. & Gibs.) Planch.

**Distribution**: Southern montane wet scrub forests at Munnar.

**Description**: A slender climbing shrub. Leaves 3-foliolate. Lateral leaflets semicordate, terminal one ovate, greyish brown tomentose beneath. Leaves sometimes merely lobed. Flowers yellowish in leaf-opposed pedunculate cymes.

**Properties**: Root is cooling and astringent.

**Ampelocissus arnottiana** Planch.

Mal: Chemparavalli

**Distribution**: Southern moist mixed deciduous and West coast semievergreen forests.

**Description**: A slender climbing shrub; branches and leaves densely covered with woolly tomentum. Leaves broadly ovate, cordate. Acute, dentate-serrate, 10-20 x 7-16 cm. Flowers greenish purple. in raceme of umbels. Fruit a berry, ovoid-oblong. purple, about 2 cm long.

**Properties**: Root juice is a blood purifier, alterative, diuretic, depurative and aperient.

**Uses**: Roots are given against bronchitis and gonorrhoea. Root juice mixed with coconut milk is applied to ulcers.

**Ampelocissus tomentosa** (Heyne ex Roth) Planch.

Syn. *Vitis tomentosa* Heyne ex Roth

**Distribution**: Secondary dry deciduous and Laterite thorn forests.

**Description**: A large climbing shrub, stem covered with reddish or greyish tomentum. Leaves orbicular-cordate or 3-7 angled or lobed. Tomentose. 10-20 cm on either way. Flowers red in dense umbellate cymes. Fruit a berry, subglobose. about 1 cm in diameter.

**Uses**: Root is used to allay swellings. It is also used against piles (Bressers. 1951).

**Cayratia carnosa** (Wall.) Gagnep.

Syn. *Vitis carnonsa* Wall.
Mal: Chorivalli

**Distribution**: Southern dry mixed deciduous and Southern moist mixed deciduous forests.

**Description**: A fleshy twining shrub. Leaves pedately 3-foliolate: leaflets ovate-lanceolate or obovate. dentate. usually pubescent, 3.5-5x 2-3 cm. Flower small, greenish, in axillary umbellate cymes. Fruit a white berry, 1-2 cm long.

**Properties**: Root is astringent.

**Uses**: Formationion with a hot decoction of leaves and roots has been recommended in high fevers to cause perspiration. The seeds and leaves are used as an embrocation. Root is used against rheumatism, bronchial troubles and spleen complaints.
Cayratia mollissima (Wall.) Gagnep.

Syn. Vitis mollissima Wall.

*Distribution*: West coast tropical evergreen forests in North Kerala.

*Description*: A climbing shrub. Leaves 3-foliolate, softly pubescent as are the branches. Flowers in axillary corymbose cymes. Fruit a berry, white, about 2.5 cm in diameter.

*Uses*: Fruits are used for poulticing swellings.

Cayratia pedata (Lamk.) Juss. ex Gagnep.

Syn. Vitis pedata (Lamk.) Wall ex Wight

Mal: Vallichor iyanam

*Distribution*: Southern montane wet scrub and Southern hill-top tropical evergreen forests.

*Description*: A large weak climbing shrub. Leaves pedately 7-9-foliolate; leaflets oblong - lanceolate, acuminate, usually Softly pubescent, 5-10 x 2.5-6 cm. Flowers white, in axillary corymbose cymes. Fruit a berry, creamy white, subglobose or 4-lobed.

*Properties*: Leaves are astringent and refrigerant.

*Uses*: Leaves are used against ulcers. A decoction of leaves are used to check uterine reflexes.

Cissus adnata Roxb.

Syn. Vitis adnata (Roxb.) Wall.

*Distribution*: In Laterite thorn forests and Dry deciduous scrub jungles.

*Soil requirements*: Loamy sand, slightly acidic soils with good drainage, medium in organic carbon.

*Description*: A slender climbing shrub stem covered with orange-red pubescence. Leaves broadly cordate, 5-angled or sometimes lobed conspicuously, bluntly serrate, grey tomentose beneath, 7-12 x 5-8 cm. Flowers greenish yellow in much branched compound umbellate cymes. Fruit a berry, black, obovoid or subglobose. 0.5 cm in diameter.

*Properties*: Decoction of tuber is diuretic, alterative and blood purifying.

*Uses*: Powdered root is applied to cuts and fractures.

Cissus quadrangularis Linn.

Syn. Vitis quadrangularis (Linn.) Wall. ex Wight

Mal: Changalamparanta
San: Asthisamhara

*Distribution*: Southern dry mixed deciduous forest and Dry deciduous scrub jungles.

*Soil requirements*: Loamy sand, slightly acidic soils with good drainage, low in potash and phosphate and medium in organic carbon.

*Description*: A climbing shrub. Stem fleshy, quadrangular. Leaves broadly ovate or reniform, entire or lobed, 2.5-5 cm long. Flowers yellow-red in umbellate cymes. Fruit a berry, red, 6 mm in diameter.

*Properties*: Stem is laxative, anthelmintic, aphrodisiac and analgesic. Leaves and young shoots are alterative.

*Uses*: Juice of the stem is used in the treatment of irregular menstruation, scurvy, bronchial troubles, piles, epileptic fits and chronic ulcers.

Cissus repens Lamk.

Syn. Vitis repens (Lamk.) Wight & Arn.
Distribution: A slender trailing shrub. the stem glaucous, white. Leaves ovate, acuminate. deeply cordate at base, membraneous, 7-15 cm. Flowers very small in compound umbellate cymes. Fruit a subglobose or pyriform berry. about 4 mm in diameter.

Uses : Plant is made into a paste and applied externally to foetid ulcerations and boils.

Leeaceae

Leea crispa Linn.
Mal: Njallu
Distribution: West coast tropical evergreen and West coast semi-evergreen forests in North Kerala.

Description : A shrub with tuberous roots; sometimes with crispate wings. Leaves simple or bipinnate; leaflets oblong, serrate. lateral nerves close and parallel. Flowers greenish yellow in corymbose cymes. Fruit grey or black. about 5 mm broad.

Uses : Leaves are applied to wounds. Tubers are used as a remedy for guinea worms.

Leea indica (Burm.) Merr.
Syn. Lsambucina Willd.
Mal: Irattani. Maniperanti
Distribution: West coast tropical evergreen and West coast semi-evergreen forests.

Soil requirements: Slightly acidic. soils. low in potash, medium in phosphate and high in organic carbon.

Description: A large shrub. sometimes a small tree. Leaves large. 2-3 pinnate. 30-45 cm long; leaflets oblong or elliptic oblong, serrate, glabrous on both surfaces. Flowers greenish white in large leaf opposed corymbose cymes. Fruit depressed globose, black-purple. 1 cm in diameter.

Properties : Root is sudorific.

Uses: Leaves give relief in vertigo. A decoction of the root is given in case of diarrhoea and dysentery.

Leea macrophylla Roxb. ex Hornem.
Syn. L. robusta Roxb.

Distribution: Southern moist mixed deciduous. Moist teak bearing and West coast semi-evergreen forests.

Description: A large shrub with thick hollow stems. Leaves 2-3 pinnate. upto 60 cm long; leaflets large. ovate-oblong. rounded or subcordate at base, serrate, pubescent especially on the nerves beneath. Flowers white, in terminal corymbose cymes. Fruit depressed globose. 3-6 lobed, about 7 mm in diameter.

Properties: Root is astringent and alexipharmic.

Uses: Root is used to treat ringworm, guinea worm and obstinate sores.

Sapindaceae

Allophylus cobbe (Linn.) Raeusch.
A. rheedii Radlk.
Mal: Mukkananzpezu
San: Thriputa
Distribution: West coast tropical evergreen and West coast semi-evergreen forests.

Description: A large shrub or a small tree; bark yellowish brown. Leaves alternate, 3-foliolate. 7.5-15 cm long; leaflets ovate or elliptic. acute or acuminate. serrate. pubescent on both surfaces. Flowers small. white, in spicate branched racemes. Fruit red. (Plate VI. Fig. 2)
Properties: Root is astringent.
Uses: Root is given to check diarrhoea. The leaf made into a paste is applied against swellings and bone fracture by the local Ayurvedic practitioners.

Cardiospermum halicacabum Linn.
Mal: Uzhinja
San: Sakralatha
Distribution: Sometimes seen in forest plantations. Mostly found in waste lands and roadsides.
Soil requirements: Loamy sand, slightly acidic soils usually poorly drained. medium in potash, low in phosphate and high in organic carbon.

Description: A herbaceous tendrill climber. Leaves alternate, biter-nate; leaflets deeply cut into segments, coarsely dentate, glabrous. Flowers white, in few flowered umbellate cymes, peduncle with two circinate tendrils. Fruit a membrane-ous inflated trigonous capsule.
Properties: Leaf is rubifacient. Root is diaphoretic, diuretic, laxative rubifacient and emmenagogus.
Uses: Plant is effective in the treatment of rheumatism. Leaf juice is used as a cure for earache. Root is occasionally used to treat lumbago and nervous disorders.

Dimocarpus longan Lour.
Syn. Euphoria longan (Lour.) Steud.
Nephelium longana Gamb.
Mal: Chempunna, Porippuvam
Distribution: West coast tropical evergreen and West coast semievergreen forests.
Soil requirements: Variety of soils; favours loamy soils strongly acidic.

Description: A medium sized tree; bark smooth, greyish brown. Leaves alternate, pinnate: leaflets 5-11, oblong, lanceolate, entire, glabrous, 6-18 x 2.5-5 cm. Flowers yellowish white, in terminal and axillary tomentose panicles. Fruit reddish brown. tubercled, about 2 cm in diameter.
Properties: Fruit is stomachic and anthelmintic. Aril is refrigerant and has tonic properties.

Dodonaea viscosa N. Jacq.
Mal: Vrali
Distribution: Southern montane wet scrub and Southern montane temperate forests.
Soil requirements: Loamy sand, medium acidic soils in the slopes, low in potash, phosphate and organic carbon.

Description: A large shrub or a small tree: bark thin, grey, peeling off in long thin strips. branchlets angular. young shoots resinous. Leaves simple. alternate, oblanceolate to linear, glabrous, entire. 3.5-10 x 0.6-3-5 cm Mowers yellowish green, in short panicles. Fruit a pale brown membraneous. 2-3 winged capsule.
Properties: Leaf is febrifuge and sudorific.

Uses: Bark is used in astringent baths and fomentation. Leaves are used to treat gout, rheumatism. swellings. bums and wounds. It is believ-ed that the powdered leaves applied over a wound will heal it without leaving a scar, in South Africa the plant is used for stomach disorders. It is considered to be having antife-rtility properties (Nagarajam et.al. 1977).
Sapindus laurifolius Vahl
Syn. *S. trifoliatus* auct. non Linn.
Mal: Pasakkotta. Uruvanchi

**Distribution**: West coast semi-evergreen, moist teak bearing and Southern moist mixed deciduous forests.

**Soil requirements**: Sandy loam, slightly acidic soils, low in potash and phosphate and high in organic carbon.

**Description**: A small to medium sized tree; bark grey. Leaves pinnate; leaflets 2-3 pairs, lanceolate, acuminate, minutely pubescent or glabrous below, 7-15 x 2.5-8 cm. Flowers creamy white, in terminal pubescent panicles. Fruits fleshy, 2-3 lobed, with 1 seed in each lobe; seeds black, smooth, shining. (Plate VI, Fig. 3)

**Properties**: Fruit is alexipharmic, expectorant, emetic, purgative and nauseant. Root is expectorant, and anthelmintic.

**Uses**: Fruit is used as effervescent in leprosy, asthma, hysteria and hemicrania. Externally it is used as a detergent. Etheral extract of the pericarp is used extensively in the preparation of certain fungicides and insecticides. Root is used as a collyrium in sore eyes and ophthalmia.

Schleichera oleosa (Lour.) Oken
Syn. *S. trijuga* Willd.
Mal: Poovam
San: Mukulaka

**Distribution**: West coast semi-evergreen, moist teak bearing and Southern secondary moist mixed deciduous forests.

**Soil requirements**: Loamy sand, medium acidic soils. loose with good drainage, medium in organic carbon.

**Description**: A medium sized to large tree, stem often fluted. Leaves pinnate; leaflets 4-8 pairs, oblong, obtuse, young leaves bright red. Flowers small, yellow, in fascicles on slender racemes. Fruit about 2 cm in diameter. slightly echinata.

**Properties**: Bark is astringent.

**Uses**: Bark is used as an external applicator for itch. An infusion of bark is prescribed against malaria. Oil from seeds is a stimulating agent for the scalp.

Anacardiaceae

Buchanania lanceolata Wight
Mal: Kulamavu. Malamavu

**Distribution**: West coast tropical evergreen forests in South Kerala.

**Soil requirements**: In the slopes with good drainage.

**Description**: A moderate sized tree; bark rough. Leaves simple, alternate, oblong-lanceolate, acuminate, glabrous, 9-15 x 3.5-5 cm. Flowers white, in terminal and axillary branched panicles. Fruit a globose drupe, red. 1.5 cm in diameter.

**Properties**: Ripe fruit improves digestive power.

**Uses**: Bark is applied to swellings and dislocated parts. Ripe fruit is used against rheumatism.

Buchanania lanzan Spreng.
San: Priyala

**Distribution**: Southern moist mixed deciduous and moist teak bearing forests. occasional in Laterite thorn forests.
**Soil requirements**: Sandy clay loam soils with good drainage, medium acidic, low in potash and organic carbon and medium in phosphate.

**Description**: A moderate sized tree; bark black, rough, tessellated with prominent squares: red inside. Leaves simple, alternate, oblong, obtuse or emarginate at apex, entire, 15-25 x 5-7 cm. Flowers greenish white in pubescent, terminal and axillary panicles. Fruit a laterally compressed drupe. black, 1.3 cm long.

**Properties**: Leaf juice is digestive, expectorant, aphrodisiac, purgative, purifies blood and lessens biliousness. Fruit is laxative and aphrodisiac. Seeds are expectorant, aphrodisiac. stomachic and tonic to the body and brain.

**Uses**: Gum obtained from the tree is given in cases of diarrhoea. Fruit is used against rheumatism. It is applied to the tongue when inflamed or very hard. Seeds are useful in the treatment of gleet and urinary concretions. Kernel is used to treat skin diseases. Root is given against biliousness.

**Holigarna arnottiana** Hook. f.

*Mal*: Cheru

*Distribution*: West coast tropical evergreen and West coast semievergreen forests.

*Soil requirements*: Variety of soils. favours clay loam. slightly acidic soils usually in moist places.

*Description*: A large evergreen tree; bark rough, exudes a black exudation when cut. Leaves simple, crowded at the tip of branches, obovate or oblong-lanceolate: petiole with a pair of spur like appendages. Flowers small, yellowish brown in axillary panicles. Fruit an obliquely ovoid drupe. 2.5 cm long.

*Properties*: Juice of the plants is vesicant.

**Lannea coromandelica** (Houtt.) Merr.

*Syn*: *Odina wodier* Roxb.

*Mal*: Katash. Karilavu, Udi

*Distribution*: Southern moist mixed deciduous and Southern secondary moist mixed deciduous forest. occasionally in Laterite thorn forests.

*Soil requirements*: Sandy loam soils with good drainage, slightly acidic, low in potash and very high in phosphate.

*Description*: A large deciduous tree: bark grey, smooth, flaking off in thin small flakes: inner bark red. Leaves pinnate: 25-45 cm long: leaflets 7-9, oblong, acuminate. Flowers yellow, in racemes. Fruit an ovoid or subreniform drupe, red, 1.3 cm long.

*Properties*: Bark is astringent.

*Uses*: Bark is used as a lotion in impetigenous eruptions and in leprous and obstinate ulcers. A decoction of bark is used against toothache. asthma and dysentery. Gum is applied to sprains and bruises. Leaves are used to treat elephantiasis.

**Mangifera indica** Linn.

*Mal*: Mavu

*San*: Amra.

*Distribution*: West coast tropical evergreen and West coast semievergreen forests: cultivated extensively.

*Soil requirements*: Variety of soils favours loamy soils with good
drainage, slightly acidic. low in potash, medium in phosphate and organic carbon.

**Description** : A large evergreen tree; bark rough, dark grey or brown, exudes a reddish gummy exudation when cut. Leaves entire, glabrous. Flowers small, yellow or reddish yellow in terminal panicles. Fruit a large one seeded drupe.

**Properties** : Bark of the tree is antiscorbutic, astringent and styptic. Leaves, fruit and seeds are astringent. Ripe fruit is laxative and diuretic. Rind of the fruit is stimulant and acts as a tonic in debility of stomach. Kernel is anthelmintic.

**Uses** : Bark is used to treat uterine haemorrhage, haemoptysis, melena and diarrhoea. The resinous juice from the bark is considered antisyphilitic. It is used in North Kerala as a specific drug for diarrhoea and dysentery. Leaves are used in the treatment of piles, rheumatism and bronchial troubles. Ripe fruit is used to stop haemorrhage from uterus, lungs and intestine. A decoction of the kernel is generally prescribed against diarrhoea.

**Spondias pinnata** (Linn.f.) Kurz

Syn. *S. mangifera* Willd.

**Mal** : Ambazham

**San** : Ambashtha

Soil requirements : Variety of soil. low lying poorly drained sandy loam to clay, strongly acidic.

**Description** : A large tree; bark grey, blotched with black. Leaves simple, oblong-obovate, shining, entire, glabrous, 30-50 x 12-75 cm. Flowers small, yellowish, in terminal, glabrous panicles. Fruit an oblique black drupe, 2.5 cm long. receptacle shorter than the drupe.

**Properties and Uses** : Same as for *Semecarpus anacardium* Linn. f.
**Connaraceae**

*Connarus monocorpus* Linn.
Mal : Kuriel, Valamkadikkaya  
**Distribution** : West coast tropical evergreen and West coast semievergreen forests.

**Description** : A straggling shrub. Leaves pinnate; leaflets 5-9, elliptic, obtusely acuminate. Flowers small. in axillary racemose panicles. Fruit a follicle, conical-ovoid, falcately curved, 2 cm long; seeds arillate.

**Properties** : Bark is refrigerant. Fruit is antiscorbutic, aphrodisiac and astringent.

**Uses** : Root is used in the treatment of rheumatism, diabetes, scurvy. pulmonary complaints, ulcers and other skin diseases.

**Papilionaceae**

*Abrus precatorius* Linn.  
Mal : Kunni  
San : Gunja  
**Distribution** : Mostly found along the hedges and fences, sometimes seen in forest plantations.

**Soil requirements** : Variety of soils, usually in sandy soils with good drainage, slightly acidic, high in potash and phosphate.

**Description** : A perennial twining shrub. Leaves paripinnate. 6-10 cm long: leaflets 10-20 pairs. opposite, oblong, mucronate. about 2 cm long. Flowers pink or creamy white, in dense racemes. Fruit a turgid pod, 2.5-4 cm long; seeds 3-5, globose, scarlet. with a black end.

**Properties** : Leaf juice is a blood purifier. Seeds are purgative, emetic.
and aphrodisiac. Root is emetic, antipyretic, aphrodisiac and alexiteric.

**Uses**: Pounded leaves are applied to painful swellings. Seeds are used to treat nervous disorders. They act as a contraceptive also. In Brazil the seeds are a popular cure for granular lids. Root is used against sore throat, asthma, fever and skin diseases.

**Atylosia goensis** (Oalz.) Dalz.

*Syn. A. harbata* Baker  
*Mal*: Kattuzhunnu  
*Distribution*: Southern dry mixed deciduous and Southern moist mixed deciduous forests.

**Soil requirements**: Sandy soils, usually in the slopes with good drainage. medium acidic with medium potash and low phosphate contents.

**Description**: A twining pubescent shrub. Leaves alternate, 3-foliate; leaflets broadly ovate, acuminate. pubescent. Flowers yellow. in many flowered racemes. Fruit 3-5 cm long, densely clothed with yellowish viscid hairs; seeds 4-6, black.

**Uses**: Used in the treatment of rheumatism, biliousness, fever, consumption and swellings.

**Butea monosperma** (Lamk.) Taub.

*Syn. B frondosa* Koan. ex Roxb.  
*Mal*: Plasu  
*San*: Palasa. Thapasavriksha  
*Distribution*: Southern dry mixed deciduous and Laterite thorn forests.

**Soil requirements**: Sandy loam soils with good drainage, slightly acidic, low in potash and phosphate and high in organic carbon.

**Description**: A small to medium sized tree: bark greyish brown, exudes a red gum when cut. Leaves alternate. 3-foliate; leaflets broadly ovate. finely pubescent beneath. Flowers large, orange-red, in showy densely fascicled racemes. Fruit oblong. flattened, 12-20 cm long with single seed.

**Properties**: Bark is astringent, alterative, aperient. aphrodisiac and anthelmintic (Mooss, 1978). Gum, leaves and flowers are astringent. Leaf is tonic, carminative, anthelmintic and aphrodisiac. Flowers are. diuretic, depurative. aphrodisiac and emmenagogue. Seeds are anthelmintic and laxative.

**Uses**: Bark is useful in the treatment of inflammation. abdominal tumour. biliousness, dysmenorrhoea. intestinal worms, bleeding piles and ulcers and haemorrhages (Mooss. 1978). Gum is given in cases of diarrhoea and dysentery (Chopra et al.. 1956). Leaves are used against boils and piles. Flowers are recommended in the treatment of biliousness, abnormal thirst and painful micturition (Mooss.1978). Powdered seeds mixed with the juice of the rhizome of *Cyperus ratundus* is administered against delirium. Seeds are also used against abdominal tumours, intestinal worms. certain urinary diseases and piles (Mooss, 1978). Root is useful in the treatment of cataract.

**Crotalaria retusa** Linn  
*Mal*: Kilukilukki  
*San*: Sanapushpi  
*Distribution*: West coast tropical evergreen, West coast semievergreen and Southern moist deciduous forests.
Soil requirements: Loamy, medium acidic soils. low in potash and phosphate and medium in organic carbon.

Description: An undershrub. Leaves simple alternate, oblanceolate. obtuse or retuse at apex, grey puberulous beneath, 5-10 x 2-3 cm. Flowers bright yellow, in showy terminal racemes. Fruit a linear oblong pod. 2.5-3.5 cm long, glabrous; seeds 10-20.

Uses: Plant is used to treat scabies and impetigo.

Crotalaria verrucosa Linn.

Mal: Kilukiluppa
San: Sanapushpi
Distribution: Southern moist mixed deciduous. Moist teak bearing and Southern dry mixed deciduous forests.

Soil requirements: Loamy sand slightly acidic soils, along the slopes; medium in potash and very low in phosphate.

Description: An undershrub. Leaves simple, alternate, ovate, obtuse, 5-15 x 2.75 cm; stipules foliaceous, semi-lunate, persistent. Flowers bluish white in racemes. Fruit an oblong pod, 3-5 cm long pubescent.

Properties: Leaf juice is considered to be efficacious in diminishing sativation.

Uses: Leaf juice is used both externally and internally in scabies and impetigo and in the treatment of heat complaints.

Dalbergia lanceolaria Linn. f.

Mal: Cheruveetti, Velleetti

Distribution: Southern moist mixed deciduous. Southern dry mixed deciduous and Moist teak bearing forests.

Soil requirements: Loamy soils with good drainage.

Description: A medium sized tree; bark grey, smooth. Leaves pinnate; leaflets 10-15. ovate-oblong, obtuse, 2-4 x 0.8-2 cm. Flowers small bluish white, in terminal and axillary panicles. Fruit oblong, tapering at both ends 5.10 cm long; seeds 1-3 cm.

Uses: Bark is recommended in intermittent fevers and dyspepsia. Oil from the seeds is applied for rheumatic afflictions.

Dalbergia latifolia Roxb.

Mal: Veetti, Eetti
San: Sirmsapa, Krishnasara
Distribution: West coast semi-evergreen, Moist teak bearing and Southern moist mixed deciduous forests.

Soil requirements: Sandy loam slightly acidic soils with good drainage. loose. low in potash and phosphate and medium in organic carbon.

Description: A large deciduous tree hark grey with shallow irregular cracks. Leaves alternate, pinnate; leaflets 5-7. ovate-orbicular, glabrous. 3-5 cm long. nearly as broad as long. Flowers small. creamy white in corymbose panicles, fascicled in the axils of older leaves. Fruit oblong, usually obtuse at apex, 3.5-7 cm long, seeds 13.

Properties: Whole plant is bitter and stomachic. It has also got tonic properties.

Uses: Plant is used to treat dyspepsia, diarrhoea, leprosy, obesity and worms.
Dalbergia sympathetica  Nimmo ex Grah.
Syn. D. muluflora Heyna ex Wall.
Mal : Anamullu

**Distribution** : Southern dry mixed deciduous and Southern moist mixed deciduous forests

**Soil requirements** : Sandy loam medium acidic soils. very low in potash and phosphate.

**Description** : A large climbing shrub. the branches often twisted trunk armed with 15-30 cm long curved spines in clusters. Leaves alternate, pinnate, leaflets 11-15, elliptic-oblong, emarginate 1-3 x 0.5-2 cm. Flowers small, white. in axillary cymose pubescent panicles. Fruit samaroid. broadly oblong. pubescent; seeds 1-2. (Plate VII. Fig. 2)

**Properties** : Leaves are alternative. Bark is said to remove pimples.

**Derris trifoliata** Lour.

Syn, D uliginosa Benth.
Mal : Kammatti

**Distribution** : Mostly seen along the sides of backwaters near seacoast.

**Description** : A large climbing shrub. Leaves alternate, pinnate; leaflets 5-7, ovate-acuminate, 5-10 x 2-5 cm. Flowers rose coloured, in axillary racemes. Fruit broad, obliquely ovate or orbicular. winged along the upper suture, 2-3 cm, as broad as long: seed one.

**Properties** : Plant is stimulant, antispasmodic and counter irritant. Root bark is alterative and insecticidal.

**Uses** : An oil prepared from the plant is used externally as an embrocation. Root bark is recommended in cases of rheumatism and dysmenorrhoea.

**Desmodium gangeticum** (Linn.) DC.

Mal : Orila
San : Prsniparni

**Distribution** : Moist teak bearing and Southern moist mixed deciduous forests.

**Soil requirements** : Loamy soils with good drainage, medium acidic. low in potash and phosphate.

**Description** : An undershrub with angular stem. Leaves simple, alternate, ovate or lanceolate. acute. rounded or cordate at base, 5-10 x 2.5-5 cm. Flowers bluish pink. in terminal racemes. Fruit with 6-8 joints, sparsely clothed with hooked hairs. (Plate VIII, Fig. 1)

**Properties** : The root is one of the Dasamoola. It is astringent. tonic diuretic, anticatarrihal alternative. aphrodisiac. anthelmintic and alexipharmic.

**Uses** : Root is recommended in case of chronic fever. biliousness.
Cough, vomiting, asthma and rheumatism. It is an ingredient of Cyavanaprasam.

**Desmodium heterocarpon** (Linn.) DC, Syn. *D. polycarpum* DC.

Mal: Nilathuvara

*Distribution*: Southern moist mixed deciduous. Southern dry mixed deciduous and Moist teak bearing forests.

*Soil requirements*: Clayey soils with poor drainage. medium acidic, medium in potash, low in phosphate and organic carbon.

*Description*: An erect or trailing undershrub. Leaves alternate, trifoliolate; leaflets elliptic or obovate, obtuse. sparsely pubescent beneath, 2.5-5 x 2-2.5 cm. Flowers purple. in dense axillary and terminal. sub sessile racemes. Fruit with 5-8 joints, ciliate on both the sutures. (Plate VIII, Fig. 2)

*Properties*: Decoction of the plant is considered to be a tonic

*Uses*: This plant is considered as a nervine Ionic by the local Ayurvedic practitioners.

**Desmodium styracifolium** (Osb.) Merr. Syn. *D. retroflexum* (Linn.) DC.

*Distribution*: Moist teak bearing and Southern moist mixed deciduous forests in North Kerala.

*Soil requirements*: Sandy soils with good drainage, slightly acidic. very low in potash and high in phosphate.

*Description*: A large shrub. Leaves usually one foliate, sometimes trifoliolate: leaflets orbicular cordate, densely white pubescent beneath. the lateral leaflets much smaller than the terminal one. Flowers purple. in short crowded racemes. Fruit with 3-5 joints. slightly pubescent.

*Properties*: Root is deobstruent, emmenagogue. stomachic and aperient,

**Desmodium motorium** (Houtt.) Merr. Syn. *D. gyrans* DC.

Mal: Remanamappacha, Thozhukanni

*Distribution*: West coast semi evergreen. Southern moist mixed deciduous and Moist teak bearing forests.

*Description*: An erect undershrub. Leaves alternate. trifoliolate. terminal leaflets 1.2-2 cm by 0.3; Flowers pink, in lax terminal and axillary racemes. Fruits slightly falcate. joints 5-10. inconspicuous.

*Uses*: Decoction of the plant is given for cough. fainting and convulsions.

**Desmodium triflorum** (Linn.) DC.

Mal: Nilamparanta. Cherupulati
San: Tripadi

*Distribution*: Mostly confined to moist areas in the plains. Sometimes seen in forest plantations.

*Soil requirements*: Clayey soils, slightly acidic, low in potash and very low in phosphate.

*Description*: A much branched trailing herb. Leaves alternate. trifoliolate; leaflets obovate cuneate, truncate or emarginate at apex. 0.4-0.6 cm on either way. Flowers pink or white. in axillary clusters of 1-3 Fruit 3-5 jointed.

*Properties*: Leaf is galactagogue

*Uses*: Leaves are used against diarrhoea and dysentery. Fresh leaves
are pounded and applied to wounds and abscesses.

**Desmodium triquetrum** (Linn.) DC.
Mal : Adakkapanal

*Distribution*: Moist teak bearing, West coast semievergreen, and Southern moist mixed deciduous forests.

*Soil requirements*: Loamy soils, medium acidic, low in potash, very low in phosphate and medium in organic carbon.

*Description*: An erect shrub with triangular stem. Leaves alternate. one foliolate. elliptic-oblong, lanceolate, cordate at base, 10-18 cm long:

*Uses*: Extract of the leaves is used against piles.

**Desmodium velutinum** (Willd.) DC.  
(*D. latifolium* DC.)
Mal : Orila

*Distribution*: West coast semi-evergreen. Southern moist mixed deciduous and Moist teak bearing forests.

*Soil requirements*: Loamy soils with good drainage.

*Description*: An erect under-shrub. Leaves simple. alternate. broadly ovate, obtuse or subacute at apex, cordate or truncate at base, densely clothed with hooked hairs, 3.5-12 x 3-9 cm. Flowers bluish in terminal and axillary racemes. upto 25 cm long. Fruits straight. 4-6 jointed, densely covered with hooked hairs, 1.5-2 cm by 2-3 mm. (Plate VIII, Fig. 3)

*Uses*: The roots mixed with pepper are used to treat urinary dis-Bases.

**Dolichos trilobus** Linn.
Syn. *D. falcatus* auct. non Klein ex Willd.
Mal : Kattamara

*Distribution*: West coast semi-evergreen, Southern moist mixed deciduous and Southern hill-top tropical evergreen forests.

*Soil requirements*: Sandy loam soils, medium acidic, medium in potash, low in phosphate and high in organic carbon.

*Description*: A twining herb with tuberous roots. Leaves 3-foliolate; leaflets broadly deltoid, ovate. 3.5 x 2 cm. Flowers pink or lilac, in axillary racemes. Fruit linear, glabrous, 5-8 cm long; seeds many.

*Uses*: Decoction of seeds is specific for rheumatism. Roots are used in the treatment of piles. constipation, ophthalmia and skin diseases.

**Flemingia grahamiana** Wight & Arn.

*Distribution*: Southern hill-top tropical evergreen and Southern montane wet scrub forests.

*Soil requirements*: Clay loam medium acidic soils.

*Description*: An erect under-shrub. Leaves alternate, 3-foliolate; leaflets ovate-obtuse or subacute. pubescent beneath. Flowers pink, in short axillary racemes. Fruit turgid. about 1 cm long, covered with rea glands.

*Properties*: Resinous powder from the glands of the fruit is anthelmintic.

*Uses*: Plant is used externally for skin diseases and internally as purgative. It is specific for colds (de Sorney, 1916).
**Flemingia strobilifera** (Linn.) Ait.

*Mal*: Kamalu

*Distribution*: Moist teak bearing and Southern moist mixed deciduous forests. Also seen in forest plantations.

*Description*: An erect branching shrub. Leaves alternate, 1-foliolate, ovate-oblong, lanceolate, 8-1.3 x 2-4.5 cm. Flowers white, in axillary and terminal racemes with conspicuous floral leaves. Fruit oblong, turgid, 0.8 cm long. densely pubescent.

*Uses*: The leaves are reported to be used in Java as vermifuge for children (Burkill, 1935). The Assamese use the root to induce sleep. Root is used against epilepsy and hysteria.

**Indigofera cassioides**, Rottl. ex DC.

*Syn.* *I. pulchella* auct, non Roxb.

*Mal*: Manali

*Distribution*: Southern dry mixed deciduous forest.

*Soil requirements*: Loamy sand, slightly alkaline soils, low in potash, phosphate and organic carbon.

*Description*: An erect shrub with striate branches. Leaves pinnate; leaflets many, ovate-oblong, obtuse or emarginate. 1-2.5 x 0.8-1.2 cm. Flowers purple in axillary racemes. Fruit turgid, cylindric, glabrous, 2.5-4 cm long; seeds 8-12.

*Uses*: A decoction of root is given in cases of cough and its powder is applied externally for chest pain.

**Indigofera Linnaei** Ali

*Syn.* *I. enneaphylla* Linn.

*Mal*: Cherupullati

*Distribution*: Southern dry mixed deciduous and Dry deciduous scrub forests.

*Soil requirements*: Sandy loam soils, usually in the slopes, slightly alkaline, low in phosphate and medium in potash and organic carbon.

*Description*: An undershrub with thick root stock and prostrate branches. Leaves pinnate, 1.2-2 cm long; leaflets 7-9. Flowers bright red, in shortly peduncled, 10-20 flowered spicate heads. Fruit 3-4 mm long, clothed with white adpressed hairs; seeds 2.

*Properties*: Plant juice is antiscorbutic, alterative and diuretic.

*Uses*: The plant is boiled with oil and applied to burns. A decoction is given in cases of epilepsy and insanity. It purifies blood.

**Indigofera tinctoria** Linn.

*Mal*: Arnari, Neela Amari

*San*: Neelika, Neela

*Distribution*: Very rare in the forests, mostly cultivated and grows in villages.

*Soil requirements*: Variety of soils.

*Description*: A branched shrub. Leaves pinnate; leaflets 7-11, elliptic-ovate, apiculate. 1-2.5 x 0.5-1.2 cm. Flowers pink, in spicate racemes. Fruit cylindrical, glabrous; seeds 8-12.

*Properties*: Stem and root are laxative, expectorant, alexipharmic and anthelmintic.

*Uses*: Extract of the plant is given in cases of epilepsy, nervous disorders, chronic bronchitis, asthma, piles, leucoderma, burns, scalds, lum-
bago, enlargement of the spleen and liver and flatulence. It is used as an ointment in sores and old ulcers. Leaf juice is used in the treatment of hydrophobia. Stem and root are used to promote growth of hair and to treat abdominal disorders, heart diseases, rheumatism, tumours and cephalalgia.

**Mucuna monosperma** DC. ex Wight

Mal : Malanthalli
San : Dathipushpika

**Distribution** : Southern moist mixed deciduous and Moist teak bearing forests in North Kerala.

**Description** : A large perennial twining shrub, young branches covered with rusty brown tomentum. Leaves 3-foliolate: leaflets ovate-oblong or elliptic, shortly acuminate. rounded at base, pubescent beneath, 6-9 x 5-7.5 cm. flowers purple. in 6-12 flowered axillary corymbose racemes; calyx with irritant bristles. Fruit nearly orbicular, winged on both sutures, 5-7 cm in diameter: seed 1, dark brown, smooth.

**Properties** : Seeds are reported to have sedative properties.

**Uses** : Seeds are used as an expectorant in cough and asthma.

**Mucuna pruriens** (Linn.) DC.

Mal : Choriyanam, Naikorana
San : Athmaguptha, Kandukari

**Distribution** : West coast semi-evergreen, Moist teak bearing and Southern moist mixed deciduous forests. Also in forest plantations.

**Soil requirements** : Variety of soils with good drainage.

**Description** : A shrub. Leaves alternate. 3-foliolate; leaflets mate.

**Phyllodium polchellum** (Linn.) Desv.

Syn *Desmodium pulchellum* (Linn.) Benth.

**Distribution** : West coast semi-evergreen, Moist teak bearing and Southern moist mixed deciduous forests. Also in forest plantations.

**Soil requirements** : Variety of soils with good drainage.

**Description** : A slender climber with a perennial rootstock. Leaves 3-foliolate: leaflets rhomboid-ovate, densely hairy beneath, 7-12 x 5-7 cm. Flowers purple, in 6-30 flowered racemes; calyx with irritant hairs. Fruit falcately curved, turgid densely covered with irritant bristles 5-7 x 1 cm: seeds small. 5-6. (Plate VII. Fig. 3).

**Properties** : Pods are anthelmintic, Seeds are aphrodisiac and act as a nerve tonic. They possess slight insecticidal property. Root acts as a purgative.

**Uses** : The plant is used to improve semen and sexual vigour (Narayana Aiyar and Kolammal, 1962). An infusion of hairs covering the pods is used for diseases of liver and gall bladder and applied externally as a local stimulant and mild vesicant. Hairs covering the fruit contain a highly irritating proteolytic enzyme called mucunain. Seeds contain L-DOPA (5-6 %) and were found to be effective in Parkinson's disease. Root is prescribed against delirium. In dropsy it is applied as a paste over the body. It is also used in the treatment of paralysis also. An ointment prepared from the roots is applied for elephantiasis.
pubescent beneath. Flowers yellow, in clusters in the axils of compound leafy racemes. Fruit 1-jointed, pubescent; seeds 2.

**Uses**: Decoction of the bark is used to treat haemorrhage, diarrhoea, poisoning and eye diseases. Flowers are useful in the treatment of biliousness.

**Pongamia pinnata** (Linn.) Pierre  
Syn. *P. glabra* Vent.  
Mal : Ungu. Pongu  
San : Karanjah. Prakirya  
**Distribution**: West coast semi-evergreen forests. Often planted as avenue trees.

**Soil requirements**: Loamy soils with good drainage. Slightly acidic, high in potash and low in phosphate.

**Description**: A small to medium sized tree; bark grey, speckled with brown. Leaves pinnate; leaflets 5-7, ovate to rounded. Glabrous and shining, 5-12 x 2.5-5 cm. Flowers pinkish white, in axillary racemes. Fruit compressed, oblong or obovoid, narrowed at the base: 1-seeded.  
(Plate VIII. Fig. 4)

**Properties**: Seeds are carminative.

**Uses**: Fresh bark is given internally for bleeding piles. Leaves in the form of a poultice is applied to ulcers infested with worms. The fruit is used against urinary diseases (Narayana Aiyar & Kolammal, 1960). Seeds are used to purify blood.

**Pterocarpus marsupium** Roxb.  
Mal : Venga  
San : Asana  
**Distribution**: Southern moist mixed deciduous. Moist teak bearing and West coast semi-evergreen forests. Also seen in forest plantations.

**Soil requirements**: Loose soils with good drainage.
Description: A viscid pubescent undershrub. Leaves alternate, 3-foliate; leaflets rhomboid ovate, the terminal leaflet 3.5-7.6 x 3-5 cm: the lateral leaflets 2-5-4 x 2-3.5 cm. Flowers purple, fascicled in terminal and axillary racemes or panicles. Fruit linear-oblong, flattened, covered with viscous hairs; seeds 4-6, brownish black (Plate VII, Fig. 4)

Uses: Root is used in the treatment of bitiousness, rheumatism, heart diseases, asthma, fever, diarrhoea, worms and piles.

Pueraria tuberosa (floxb.) DC.
Mal: Pannikizhangu

Distribution: Occasional in Southern dry mixed deciduous and Southern moist mixed deciduous forests. Grown as a cover crop in Rubber plantations.

Soil requirements: Variety of soils, favours loamy soils with good drainage, medium acidic, low in potash and phosphate and high in organic carbon.

Description: A climbing shrub with large tuberous root. Leaves 3-foliolate; leaflets ovate-oblong, broadly ovate, acuminate, pubescent beneath, 10.22 x 7.5-15 cm. Flowers small, in lax racemes. Fruit membraneous, constricted between the seeds. pubescent with bown hairs. 5-7.5 cm long; seeds 3-6.

Properties: The plant is credited with insecticidal properties. The acetone extract of the bark is toxic to mosquito larvae.

Uses: Decoction of the bark is used as a remedy in dropsy and bowel complaints. The ashes of the leaves are given in molasses as a vermifuge. Flower is used in the treatment of colic and hysteria.

Teramnus labialis (Linn.) Spreng.
Syn. T. parviflorus Spreng.
Mal: Kattuzhunnu

Distribution: Southern moist mixed deciduous, Moist teak bearing and West coast semievergreen forests.

Description: A large woody climber; bark dark brown, rough, erodes a red gummy exudation when cut. Leaves 3-foliolate; leaflets ovate, acuminate, pubescent beneath, 10.22 x 7.5-15 cm. Flowers small, in large axillary and Terminal pubescent panicles. calyx brown velvety pubescent, corolla pink. Fruit oblong, flattened, pubescent, about 15 cm long.

Properties: The plant is credited with insecticidal properties. The acetone extract of the bark is toxic to mosquito larvae.

Uses: Decoction of the bark is used as a remedy in dropsy and bowel complaints. The ashes of the leaves are given in molasses as a vermifuge. Flower is used in the treatment of colic and hysteria.

Spatholobus parviflorus (Roxb.) O. Ktze.
**Uses:** The plant is used in the treatment of paralysis, rheumatism, catarrhs, haemoptysis, tuberculosis, bronchitis and burning sensation.

**Uraia hamosa** Wall.

Mal: Moovila

*Distribution:* Southern moist mixed deciduous and Moist teak bearing forests. Also in forest plantations.

*Soil requirements:* Clayey soils with poor drainage. Strongly acidic. High in potash and low in phosphate.

*Description:* An undershrub, with long slender branches. Leaves 3-foliolate; leaflets elliptic, oblong, obtuse, the terminal one larger. Flowers purple. In terminal glandular racemes or panicles. Fruits twisted. 4-7 seeded.

*Properties:* The plant is a febilfuge.

**Uraria Iagopodioides** (Linn.) Desv.

Mal: Orila
San: Brahmaparni Chithrparni

*Distribution:* Southern dry mixed deciduous and Southern moist mixed deciduous forests.


*Properties:* Plant is reported to be abortifacient in ancient ayurvedic texts. It is alterative, anticitarrhal, laxative and aphrodisiac. It has tonic properties also.

*Uses:* The plant is used against rheumatism, bronchial troubles, asthma, dysenter, thirst vomiting, delirium. Malaria fever, ulcers and eye diseases.

**Vigna trilobata** (Linn.) Verdc.

*Syn:* *Phaseolus trilobus* Ait.

Mal: Kattu-payar
San: Mulgaparni

*Distribution:* Southern dry mixed deciduous and Southern moist mixed deciduous forests.


*Properties:* Leaf has tonic and sedative properties.

*Uses:* Leaf is used to treat eye diseases and decoction is administered in irregular fever.

**Zornia diphylla** (Linn.) Pers.

*Distribution:* Southern dry mixed deciduous and Laterite thorn forests.

*Soil requirements:* Sandy loam soils along the slopes. Medium acidic. Low in potash and phosphate and medium in organic carbon.

*Description:* A small diffuse herb. Leaves 2-foliolate; leaflets lanceolate or ovate, acuminate. 1-1.5 cm long. Flowers small. Yellow. In 3-10 flowered spicate racemes with prominent bracts. Fruit 1-6 jointed. Covered with short fulvous hairs.

*Uses:* The plant is used for the treatment of dysentery. Root is given to children to induce sleep.

---

**Caesalpiniaceae**

**Bauhinia racemosa** Lamk.

Mal: Mandaram
Distribution: Southern moist mixed deciduous, Moist teak bearing and Southern dry mixed deciduous forests.

Soil requirements: In the slopes having good amount of gravel. strongly acidic soils high in potash and low in phosphate and organic carbon.

Description: A small tree, bark dark brown, rough. Leaves alternate. orbicular. bilobed, palmately veined, 3.5-6 cm in either way. Flowers small, yellowish-white. in axillary racemes. Fruit linear-oblong, flattened, 15-30 cm long, many seeded.

Properties: Bark and leaves are astringent, alexipharmic and vermifugal. Fruit is refrigerant and astringent to the bowels.

Uses: Decoction of leaves is given against headache and malaria. Bark and leaves are used to treat biliousness. diarrhoea, dysentery. urinary discharges, fistula. tuberculous glands and diseases of the blood. Fruit is recommended in cases of rheumatism and bronchial troubles.

Caesalpinia bonduc (Linn.) Roxb.
Syn. C. crista Linn.
Mal: Kazhanachi
Ssn: Kuberakshi, Lathakaranja

Distribution: Mostly seen in scrub jungles in villages. Occasional in the Southern dry mixed deciduous forest.

Description: A scandent prickly shrub. Leaves bipinnate, pinnae 6-8 pairs; leaflets 6-10 pairs, elliptic-oblong, obtuse. 2-4.5 cm long. Flowers yellow. in long peduncled terminal and supra axillary racemes. Fruit oblong, densely prickly; seeds 1-2, grey, about 1 cm in diameter.

Properties: Bark and leaves are emmenagogues, febrifuge and anthelmintic. Seeds are antiperiodic, antipyretic. and febrifuge. Oil from seeds is emollient. Root bark is antiperiodic.

Uses: Tender leaves are used to rectify the disorders of the liver. Leaves and seeds are used in external applications for treating inflammatory swellings. Oil obtained from the leaves is useful in convulsions and nervous complaints. Oil from seeds is used as embrocation to remove freckles from the face and for stopping discharges from the ear. Root bark is used to treat tumours.

Cassia absus Linn.
Mal: Karinkolla, Kattumuthira

Distribution: Southern dry mixed deciduous and Laterite thorn forests.

Soil requirements: Variety of soils. usually in dry areas.

Description: An undershrub. Leaves pinnate; leaflets two pairs. very oblique, elliptic-oblong or elliptic-ovate 1.5-3.5 x 0.8-2.5 cm. Flowers reddish yellow. in terminal or leaf opposed racemes. Fruit ligulate, compressed, covered with bristly hairs, seeds 4-6. ovoid. black. shining.

Properties: Leaves are bitter, astringent and cholagogue. Seeds are astringent and cathartic.

Uses: Leaves are used as a remedy for cough. Seeds are applied in cases of ringworm. skin affections, conjunctivities and ophthalmia.

Cassia fistula Linn
Syn: C. rhombifolia Roxb.
Mal: Kanikkonna, Konna
San : Aragwadha

**Distribution** : Southern moist mixed deciduous and Moist teak bearing forests.

**Soil requirements** : Variety of soils. favours sandy loam medium acidic soils, low in potash and phosphate and high in organic carbon.

**Description** : A small to medium sized deciduous tree; bark reddish-grey, smooth in young tree, becoming rough and flaking off in strips in old trees. Leaves pinnate: leaflets 4-8 pairs, ovate acute. 5-10 x 3.5-7 cm. Flowers yellow, axillary, solitary or 2-3 together. Fruit cylindric, 25-60 cm long. many seeded. (Plate X. Fig. 1)

**Properties** : Fruit is cathartic. Seeds are emetic. Leaves, seeds, pulp of the fruit and root bark are considered to be laxative. Root is astringent, febrifuge and purgative.

**Uses** : Bark is used against asthma (Balakrishnan 1975). Leaf juice is recommended for skin diseases. It lessens the inflammation. A poultice made of the leaves is said to relieve the chilblains which are common in Upper Sind. It has been beneficially used in facial paralysis and rheumatism. Fruit also is applied in cases of rheumatism. Root is used to treat skin diseases leprosy. tuberculous glands and syphilis.

Cassia mimosoides Linn.

Mal : Cheruthakara

**Distribution** : Southern montane wet grassland and Southern montane wet scrub forests.

**Soil requirements** : Loamy sails. poorly drained, compact, strongly acidic.

**Description** : A diffuse under-shrub. Leaves pinnate: leaflets numerous (40-60 pairs). linear, very unequal sided. Flowers yellow, axillary, solitary or 2-3 together. Fruit linear flattened. sparsely pubescent, 2-6 cm long; seeds 15-25.

**Uses** : Roots are given in spasms of stomach.

Cassia occidentalis Linn.

Mal : Ponnaveeram, Nathramthakara

**Distribution** : Mostly seen in forest plantations.

**Soil requirements** : Medium acidic soils, low in potash. phosphate and organic carbon.

**Description** : An undurshrub. Leaves pinnate; leaflets 3-5 pairs, ovate: acuminate. 2.5-10x 2.2-3.5 cm: petiole with a gland near the base. Flowers yellow in short few flowered axillary racemes. Fruit 9-12 cm long. compressed: seeds 20-30. ovoid. compressed.

**Properties** : Plant is tonic. diuretic. purgative and febrifuge Leaves are aphrodisiac, antiperiodic, alexiteric and stomachic. Hoot decoctions and infusions are used as an abortifacient and purgative (Wesley Wong 1976).

**Uses** : Leaves are used against cough. asthma, sore throat and bili-ousness. Leaves and seeds are used externally in skin diseases. Seed decoction is given for palpitation, colds and congestive heart failure (Wesley Wong. 1976). Root is useful in the treatment of ringworm, elephantiasis and scorpion sting. According to Mooss (1977) this plant is not commonly used in Kerala for Ayurvedic
preparations. The Sanskrit name 'Kasamardah' is used for *C. occidentalis* by some authors. But as *C. occidentalis* is not truly indigenous to India, it cannot be the 'Kasamardah' of the ancient Sanskrit works. *Cassia sophora* is the actual 'kasarnardah'.

**Cassia tora** Linn.

Mal : Thakara, Ponnamthakara
San : Chakramarda

*Distribution*: Southern moist mixed deciduous and moist teak bearing forests. Also seen in forest plantations.

*Soil requirements*: Sandy loam, slightly acidic soils with good drainage.


*Properties*: Leaves and seeds are refrigerant, anthelmintic, antipyretic, laxative and diuretic. Fruit and seeds are astringent and alexiteric.

*Uses*: Crushed leaves are applied for the sting of bees (Van Reede, 1679). Leaves and seeds are used to treat skin diseases. They are used against biliousness, bronchitis, asthma, leprosy and tumours.

**Cynometra iripa** Kostel

Syn. *C. mimosoides* sensu Gamble

Mal : Irippa

*Distribution*: Occasional in the West coast tropical evergreen forests in South Kerala.

**Soil requirements**: Strongly acidic loamy soils with good moisture retentivity and high organic carbon.

*Description*: A medium-sized tree; bark smooth, brownish grey. Leaves pinnate; leaflets 2 pairs; oblancoolate, falcate, acute, unequal sided. 7.5-12 x 3.5-4.5 cm. Flowers white, in racemes in the axils of fallen leaves. Fruit turgid, very rugose. 1-2.5 cm long.

*Properties*: Root is cathartic and purgative.

*Uses*: Oil from seeds and lotion prepared from the leaves are applied externally in leprosy, scabies and other cutaneous diseases.

**Humboldtia vahliana** Wight

Mal : Attu-vanchi, kara-pongu

*Distribution*: Mostly seen along the banks of streams and rivers in West coast tropical evergreen and West coast semievergreen forests.

*Soil requirements*: Low lying areas where the soils are clayey. Strongly acidic to slightly acidic.

*Description*: A medium-sized tree; bark dark brown, mottled with white. Leaves pinnate; leaflets 3-4 pairs, ovate. Lanceolate. acuminate, 12-22 x 4-7 cm; stipules prominent with a basal reniform appendage. Flowers white, in axillary pubescent racemes. Fruit flattened, acute at both ends, yellowish brown, pubescent.

*Uses*: Bark is used in the treatment of biliousness, leprosy, ulcers and epilepsy.

**Kingiodendron pinnatum** (Roxb. ex DC.)..Harms

Syn. *Hardwickia pinnata* Roxb ex DC.
Mal : Kiyavu, Kutavu  
**Distribution** : West coast tropical evergreen and West coast secondary evergreen Dipterocarp forests.  
*Soil requirements* : Variety of soils with permanent moisture.  
**Description** : A large evergreen tree; bark pale brown, mottled with green. Leaves pinnate; leaflets 4-7 pairs, ovate-lanceolate. shining. Flowers white, in panicled racemes. Fruit obovate. 1-seeded.  
**Uses** : Oleoresin is used in the treatment of gonorrhoea.

**Mouliva spicata** (Dalz.) Nicholson  
*Syn.* *Wagataea spicata* Dalz.  
**Distribution** : West coast semi-evergreen, Moist teak bearing and Southern moist mixed deciduous forests.  
**Description** : Large straggling shrub with scattered prickles. Leaves bipinnate. pinnae 4.6 pairs; leaflets 6-7 pairs. oblong, obtuse or subacute. 2.5-4 x 1-2 cm. Flowers red, in dense spicate racemes. Fruit linear-oblong. constricted between the seeds; seeds 3-4.  
**Uses** : Bark is used against skin diseases. Root is prescribed in cases of pneumonia.

**Piliostigma malabaricum** (Roxb.) Benth.  
*Syn.* *Rauhinia malabarica* Roxb.  
*Mal* : Arampuli  
**Distribution** : Southern moist mixed deciduous and Moist teak bearing forests.  
*Soil requirements* : Loamy sand, slightly acidic-soils with. good drainage. loose.medium in potash and low in phosphate.  
**Description** : A small to medium sized tree; bark brown, rough. Leaves bilobed, orbicular, palmitately veined. 3.5-12 x 4-15 cm. Flowers creamy white, in axillary racemes. Fruits some what turgid, 25-30 x 2-2.5 cm; seeds 10-20.  
**Uses** : Infusion of new flowers is given in dysentery.

**Saraca asoca** (Roxb.) de Wilde  
*Syn.* *S. indica* auct. non Linn.  
*Mal* : Asokam  
*San* : Gathasoka  
**Distribution** : Occasional in the West coast tropical evergreen forests. Often grown in homesteads.  
*Soil requirements* : Variety of soils with good drainage.  
**Description** : A small tree, bark surface brown, 2-3 mm thick, blaze pinkish. Leaves pinnate: leaflets 4-6 Pairs. Flowers orange-red in dense racemes. Fruit oblong-compressed, 10-18 x 2-5 cm; seeds 4-8. (Plate IX Fig. 2)  
**Properties** : Bark is astringent, alexiteric, anthelmintic, demulcent and emollient. It is good for Complexion.  
**Uses** : The bark is a uterine tonic and it is used extensively in dysmenorrhoea, emmenorrhagia, leucorrhoea and various forms of menstrual disorders (Mooss, 1978). It cures inflammation of the cervical glands. thirst, burning sensation. intestinal worms. animal poisoning and haemorrhages. The dried flowers are used against diabetes. They are also used in the treatment of bleeding piles and scabies in children (Narayana Aiyar & Kalammal, 1960).
**Mimosaceae**

**Abarema bigemina** (Linn.) Kosterm.
-Syn. *Pithecellobium bigeminum* auct. non (Linn.) Mart. ex Benth.
-Mal: Kalppakku, Kattu-konna

**Distribution**: West coast tropical evergreen and West coast semievergreen forests.

**Description**: A small tree; bark brown, smooth. Leaves bipinnate, pinnae 1-2 pairs; leaflets 2-4 pairs, elliptic-lanceolate or ovate-oblong, acuminate, 7-15 x 2.5-3.5 cm. Flowers small, creamy white, in few flowered heads arranged in short panicles. Fruits flat, curved in a ring, reddish brown outside, red inside; seeds 5-8, black.

**Uses**: Decoction of leaves is used as an external application in leprosy and as a stimulant for the growth of hair.

**Acacia caesia** (Linn.) Willd.
-Syn. A. *intsia* Wight & Arn.
-Mal: Incha
-San: Nikunjika

**Distribution**: West coast semi-evergreen, Moist teak bearing. Southern moist mixed deciduous and Southern dry mixed deciduous forests.

**Soil requirements**: Loamy sand, slightly acidic soils with good drainage, low in potash and phosphate and high in organic carbon.

**Description**: A climbing shrub with prickles on the stem and leaf rachis. Leaves bipinnate, pinnae 6 pairs; leaflets 10-20 pairs, oblong? falcate, very small. Flowers white or yelowish, in globose heads arranged in panicles. Fruit strap shaped, flat, thin; seeds 6-12.

**Uses**: Plant extract is used to treat scalp affections, cutaneous affections and to improve growth of hair. Leaf is used to treat biliousness.

**Albizia amara** (Roxh.) Boiv.
-Mal: Varachi

**Distribution**: Southern moist mixed deciduous forests.

**Description**: A medium sized deciduous tree; bark smooth, greenish. Young shoots densely pubescent. Leaves bipinnate, pinnae 6-15 pairs; leaflets 15-25 pairs, linear, small. Flowers yellow, in 12-20 flowered heads, axillary, solitary or in clusters of 2-4. Fruit flat, thin, 10-17 x 1.5-3 cm; seeds 6-8, orbicular.

**Properties**: Seeds are astringent.

**Uses**: Leaves are recommended in cases of ophthalmia. Flowers are used in the treatment of deranged menstrual courses.

**Acacia rugata** (Lamk.) Merr.
-Mal: Cheevakka
-San: Charmasahua

**Distribution**: Southern moist mixed deciduous and West coast semievergreen forests.

**Soil requirements**: Sandy slightly acidic soils, loose. low in potash and phosphate.

**Description**: A prickly climbing shrub. Leaves bipinnate, pinnae 4-6 pairs; leaflets 10-20 pairs, about 1 cm long, linear. Flowers yellowish-white, in globose heads. Fruits reddish brown, fleshy, constricted between the seeds. Seeds 6-10.

**Properties**: Leaf is cathartic. Pods are aperient, expectorant and emetic.

**Uses**: Plant extract is used to treat scalp affections, cutaneous affections and to improve growth of hair. Leaf is used to treat biliousness.
externally applied to inflammation, boils and ulcers. Seeds are used against piles, diarrhoea and gonorrhoea. Oil from seeds is used in the treatment of white leprosy.

Albizia chinensis (Osb.) Merr.
Syn. A. marginata (Lamk.) Merr. A. stipulata Boiv.
Mal: Pottavaka, Pulivaka
San: Sirisa

Distribution: Moist teak bearing and Southern moist mixed deciduous forests.

Soil requirements: Loamy soils, slightly acidic, high in potash and organic carbon and low in phosphate.

Description: A large deciduous tree; bark brownish grey, rough with short irregular cracks. Leaves bipinnate; pinnae 2-3 pairs, with leaflets in between them; leaflets 5-9 pairs broadly oblong, 2.5-3.5 x 1.5-2 cm. Flowers white in globose umbellate heads. Fruit flattened thin; seeds 6-12, ellipsoid-oblong.

Properties: Flowers are aphrodisiac, emollient and maturant. Bark and seeds are astringent, tonic, restorative and alexiteric.

Uses: Leaves are used against night blindness. Flowers are given for asthma. Bark and seeds are used in the treatment of piles, diarrhoea, bronchitis, leprosy, paralysis, gum inflammation and helminthic infections (Sathyavathi, 1976). Root is prescribed for ophthalmia and hemi-crania.

Albizia odoratissima (Linn. f.) Benth.
Mal: Kunniva ka. Nellivaka,

Distribution: Southern moist mixed deciduous, Southern dry mixed deciduous and West coast semi-evergreen forests.

Soil requirements: Sandy clay loam Soils. medium acidic, high in potash and organic carbon and medium in phosphate.

Description: A large deciduous tree: bark rough with irregular cracks. Leaves bipinnate; pinnae 3-8 pairs; leaflets 10-20, oblong falcate. 2-3 cm long Flowers white, in 10-12 flowered heads, in terminal, panicles. Fruits oblong, brown 10-18 cm long:
seeds 8-12, broadly ovate, yellow.

Uses: Bark is applied externally in leprosy and invertebrate ulcers. Leaves are used as a remedy for cough.

*Albizia procera* (Roxb.) Benth.

Mal: Jelavaka. Vellavaka

*Distribution*: Southern moist mixed deciduous and Moist teak bearing forests.

*Soil requirements*: Flourishes in sandy loam, slightly acidic soil with good drainage. high in potash and organic carbon and low in phosphate.

*Description*: A large deciduous tree: bark smooth, yellowish white. Leaves bipinnate. pinnae 3-5 pairs: leaflets 5-10 pairs, obliquely ovate, broad and rounded at the base, 2.5-3.5 x 1.5-2 cm. Flowers greenish yellow. in 12-20 flowered heads arranged in terminal panicles.

*Properties*: Leaves have insecticidal property and they are applied to ulcers as a poultice.

*Entada pursea*tha DC.

Syn. *E. scandens* auct. non Benth.

Mal: Malamanchadi. Paranta

*Distribution*: West coast semi-evergreen and West coast tropical evergreen forests.

*Soil requirements*: Sandy clay loam soils. strongly acidic. high in potash and organic carbon and low in phosphate.

*Description*: A very large woody climber: stem angled, often spirally twisted. Leaves bipinnate, pinnae 1 pair: leaflets 2-5 pairs. oblong, obtuse or emarginate, 3.5-7 x 2-3 cm. Flowers yellow, in simple or panicked spikes. Fruit woody, 30-90 cm long. jointed between the seeds; seeds 6..15. orbicular or orbicular-oblong. dark brown. shining. (Plate IX, Fig. 4)

*Properties*: Stem, bark and seeds are poisonous. Seeds are considered to be tonic. emetic. antiperiodic and anthelmintic.

*Uses*: Juice of wood and bark is used for external application for ulcers. Seeds are applied locally for inflammatory glandular swellings. Powdered kernel is commonly taken by native women after delivery, for allaying the body pains and warding off cold

*Mimosa pudica* Linn.

Mal: Thottavadi

Sari: Lajjalu

*Distribution*: Frequent in forest plantations.

*Soil requirements*: Variety of soils; favours loamy sand. medium acidic soils with low potash and phosphate contents.

*Description*: A small prickly diffuse herb. Leaves bipinnate, pinnae 1-2 pairs; leaflets 12-20 pairs, small, very sensitive. Flowers pink. in axillary globose heads. Fruit covered with stiff bristles; seeds 3-5.

*Properties*: Root is cooling, vulnerary and alexipharmic.

*Uses*: A paste or leaves is applied to glandular swellings. Juice of leaves is used in dressing for sinus and also as an application for sores and piles. Roots are used against biliousness, leprosy. dysentery, vaginal anti uterine complaints. inflammation, burning sensation. fatigue. asthma. leucoderma. piles. jaundice and ulcers. A decoction of the root is considered to be useful in gravelly and other urinary complaints,
Xylia xylocarpa (Roxb.) Taub.
Mal : Irul

Distribution: Moist teak bearing, Southern moist mixed deciduous and West coast semievergreen forests. Occasional in the West coast secondary evergreen forests.

Soil requirements: Variety of soils; grows well on deep well drained loamy soils.

Description: A large deciduous tree, bark reddish-grey. Leaves bipinnate; pinnae 1-pair; leaflets 4-12. oblong, acute or acuminate, rachis with glands. Flowers yellowish, in dense globose heads Fruit woody, falcate-oblong, dark brown, 10-17 x 2.5-5 cm; seeds 6-10 oblong-ellipsoid, compressed.

Properties: Decoction of bark is anthelmintic.

Uses: Bark is used to treat leprosy, vomiting, diarrhoea, gonorrhoea and ulcers. The oil from the seeds is given in rheumatism, piles and leprosy.

Rosaceae

Rubus rugosus Sm

Syn. R. moluccanus auct. non Linn.

Distribution Southern montane wet scrub jungles

Soil requirements: Loamy soils with high content of gravel, medium acidic, well drained. low in potash and phosphate and high in organic carbon.

Description: A straggling shrub with scattered prickles. Leaves simple. ovate, cordate at base, looeea, prominently rugose on both surfaces, white tomentose beneath, 7-15 cm long. Flowers white, in terminal and axillary panicles, shorter than the leaves. Fruit globose, fleshy, red.

Properties: Leaves are astringent, emmenagogue and aborrifacient.

Uses: Fruit is considered to be an useful remedy for the nocturnal micrurition of children.

Crassulaceae

Kalanchoe schwinfurthii Penzig

Syn. K. laciniata auct. non (Linn.) Pers.

Distribution: Southern dry mixed deciduous forests.

Description: A large succulent herb, often pubescent. Leaves very variable, the lower deeply segmented. segments usually narrowly oblong. acute. serrate, the middle stem leaves deeply pinnatisect. the upper entire or nearly so. Flowers yellow, in paniculate cymes.

Properties: Leaf juice is styptic. Succulent leaves allay irritation and promote cicatrization.

Uses: Leaf is used to treat bilious diarrhoea and lithiasis.

Droseraceae

Drosera peltata Sm.

Mal: Thankabhasmachedi

Distribution: Southern montane wet grasslands.

Soil requirements: Sandy loam soils, medium acidic, low in potash, phosphate and organic carbon.

Description: A small herb with buibous root stock. Leaves cauline. peltate, glandular hairy. Flowers white, in terminal racemes.

Uses: Plant is used in the preparation of gold bhasma which used as antisyphilitic, alterative ana
tonic. Crushed leaves are used as a blistering agent.

**Rhizophoraceae**

**Carallia brachiata** (Lour.) Merr.
- Syn. *C. integerrima* DC.
- *C. lucida* Roxb.
- Mal: Vallabham, Varangu
- **Distribution**: West coast semi-evergreen and *Myristica* swamp forests.

**Soil requirements**: Rich deep alluvial loamy soils with undecomposed organic debris.

**Description**: A medium sized to large tree with horizontal branches; bark dark grey, smooth, sometimes corky. Leaves simple, opposite, elliptic to obovate. obtuse. thickly coriaceous. 5-10 x 2.5-5 cm. Flowers sessile, in small heads in axillary trichotomous cymes. Fruit small, globose.

**Uses**: Bark is recommended for itch. Fruits are used in the treatment of ulcers.

**Calycopteris floribunda** (Roxb.) Poir.
- Mal: Pullani
- San: Sushami
- **Distribution**: Southern moist mixed deciduous. Moist teak bearing and Laterite thorn forests.

**Description**: A large straggling shrub; bark pale brown, very thin. Leaves simple, opposite, ovate-lanceolate to elliptic-oblong, softly pubescent, 7-10 x 3-5 cm. Flowers yellowish-green, in terminal panicles. Fruit narrowly ovoid, about 1.8 cm long, crowned by the persistent calyx.

**Properties**: Leaves are astrignent, anthelmintic and laxative.

**Uses**: Leaves are administered as a cure for dysentery and malaria and applied externally for ulcers.

**Combretaceae**

**Anogeissus latifolia** (Roxb. ex DC.) Wall. ex Guill, & Perr.
- Mal: Mazhukkanjiram, Vellanjarna
- San: Dhava
- **Distribution**: Southern moist mixed deciduous, Southern dry mixed deciduous and Moist teak bearing forests.

**Soil requirements**: Loamy sand, slightly acidic soils, loose with good drainage, medium in potash and low in phosphate.

**Description**: A large deciduous tree with drooping branchlets; bark smooth, greyish-brown, flaking off in thin rounded scales. Leaves simple opposite or subopposite. elliptic to suborbicular, obtuse, 5-10 x 3-5 cm. Flowers small, yellowish, in globular heads. Fruit compressed, nearly orbicular, narrowly winged. arranged in dense heads.

**Properties**: Bark is bitter and astrigent. Fruit also is astrigent. Root is pungent, acrid, stomachic and increases biliousness.

**Uses**: Bark is used to treat anaemia, urinary discharges, piles, skin diseases and erysipelas. Leai juice is given in purulent discharges from the ear. Fruit is used against biliousness.
green. Moist teak bearing and Southern moist mixed deciduous forests.

**Soil requirements**: Variety of soils; favours strongly acidic soils with medium potash, low phosphate and high organic carbon contents.

**Description**: A large buttressed tree; bark greyish brown with shallow longitudinal fissures. Leaves simple, alternate, tong petioled, crowded towards the tip of branchlets, ovate, elliptic, acute at base, 10-17 x 7-15 cm. Flowers yellow, small, in axillary slender spikes. Fruit ovoid, 1.2-2.5 cm in diameter, minutely pubescent, obscurely angled when dried. (Plate XII. Fig. 1)

**Properties**: Fruit is one of the 'Tribhala'. It is bitter, astringent, tonic, laxative and antipyretic. Kernel is narcotic.

**Uses**: The water in which the crushed bark has been boiled is used for removing the allergy caused by species of *Semecarpus* and *Holigarna* (Narayana Aiyar & Kolammal, 1963). Fruit is used in the treatment of diseases of liver, maintains youthful vigour and promotes retentive power. It is astringent, laxative, carminative and expectorant.

**Terminalia chebula** (Gaertn.) Retz.
- **Mal**: Kadukka
- **San**: Hareethaki
- **Distribution**: Southern dry mixed deciduous forests.
- **Soil requirements**: Slightly loam soils, well drained having good amount of humus.

**Description**: A medium sized to large tree; bark dark brown, often with shallow vertical fissures. Leaves simple, subopposite. ovate-elliptic or oblong-ovate, acuminate, 6-15 x 3.5-7 cm, petiole with 2 glands at the top. Flowers yellow, in terminal spikes, often panicled. Fruit usually obovoid, greenish-yellow, obscurely 5-ribbed.

**Properties**: Bark is diuretic, and cardiotonic. Fruit is one of the 'Tribhala'. It regulates the function of liver, maintains youthful vigour and promotes retentive power. It is astringent, laxative, carminative and expectorant.

**Uses**: Fruit is used in local application to chronic ulcers and as a gargle in stomatitis. It is used to treat asthma, eye diseases, diseases of heart and bladder, leucoderma, piles, anaemia, elephantiasis and bleeding ulcerations of the gums.

**Terminalia crenulata** Heyne ex Roth
- **Mal**: Kari-maruthu, Thempavu
- **San**: Chayakarna
- **Distribution**: Southern moist mixed deciduous, Moist teak bearing, West coast semievergreen and Southern mixed deciduous forests.
- **Soil requirements**: Silty loam, slightly acidic soils high in potash, low in phosphate and medium in organic carbon.

**Description**: A large tree; bark greyish black with deep vertical fissures and transverse cracks, flaking off in irregular thick flakes. Leaves simple, opposite or subopposite. elliptic-oblong, acute, 15-30 x 3.5-7 cm, with a pair of stalked glands on the lower surface on either side of
the midrib. Flowers small, yellowish, in axillary and terminal panicles. Fruit 5-winged.

**Properties**: Decoction of bark is astringent, diuretic and cardiotonic.

**Uses**: Decoction of bark is taken against diarrhoea and applied locally to ulcers.

**Terminalia paniculata** Roth

*Mal*: Maruthu, Pullamaruthu  
*Distribution*: West coast semi-evergreen, Moist teak bearing, Southern moist mixed deciduous and Southern dry mixed deciduous forests.  
*Soil requirements*: Sandy loam, strongly acidic soils. medium in potash. high in phosphate and organic carbon.  
*Description*: A medium sized to large deciduous tree; bark dark brown becoming rough in old trees. Leaves simple, subopposite, elliptic or elliptic-oblong, acute or acuminate at apex, rounded at base, 7-15 x 4-6 cm, glands present on the lower surface near the base. Flowers small, yellowish, in slender spikes forming compound panicles. Fruit 3-winged, one larger than the other two.  
*Properties*: Bark is diuretic and cardiotonic.  
*Uses*: Juice of the fresh flowers is used as a remedy in cholera and opium poisoning.

**Myrtaceae**

**Rhodomyrtus tomentosa** (Ait.) Hassk.  
*Mal*: Koratta  
*Distribution*: Southern montane wet scrub, Southern montane wet temperate forests.  
*Description*: A large shrub; bark reddish brown. peeling off in thin long flakes Leaves simple, opposite. elliptic or obovate, mucronate, basally 3-5 ribbed. 3-6 x 3-3.5 cm Flowers white solitary or in axillary cymes Fruit purple, crowned by the persistent calyx  
*Uses*: The fruit is used in Malaya as a medicine against diarrhoea.

**Syzygium cumini** (Linn.) Skeels  
*Syn*: S.jambolanum DC.  
*Mal*: Njara, Njaval, Perinjara  
*San*: Mahajambu  
*Distribution*: Southern montane wet scrub, Southern montane wet temperate forests.  
*Soil requirements*: Loamy sand, slightly acidic soils with impeded drainage. low in potash, phosphate and organic carbon.  
*Description*: A large evergreen tree; bark grey or greyish brown. Leaves simple. subopposite, elliptic, lanceolate. lateral nerves unites to form intramarginal nerves, 5-12 x 3-6 cm. Flowers white, slightly fragrant, in panicled cymes. Fruit purplish black. fleshy, oblong or globose, 1.5-2 cm in diameter  
*Properties*: Bark is astringent and anthelmintic. Juice of ripe fruit is stomachic, carminative and diuretic. It strengthens gums and teeth.  
*Uses*: Bark is used in the treatment of diabetes. diarrhoea, dysentery, sore throat, bronchitis, asthma and biliousness. Juice of leaves also is given for dysentery. Fruit is an useful astringent in bilious diarrhoea and a good lotion for ring worm on the head. Seeds are used against diabetes.
**Syzygium caryophyllatum** (Linn.) Alston

*Syn. Eugenia caryophyllaea* Wight

*Mal* : Njara

*San* : Kshudrajdmbu. Hrsvajambu

*Distribution* : West coast semi-evergreen forests, mostly seen along the banks of streams.

*Soil requirements* : Medium acidic soils with high moisture retentiivity.

*Description* : A small tree; bark grey, smooth. Leaves simple, opposite, obovate, obtuse or emarginate. Lateral nerves unite to form intramarginal nerves, 3-5 x 2-4 cm. Flowers white, in corymbose cymes. Fruit globose, black, fleshy.

*Properties* : Tender leaves improve appetite, roots and leaves purify blood.

*Uses* : Bark is used as a remedy in diarrhoea. Impure blood and phlegm. Leaves are applied to ulcers in the genital organs. Decoction of leaves is used in acidity. Root is given to stop vomiting and root bark is beneficial in anemia.

**Syzygium hemisphericum** (Walp.) Alston


*Distribution* : West coast tropical evergreen forests.

*Soil requirements* : Loamy soils, loose, slightly acidic. Medium in potash, low in phosphate and high in organic carbon.

*Description* : A large evergreen tree. Leaves simple, opposite, elliptic or ovate-lanceolate. Acuminate, 10-16 x 5-8 cm. Lateral nerves unite at the margin to form intramarginal nerves. Flowers creamy white, in axillary and terminal panicled cymes. Fruit hemispherical, purple, crowned by the persistent calyx lobes.

*Uses* : Decoction of bark is used to treat biliousness and syphilis.

**Lecythidaceae**

**Barringtonia acutangula** (Linn.) Gaertn.

*Mal* : Attupazhu, Nirpezhu

*San* : Samudraphala, Vidula

*Distribution* : Southern moist mixed deciduous and West coast semi-evergreen forests, mostly seen along the banks of streams and rivers.

*Soil requirements* : Clayey soils with impeded drainage. Strongly acidic. Medium in potash and high in phosphate.

*Description* : A small to medium sized tree; bark dark brown, rough. Leaves simple. crowded at the tip of branches, oblanceolate, crenate-serrate, 6-15 x 2.5-7.5 cm. Flowers pink, in large terminal penndulous racemes. Fruit bluntly 4-angled.

*Properties* : Leaves and roots are used as tonic. Fruit is astringent, vulnerary, alexipharmic, galactagogue and antheimintic. Seed is emetic and expectorant. Root is cooling, aperient and emetic, and possess properties similar to cinchona (Ahmed, 1969).

*Uses* : Leaf juice is given in diarrhoea. Fruit is used in the treatment of biliousness, diseases of the blood, bronchitis, sore eye, headache, hallucinations, gleet and syphilis. Powdered seed is used as a snuff in headache.

**Careya arborea** Roxb.

*Mal* : Pezhu

*San* : Kadabhee
**Distribution**: Southern moist mixed deciduous, Moist teak bearing and Laterite thorn forests.

**Soil requirements**: Sandy loam soils with good drainage, slightly acidic, high in potash and organic carbon and low in phosphate.

**Description**: Small to medium sized tree; bark dark grey, flaking off in thin narrow strips. Leaves simple, clustered at the end of branchlets, obovate or oblong, obtuse or shortly acuminate, crenate. 12-30 x 7-15 cm; leafbase usually decurrent on the petiole. Flowers yellowish white, in terminal spikes. Berry globose, 5-7 cm in diameter, crowned by the persistent calyx lobes and style.

**Properties**: Bark is antipyretic and antipruritic in eruptive fevers. Bark, flowers and fruits are astringent and demulcent.

---

**Melastomaceae**

**Melastoma malabathricum** Linn.

*Mal*: Kadali, Kalampetti

**Distribution**: West coast tropical evergreen, West coast semievergreen and Southern montane wet scrub forests.

**Soil requirements**: Clayey soils with impeded drainage, strongly acidic with low potash and phosphate contents.

**Description**: A large shrub. young parts densely covered with brown scales. Leaves simple. opposite, elliptic. or elliptic-lanceolate, 3-5 ribbed, 5-10 x 1.5-3.5 cm. Flowers purple, in few flowered terminal corymbose panicles.

**Uses**: A decoction of bark is prescribed as a gargle in catarrhal pharyngitis and aphthae and as lotion for scabies and ulcers. Leaves are used in the treatment of diarrhoea and dysentery. Leaves and flowers are given as astringent in leucorrhoea and chronic diarrhoea in Indo-China.

**Memecylon angustifolium** Wight

*Mal*: Attukanila

**Distribution**: West coast tropical evergreen and West coast semievergreen forests.

**Soil requirements**: Loamy sand. slightly acidic soils with good drainage.

**Description**: A large shrub to a small tree. Leaves simple. opposite, linear-lanceolate. obtuse at apex. secondary nerves not prominent. up to 7x1.2 cm. Flowers small, purplish blue. in subumbellate cymes. Berry globose, black purple, about 0.5 cm in diameter.

**Properties**: Bark is used as a tonic and refrigerant.

**Memecylon umbellatum** Burm. f.  
*M. edule* Roxb.

*Mal*: Kaasavu, Kayampu

**Distribution**: Occasional in the West coast semievergreen forests. Mostly grown in villages.

**Description**: A large shrub to a small tree; bark thin, light brown. Leaves simple, opposite. ovate-lanceolate, lateral nerves obscure. Flowers small. blue, in axillary or extra axillary cymes. Fruit black. purple. 0.6 cm in diameter.

**Properties**: Leaves are cooling and astringent.

**Uses**: Leaves are given internally in leucorrhoea and gonorrhoea. It is used as a lotion in conjunctivities.
decoction of the root is useful in excessive menstrual discharges.

**Osbeckia parvifolia** Arn.


Mal : Cherukadali

**Distribution** : Southern montane wet scrub and Southern montane wet grass-lands.

**Soil requirements** : Marshy areas; favours sandy loam soils, medium acidic; low in potash and phosphate and high in organic carbon.

**Description** : A small herb. Leaves simple, opposite ovate or elliptic-ovate, acute, 3-ribbed. up to 4 x 2 cm. Flowers white or pink in capitate heads. Fruit ovate-oblong, obscurely ribbed.

**Uses** : Whole plant is pounded and applied to swellings.

**Lythraceae**

**Lagerstroemia reginae** Roxb.


Mal : Chemmaru . Manimaruthu

**Distribution** : Mostly seen along the river banks in west coast semi-evergreen. Moist teak bearing and Myristica swamp forests.

**Soil requirements** : Sandy loam soils with impeded drainage, slightly acidic; low in potash and phosphate and high in organic carbon.

**Description** : A medium to large deciduous tree. often buttressed; bark smooth, greyish-yellow or pale brown, peels off in thin irregular strips. Leaves simple, opposite or sub-opposite, ovate. lanceolate, rounded at base, about 15x8 cm. Flowers pink, in showy terminal panicles

**Properties** : Bark and leaves are purgative. Seeds are narcotic Root is astringent, stimulant and febrifuge.

**Uses** : Fruit is used as a local application for aphthae of the mouth.

**Onagraceae**

**Ludwigia octovalvis** (Jacq.) Raven


Mal : Kattukarayampu
San : Bhulavanga

**Distribution** : in all forest types, seen along the sides of streams.

**Description** : An erect hairy undershrub. Leaves simple. alternate. lanceolare, acute, 5-7 x 1.5 cm. Flowers yellow. solitary axillary

Fruit 2.5-4 cm long, 8-ribbed. pubescent, seeds numerous minute.

**Properties** : A decoction of the plant is vermifuge and purgative. Root is antipyretic.

**Uses** : Plant is considered useful in the treatment of dysentery

**Passifloraceae**

**Adenia hondala** (Gaertn.) de Wilde


Mal: Muthakku, Karimuthakku

**Distribution** : West coast tropical evergreen and West coast semi-evergreen forests.

**Soil requirements** : Silty clay loam with poor drainage. strongly acidic with high potash phosphate and organic carbon.

**Description** : A large tendril bearing climber with tuberous roots; stem thickened at the modes. Leaves simple alternare, palmately 3–5 lobed rarely undivided. glandular in
sinuses. Flowers greenish yellow, in axillary cymes. Fruit a capsule, about 5 cm long; seeds many.

**Properties**: Tubers are galactagogue; improve memory and strength.

**Uses**: Juice of leaves and roots is used externally for skin diseases. Flowers are used against biliousness. Tubers are used as a remedy in rheumatism, biliousness, burning sensation, tuberculosis and sterility.

**Passiflora foetida** Linn.

Mal : Chadayan. Poochappazham

**Distribution**: Seen in forest plantations.

**Description**: A slender tendril bearing climbing herb. Leaves alternate, simple, lobed. basally 3-5 nerves. Flowers white, axillary, solitary. Fruit a berry, orange-yellow, about 1.5 cm in diameter. surrounded by the persistent pectinate calyx.

**Properties**: Leaf is an emmenagogue. Fruit is emetic.

**Cucurbitaceae**

**Diplocyclos palmatus** (Linn.) C. Jeffrey

Syn. *Bryonopsis laciniosa* non (Linn.) Nand.

Mal : Neyunni. Sivavalli

**Distribution**: Seen in forest plantations also in the open areas in forests.

**Description**: A slender scabrous tendril bearing climbing herb. Leaves alternate, simple, lobed. basally 3-5 nerves. Flowers white, axillary, solitary. Fruit a berry, orange-yellow, about 1.5 cm in diameter. surrounded by the persistent pectinate calyx.

**Properties**: Leaf is an emmenagogue. Fruit is emetic.

**Solena heterophylla** Lour.


Mal : Njerinjampuli
San : Amlavethasa

**Distribution**: Southern moist mixed deciduous and Southern dry mixed deciduous forests.

**Description**: A slender tendril bearing climbing herb with a thick root stock. Leaves simple, deeply palmately lobed. Flowers small in axillary fascicles. Fruit a berry, red with white vertical lines, about 1.2 cm in diameter.

**Properties**: Plant is bitter, aperient. It is also used as a tonic.

**Uses**: Plant is used in the treatment of bitious attack and fevers with flatulence. Pounded leaves are applied to inflammation.
Fruit ribbed, oblong, red, often striped with yellow, up to 6 cm long.

**Properties:** Seeds are purgative.

**Uses:** Leaf juice is applied to inflammation caused by marking nut. Root juice is used as a remedy for spermatorrhoea.

**Trichosanthes tricuspidata** Lour.


Mal: Kakkathonti. Valiyakattuvelli

**Distribution:** West coast tropical evergreen and West coast semievergreen forests.

**Description:** A large woody climber with tendrils. Leaves simple, deeply palmately lobed, very variable. Male flowers white, in racemes with large conspicuous bracts. Female flowers solitary, white. Fruit a large, globose berry, red, orange-streaked.

**Properties:** Fruit is cathartic, hydragogue, carminative. purgative and abortifacient. The seeds are emetic and purgative.

**Uses:** Fruit is used against ophthalmia, leprosy, asthma, hemicrania and rheumatism.

**Trichosanthes cucumerina** Linn.

Mal: Kaippan-padavalam, Kattupadavalam
San: Padola

**Distribution:** Occasional in Southern moist mixed deciduous and Southern dry mixed deciduous forests. Mostly seen in scrub jungles.

**Description:** A stout climbing shrub with tendrils. Leaves simple, ovate-cordate, acute at apex. 12-18 x 7.5-9 cm. Flowers dioecious, very small, in pendulous racemes. Fruit elongate-cylindric, clavate, truncate at apex, about 10 cm long.

**Properties:** Plant is a febrifuge. Fruit is acrid, aperient, and cathartic.

**Uses:** Leaves are used to reduce inflammation. antispasmodic afflictions and nervous irritation caused by boils. Fruit is beneficial in asthma and cough.

**Zanonia indica** Linn.

**Distribution:** Southern moist mixed deciduous and West coast semievergreen forests in North Kerala.

**Description:** A stout climbing shrub with tendrils. Leaves simple, ovate-cordate, acute at apex. 12-18 x 7.5-9 cm. Flowers dioecious, very small, in pendulous racemes. Fruit elongate-cylindric, clavate, truncate at apex, about 10 cm long.

**Properties:** Plant is a febrifuge. Fruit is acrid, aperient, and cathartic.

**Uses:** Leaves are used to reduce inflammation. antispasmodic afflictions and nervous irritation caused by boils. Fruit is beneficial in asthma and cough.

**Datiscaeaceae**

**Tetrameles nudiflora** R. Br.

Mal: Cheeni

**Distribution:** West coast semi-evergreen, West coast tropical evergreen, Moist teak bearing and Southern moist mixed deciduous forests.
**Soil requirements**: Variety of soils, favours loamy soils with good drainage, slightly acidic and medium in organic carbon.

**Description**: A large deciduous buttressed tree; bark greyish white with transverse wrinkles and lenticels. Leaves simple, crowded at the tip of branchlets, broadly ovate, acuminate. Cordate at base. serrate, 7.5-15 cm in each way. Flowers small. Yellowish-green, male in panicles. Female in pendulous racemes. Fruit an urceolate capsule crowned by the persistent calyx. about 0.6 cm long.

**Properties**: Bark is laxative and diuretic.

**Uses**: Decoction of bark is used against rheumatism. Edema and ascites.

---

**Cactaceae**

*Opuntia dillenii* (Ker-Gawler) Haworth

*Mal* : Chattuka Kalli. *Nagamulla*  
**Distribution**: Southern dry mixed deciduous forests and Scrub jungles.  
**Soil requirements**: Clay loam soils, slightly acidic, medium in potash and organic carbon and high in phosphate.  
**Description**: A shrub with jointed, flattened, fleshy stem, with clusters of sharp spines. Leaves absent, flowers yellow, large.

**Properties**: Latex of the plant is purgative. Fruit is refrigerant.

**Uses**: Leaf juice is applied to the eyes in cases of ophthalmia. It hastens the suppuration of boils. Fruit is used against whooping cough.

---

**Umbelliferae**

*Centella asiatica* (Linn.) Urban  
*Syn. Hydrocotyle asiatica* Linn.  
*San* : Mandookaparni  
**Distribution**: Seen along the sides of water courses in forest plantations.  
**Soil requirements**: Sandy loam soils, medium acidic, low in potash and phosphate and high in organic carbon.  
**Description**: A prostrate herb. Rooting at the nodes. Leaves simple. Orbicular-cordate, crenate. up to 5 cm in diameter. Long petioled. Flowers small, reddish in axillary few flowered umbels.

**Properties**: Plant is a general tonic. Continuous usa improves physical strength, digestive power, com-
plexion. voice, intellectual faculties and memory power.

**Uses**: The juice of the leaves may be taken as a tonic. It is used against diseases of the skin, nerves and blood and epilepsy. Leaves are used as a poultice and have marked stimulating and healing action. An ointment prepared from the leaves is used in case of elephantiasis, enlargement of scrotum and affections of the cellular tissue.

**Hydrocotyle javanica** Thumb.

*Distribution*: West coast tropical evergreen and Southern hilltop tropical evergreen forests.

*Soil requirements*: Variety of soils. loose and slightly acidic.

*Description*: A prostrate herb. rooting at the nodes. Leaves simple, orbicular cordate. 7-9 lobed, 2.5-8 cm in diameter, long petioled. Flowers white, small, in compound umbels.

*Properties*: Plant is a cooling tonic, alterative arid diuretic. It is reported to be insecticidal.

*Uses*: Leaves are used as a blood purifier. They are also used against nervousness, indigestion and dysentery.

**Hydrocotyle sibthorpioides** Lamk.

*Syn. H. rotundifolia* Roxb. ex DC.

*Distribution*: Southern montane wet temperate forests and Southern montane wet scrub jungles.

*Soil requirements*: Loose. clay loamy, strongly acidic soils.

*Description*: A small prostrate herb. rooting at the nodes. Leaves simple, orbicular -cordate, 7-lobed, 0.2-1.2 cm in diameter. Flowers small, white, in slender umbels.

*Properties*: Plant juice is emetic, vermifuge and diuretic.

*Uses*: Plant is used against rheumatism, pulmonary and digestive troubles, and skin diseases. In Assam the leaves are applied to boils for suppuration. In China the leaves are chewed in case of liver complaints.

**Pimpinella heyneana** Wall.

*Distribution*: In grasslands and West coast tropical evergreen forests above 800 m elevation.

*Soil requirements*: Loamy sand. medium acidic. soils along the slopes, low in potash and phosphate and high in organic carbon.

*Description*: An erect annual herb. Leaves 3-foliolate; leaflets ovate. serrate. sometimes lateral leaflets deeply divided. Flowers small, white. in compound umbels. Fruit glabrous. ovoid. didymous.

*Properties*: Root is febsifuge.

**Alangiaceae**,

**Alangium salvifolium** (Linn. *f.*) Wang

Mal: Ankolam, Azhinjil, Irinjil
San: Ankola

*Distribution*: Southern moist mixed deciduous, Southern dry mixed deciduous and Laterite thorn forests.

*Soil requirements*: Loamy and, medium acidic soils with low potash and phosphate contents.

*Description*: A small deciduous. often spinescent tree: bark yellowish grey. Leaves simple, alternate. elliptic-lanceolate: basally 3-5 ribbed.
5-15 x 1.5-5 cm. Flowers white, in axillary fascicles. Fruit a globose purplish red berry; 1-seeded.

**Properties**: Fruit is cooling and nutritive. Root is laxative and anthelmintic.

**Uses**: Leaves are used as a poultice in rheumatic pains. Root bark is recommended for fever and skin diseases.

**Rubiaceae**

**Anthocephalus chinensis** (Lamk.) Rich. ex Walp.
- *A. cadamba* Miy.

**Kadampu**
- San: Kulsithanga

**Distribution**: West coast semi-evergreen forests, mostly seen along the banks of streams.

**Soil requirements**: Clayey soils with impeded drainage, medium acidic, medium in potash and low in phosphate.

**Description**: A large deciduous tree with spreading horizontal branches: bark brownish grey with shallow vertical fissures. Leaves simple, opposite, ovate-oblong, up to 30 cm long and 12 cm broad. pubescent below. Flowers small, yellow, in showy globose heads.

**Properties**: Bark is tonic, febrifuge, astringent, aphrodisiac. galactagogue, vulnerary and alexiteric. The new sprouts of the plants are stomachic and aphrodisiac.

**Uses**: Bark is used to treat uterine complaints and biliousness. The sprouts are used against leprosy and dysentery. Decoction of leaves is used as a gargle in cases of aphthae and stomatitis.

**Borresia articularis** (Linn. f.) F. N Will.
- *Mal. Tharuthaval*

**Distribution**: Southern dry mixed deciduous forests and Scrub jungles.

**Soil requirements**: Sandy loam soils with good drainage, slightly acidic, low in organic carbon.

**Description**: A small herb. Leaves simple, opposite. subessile, obleng or elliptic, scabrid, 1-2.5 x 0.8-2 cm; stipules with long bristles. Flowers pink, in axillary clusters. Seeds brown, finely granulate, 0.3-0.4 cm long. (Plate X. Fig. 1)

**Properties**: Seeds are stimulant. Decoction of the root is alterative.

**Canthium dicocum** (Gaertn.) Teys. & Binn.
- Syn. *C. didymum* Gaertn.
- *Mal Irumparappi*

**Distribution**: Southern moist mixed deciduous, and Southern dry mixed deciduous forests.

**Soil requirements**: Variety of soils; favours loamy soils, loose, slightly acidic.

**Description**: A small evergreen tree; bark smooth, dark grey. Leaves simple, opposite, ovate, acuminate. 4-11 x 2-5 cm. Flowers white, in axillary corymbs. Fruit a globose drupe, black, about 0.8 cm long.

**Uses**: Bark is recommended for fever.

**Catunaregam spinosa** (Thumb.) Tirvengadum
- Syn. *Xeromphis spinosa* (Thumb.)
**Randia dumetorum** Lamk.

**Māl** : Kara, Malankara

**San** : Madana

**Distribution** : Southern moist mixed deciduous and Southern dry mixed deciduous forests.

**Soil requirements** : Variety of soils; favours loamy soils with good drainage and slightly acidic.

**Description** : A large shrub with axillary spines. Leaves simple, opposite, obovate, obtuse or acute, about 2.5 cm long; stipules ovate-acuminate. Flowers creamy yellow, solitary or 2-3 at the ends of short lateral branchlets. Fruit globose or ovoid, yellow, 2.5-4 cm long; seeds many, embedded in gelatinous pulp.

**Properties** : Bark is astringent. Pulp of the fruit is anthelmintic, abortifacient, aphrodisiac, carminative, alexiteric and antipyretic. Fruit is antispasmodic and sedative.

**Uses** : Bark is externally applied as an anodyne in rheumatism. Leaves are used against pulmonary infections. Pulp of the fruit is applied to the tongue and palate for incidental ailments of children during teething. It is also used to treat ulcers, leprosy and skin diseases.

**Ceriscoides turgida** (Roxb.) Tirvengadum


*G. montana* Roxb.

**Māl** : Malankara

**Distribution** : Southern dry mixed deciduous and Laterite thorn forests.

**Soil requirements** : Variety of soils. It is a characteristic tree of poor dry sandy areas, dry rocky hill sides, laterite and stiff clay soils.

**Description** : A small deciduous tree with numerous thick stout, sometimes leafbearing thorns; bark bluish grey, smooth. Leaves simple, opposite, oblong or semioblong, obtuse, pubescent below. 7.5-10 x 2.5-5 cm. Flowers yellowish, axillary, solitary or in clusters. Fruit a berry, 5-7.5 cm long; seeds many, embedded in pulp.

**Uses** : A preparation of root is given to children in case of indigestion.

**Chassalia ophioxyloides** (Wall.) Craib

Syn. *C. curviflora* Thw.

**Māl** : Vellakurinji

**Distribution** : West coast tropical evergreen, West coast semievergreen forests.

**Soil requirements** : Clay loam with impeded drainage, strongly acidic and high in organic carbon.

**Description** : An undershrub. Leaves simple, opposite, elliptic, oblanceolate or obovate. acute or acuminate.10-15 x 4-7.5 cm. Flowers pinkish white, with a yellow tinge at the mouth of the corolla, in terminal cymes. Fruit a berry, black, about 0.8 cm in diameter.

**Uses** : Leaves and root are applied externally to wounds and ulcers. A decoction of root is used to treat rheumatism, pneumonia, ear and eye diseases and sore throat.

**Geophila repens** (Linn.) I. M. Johnston

Syn. *G. reniformis* D. Don

**Distribution** : West coast semi-evergreen forests.

**Description** : A small prostrate herb, rooting at the nodes. Leaves orbicular, deeply cordate, 1-3.5 cm in diameter. Flowers white, terminal,
Haldina cordifolia (Roxb.) Ridsd.

Syn. Ao'ina cordifolia (Roxb.) Hook.f. ex Brandis
Mal : Manjakadambu
San : Dharakadamba

**Distribution**: Southern moist mixed deciduous, Moist teak bearing and West coast semievergreen forests.

**Soil requirements**: Sandy loam soils with good drainage, medium acidic.

**Description**: A large deciduous tree; bark grey, Leaves simple, opposite, orbicular-cordate, acuminate, pubescent beneath, 10-28 cm in diameter. Flowers yellow, in globose heads.

**Properties**: Bark is febrifuge, antiseptic, tonic, vulnerary and aphrodisiac. Root is astringent.

**Uses**: Plant juice is used to kill worms in sores. Bark cures inflammations, biliousness and diseases of the blood and skin.
Description: A shrub. Leaves simple, opposite, oblanceolate, sessile or shortly peduncled corymbose cymes. Fruit purple, globose.

Properties: Leaves, flowers and roots are astringent, antiseptic, cholagogue and sedative (Mooss, 1978)

Uses: Leaves, flowers and roots are highly beneficial in skin diseases. Itch and boils; also effective in erysipelas and burning sensation. Water boiled with the leaves is an effective wash in skin diseases, itch and painful boils. Oil prepared with the flowers is used for external application in itch and skin eruptions. Flower buds are used in the treatment of conjunctivitis and redness of the eyes. The root is said to be effective in dysentery, gonorrhoea, leucorrhoea, hiccough and nausea. An infusion or decoction of the roots is used as a gargle in sore throat. A decoction of the root is effective against a particular variety of leprosy (Mooss, 1978).

Mitragyna parvifolia (Roxb.) Korth.
Syn. Stephegyne parvifolia Roxb.
Mal: Neerkadampu, Veempu
Distribution: Southern moist mixed deciduous and West coast semi-evergreen forests.

Soil requirements: In the slope; favours slightly acidic soils with low potash and phosphate and high organic carbon.

Description: A large deciduous tree. Stem fluted or sometimes buttressed; bark brownish or greenish grey, smooth, flaking off in small scales. Leaves simple, opposite, orbicular, oblanceolate, ovate or obovate. Base cuneate to truncate, 5-12 x 2.5-7 cm. Flowers yellowish, in globose heads.

Uses: Bark is applied for muscular pains. Bark and roots are given in cases of fever and colic.

Morinda coreia Buch.-Ham.
Syn. M. tinctoria Roxb.
Mal: Manjanathi
Distribution: Southern dry mixed deciduous forests.

Soil requirements: Sandy loam, well drained loose soils.

Description: Small to medium sized tree; bark corky, pale brown, deeply cracked. Leaves simple, opposite, elliptic-lanceolate, acute, 10-15 x 5-7 cm. Flowers white, in globose heads. Fruit a syncarpium, about 2 cm in diameter.

Properties: Leaves and fruits are deobstruent and emmenagogue (Dey, 1973). Root is an astringent.

Uses: Leaves are used in medicines for heart diseases. The tunic 'Arjunaarishta' is prepared with the leaves (Joseph, 1977). Root is used as a cure to boils.

Morinda umbellata Linn.
Mal: Kudalchurukki
Distribution: West coast semi-evergreen, Southern moist mixed deciduous and; Southern dry mixed deciduous forests.

Soil requirements: Silty loam, loose soils with good drainage slightly acidic, high in potash, phosphate and organic carbon.

Description: A diffused climbing shrub with milky latex. Leaves simple, opposite, elliptic-lanceolate, membraneous, 8-13 x 2.5-4 cm.
wers small, white, in many branched terminal umbels.

*Uses*: A decoction of leaves is recommended for diarrhoea and dysentery.

*Mussaenda glabrata* (Hook.f.) Hutch. ex Gamble

Mal: Vellila  
San: Sreeparni  
*Distribution*: Southern moist mixed deciduous and West coast semievergreen forests.  
*Soil requirements*: Variety of soils, favours slightly acidic soils with medium organic carbon.  
*Description*: A climbing shrub with nearly glabrous branchlets. Leaves simple, opposite, broadly ovate, acuminate, 8-13 x 7-9 cm. Flowers yellow, in terminal cymes. One of the sepals enlarged into a white leafy structure.  
*Properties*: Flowers are diuretic.

*Uses*: A decoction of root expels phlegm and it is a cooling agent.

*Mussaenda laxa* (Hook.f.) Hutch. ex Gamble

Mal: Vellila  
*Distribution*: Southern moist mixed deciduous and West coast semievergreen forests.  
*Soil requirements*: Variety of soils; favours slightly acidic soils with good drainage, medium in organic carbon.  
*Description*: A climbing shrub, branchlets softly hairy. Leaves simple, opposite, ovate-acuminate, 6-10 x 6.5-8 cm. Flowers orange yellow in terminal lax cymes; one of the sepals enlarged into a white leafy structure.  
*Properties*: Flowers are diuretic. A decoction of root is given against aphthae and white leprosy.

*Ophiorrhiza mungos* Linn.

Mal: Avilpori  
*Distribution*: West coast tropical evergreen and Southern hill-top tropical evergreen forests.  
*Soil requirements*: Loamy, loose, strongly acidic soils, high in organic carbon.  
*Description*: A herbaceous undershrub. Leaves simple, opposite, elliptic or elliptic-lanceolate, acuminate at apex, attenuate at base, 8-13 x 3-6 cm. Flowers white, in subumbellate cymes. Fruit a small obcordate capsule.  
*Properties*: Root is bitter, tonic, anthelmintic and alexipharmic.

*Pavetta indica* Linn.

Mal: Pavatta  
*Distribution*: Southern moist mixed deciduous and Moist teak bearing forests.  
*Soil requirements*: Variety of soils, favours medium acidic soils, low in organic carbon.  
*Description*: A large shrub to a small tree: branchlets pale brown,
subquadrangular, thick. Leaves simple, opposite, elliptic or obovate, very variable in shape. Flowers white, in showy terminal corymbose cymes.

**Properties** : Root is bitter and aperient.

**Uses** : Leaves are used for fomenting haemorrhoidal pains. Root is prescribed in visceral obstructions and dropsy.

**Rubia cordifolia** Linn.

Mal : Manchatti
San : Manjishta

**Distribution** : West coast semi-evergreen and Southern hill-top tropical evergreen forests at elevations above 500 m.

**Description** : A climbing scabrous herb. Leaves simple, in whorls of 4, ovate-cordate, basally 5-7 ribbed, long petioled. Flowers very small, greenish white, in axillary and terminal cymes. (Plate X, Fig. 2)

**Properties** : Root is tonic, alterative, astringent, alexiteric, antidiysenteric, antipyretic, analgesic and anthelmintic. It improves the voice and complexion. It is known to have anticancerous activity (Anon, 1980).

**Uses** : Leaves cure biliousness. Fruit cures diseases of the spleen. Root is used to treat diseases of the uterus, leucoderma, erysipelas, ulcers, urinary discharges, jaundice and piles.

**Tarenna asiatica** (Linn.) O. Ktze. ex Schum.

*Chomelia asiatica* 0. Ktze.

Mal : Kattuchethi

**Distribution** : West coast tropical evergreen forests.

**Xeromphis uliginosa** (Retz.) DC.

Syn. *Randia uliginosa* (Retz.) DC.


**Distribution** : Southern moist mixed deciduous, Southern dry mixed deciduous and Laterite thorn forests.

**Soil requirements** : Sandy loam soils with good drainage, slightly acidic and medium in organic carbon.

**Description** : A small thorny, deciduous tree; bark reddish brown, scaly; branchlets often terminate in short thorns. Leaves simple, opposite, obovate or oblanceolate, obtuse or sometimes acuminate, pubescent beneath, 5-10 x 2-5 cm. Flowers white, solitary at the ends of suppressed branches. Fruit ovoid, smooth, crowned by the persistent calyx, 5-6 cm long; seeds numerous, embeded in the pulp.

**Properties** : Unripe fruit is astrin-gent. Root is diuretic and haematinic.

**Uses** : Fruits and roots are used as a remedy in dysentery and diarrhoea.

**Valerianaceae**

**Valeriana arnottiana** Wight

**Distribution** : Southern montane wet grasslands.
Soil requirements: Loamy sand, medium acidic soils.

Description: A tall herb with stout rootstock. Leaves 4-8 cm long, unequally pinnate; leaflets 5-9, the lowest pair alternate, the others opposite, all coarsely dentate. Flowers small, white, in terminal panicles. Fruit with pappus hairs.

(Plate X. Fig. 4)

Properties: The drug 'Indian Valerian' is extracted from the plant. It is an insect repellant. The drug yields a derivative which is useful as a tranquilizer (Yoganarasimhan, 1978).

Uses: It is prescribed as a remedy for hysteria, hypochondriasis, nervous unrest and emotional troubles (Yoganarasimhan. 1978).

Valeriana beddomei C.I.

Distribution: Southern montane wet scrub and Southern montane wet grasslands.

Soil requirements: Loamy sand strongly acidic soils with poor drainage.

Description: A herb with thick roots. Leaves 10-25 cm long, pinnate; leaflets many, narrow, linear. The end one ovate, entire or dentate, glabrous, or softly pubescent. Flowers small, in terminal corymbosely cymes. (Plate X, Fig. 3)

Uses: The drug 'Indian Valerian' is extracted from the roots (Yoganarasimhan. 1978).

Valeriana hookeriana Wight & Arn.

Distribution: Southern montane wet scrub and Southern montane wet grasslands.

Soil requirements: Loamy sand, strongly acidic soils, and poorly drained.

Description: A tall pubescent herb. Leaves pinnate; leaflets 7 or more, ovate, usually crenate-dentate. Flowers small, white, in corymbose cymes. Fruit ribbed and hairy.

Uses: The drug 'Indian Valerian' is extracted from the roots (Yoganarasimhan. 1978.)

Valeriana leschenaultii DC.

Distribution: Southern hill-top tropical evergreen, Southern montane wet scrub and Southern montane wet grasslands.

Description: A large perennial herb. Leaves usually simple, sometime one or two small leaflets below the end one, radical leaves ovate, acute, truncate or cordate at base; long petioled. Flowers small, pink, in terminal corymbose cymes.

Properties: Root is stimulant, carminative and anti-spasmodic.

Uses: Root is used to treat hysteria, epilepsy, cholera and neurosis.

Compositae

Ageratum conyzoides Linn.

Mal: Appa
San: Pishamushti

Distribution: Mostly seen in forest plantations and open areas in moist forests.

Soil requirements: Sandy loam soils, well drained medium acidic, low in potash and phosphate and high in organic carbon.

Description: A softly hairy annual herb. Leaves simple, opposite,
ovate, crenate, 5-7 x 2.5-9 cm. Flowers small, bluish-white, in corymbose heads.

Properties: Leaves are styptic and it is said to prevent tetanus. Root juice is antilythic.

Uses: Leaves are applied to cuts and sores. A cold decoction of the root is used as a lotion in purulent ophthalmia. It is used to treat rheumatism also.

Artemisia nilagirica (Cl.) Pamp.
Syn. A. vulgaris auct. non Linn.
Mal: Thirunithripacha

Distribution: Southern montane wet scrub forests. Also seen along the sides of road cuttings in forests and plantations above 800 m elevation.

Soil requirements: In the slopes having good drainage, favours loose soil, medium in potash, phosphate and organic carbon.

Description: A shrub, strongly scented. Leaves alternate, lower leaves ovate in outline, deeply pinnatisect, pubescent above and white tomentose beneath; uppermost trifid or entire. Flowers small, greenish white, in small heads arranged in panicles.

Properties: Plant is emmenagogue, anthelmintic, antiseptic, stomachic, deobstruent, antispasmodic and alterative. Root has tonic and antiseptic properties.

Uses: Infusion of leaves and flowering twigs is administered in nervous and spasmodic affections, in asthma and diseases of the brain.

Blumea lacera (Burm. f.) DC.
Mal: Venapacha
San: Kukkuradru

Distribution: Southern moist mixed deciduous forests. Also seen in forest plantations.

Soil requirements: Sandy loam soils in the slopes with good drainage, strongly acidic, low in potash and phosphate.

Description: A large glandular pubescent herb with a strong odour of turpentine. Leaves elliptic-oblong or obovate, obtuse or subacute often incised or lyrate, pubescent, 3.5-7 x 2-6 cm. Flowers yellow, arranged in small heads in short axillary cymes and terminal panicles.

Properties: Plant is bitter and antipyretic. Juice of the leaves is anthelmintic, astringent, febrifuge; stimulant and diuretic.

Uses: Root is used in the treatment of Cholera.

Elephantopus scaber Linn.
Mal: Anachuvadi

Distribution: Southern moist mixed deciduous and Southern dry mixed deciduous forests.

Soil requirements: Sandy clay loam soils with good drainage, strongly acidic, medium in potash and low in phosphate.

Description: A stiff herb. Leaves simple, radical, obovate-oblong, rounded or subacute, coarsely serrate-dentate, sparsely hairy on both surfaces, base tapering into an obscure petiole, 10-20 x 3.5-6 cm. Flowers violet, in small heads on long peduncle.

Properties: Plant is astringent, cardiac tonic, alterative, febrifuge, antipyretic and alexipharmic. A decoction of leaves and root is emollient. Flowers are aphrodisiac and expectorant.
Uses: Plant is used in the treatment of diseases of blood. A decoction of leaves and roots is used to treat dysuria, diarrhoea, dysentery and swelling or pain in the stomach. Bruised leaves are applied to ulcers and eczema. Flowers cure biliousness and liver troubles. Root is given to arrest vomiting.

Emilia sonchifolia (Linn.) DC
Mal: Muyalchevi
San: Sasasruthi
Distribution: Seen in forest plantations.
Soil requirements: Variety of soils, favours sandy loam, slightly acidic soils with good drainage.
Description: An erect or diffuse slender herb. Leaves simple, very variable, lyrate or obovate. toothed or entire; the cauline more or less amplexicaul and auricled. Flowers purplish, in heads arranged in lax corymbs.
Properties: Decoction of plant is a febrifuge.
Uses: Decoction of the plant is given against tympanites and bowel complaints. Leaf juice is used to treat eye inflammation and nightblindness. Roots are recommended for diarrhoea. The juice of the plant boiled with equal quantity of coconut oil is applied on the head against tonsilitis. A paste prepared from the plant is applied over the throat.

Notonia grandiflora DC.
Distribution: Southern dry mixed deciduous and Laterite thorn forests.
Description: A succulent shrub. Leaves simple, obovate or elliptic-lanceolate, fleshy, 5-10 x 2.5-6 cm.

Siegesbeckia orientalis Linn.
Distribution: Southern montane wet scrubs.
Soil requirements: Clay loam, strongly acidic soils.
Description: A large annual pubescent herb. Leaves simple, opposite, ovate acute or acuminate, 5-9 x 2.7-6 cm. Flowers yellow, in heads, the outer involucre with large viscid glandular hairs.
Properties: Plant is depurative, sialagogue, anthelmintic and cardiotonic.
Uses: Plant is used in the treatment of urethral diseases, skin diseases, ulcers and sores.

Spilanthes calva DC.
Syn: S. acmella auct non (Linn.) Murr
Mal: kuppamanjal
Distribution: Mostly seen along the water courses in forest plantations and along road cuttings in forests.
Soil requirements: Variety of soils in moist areas.
Description: Annual herb rooting at the nodes. Leaves simple, opposite, ovate, crenate, 2-3 5 x 1-2 cm. Flowers yellow, in axillary and terminal heads. Achenes compound, ciliate on the margins.
Properties: Plant is a powerful mosquitocidal larvicide.
Uses: Flowers are used to relieve toothache. Seeds are chewed.
to produce salivation when the mouth is dry.

**Taraxacum officinale** Weber.

*Distribution*: Introduced, grows wild in forest plantations at Munnar.

*Soil requirements*: Clay loam soils at high elevations with imeded drainage slightly acidic, medium in potash, high in phosphate and organic carbon.

*Description*: A herb with thick root stock and milky latex. Leaves radical, pinnatifid, margins spinescent. Flowers yellow, on long peduncled solitary heads.

*Properties*: Root is diuretic, and aperient. It is also used as a tonic.

*Uses*: Leaves are used for fomentation. Root is used as a remedy for chronic disorders of kidney and liver.

**Tricholepis glabrerrima** DC.

*Distribution*: West coast semi-evergreen forests.

*Soil requirements*: Loamy soils with good drainage, medium acidic and high in organic carbon.

*Description*: An erect glabrous herb with angular stem. Leaves simple, opposite, linear-oblong, shortly auricled, sessile, 2.5-6 x 0.3-0.6 cm. Flowers purple, in terminal heads.

*Properties*: Plant is considered as nervine tonic and aphrodisiac.

*Uses*: Plant is used in the treatment of leucoderma, skin diseases and seminal debility.

**Vernonia cinerea** (Linn.) Less.

*Mal*: Poovaankurunthal
*San*: Sahadevi

*Distribution*: Southern moist mixed deciduous forests. Also seen in forest plantations.

*Soil requirements*: Sandy soils, slightly acidic with medium potash and high phosphate contents.

*Description*: An erect annual herb. Leaves simple, alternate, ovate or lanceolate, the margin undulate toothed, very variable in size. Flowers pink or lilac in small heads, arranged in panicles.

*Properties*: Plant is diaphoretic. Seeds are anthelmintic and alexipharmic.

*Uses*: A decoction of plant is used to promote perspiration in febrile conditions, as a remedy for spasm of the bladder and strangury. Plant juice is given to cure piles. Root recommended for dropsy and flowers are administered for conjunctivities.

**Wedelia chinensis** (Osb) Merr.

*Syn.* *W. calendulacea* Less.

*Mal*: Manjakruinji
*San*: Peethabhringaraja

*Distribution*: Southern moist mixed deciduous forests.

*Soil requirements*: Variety of soils, favours sandy loam, slightly acidic soils with good drainage and medium organic carbon.

*Description*: A procumbent perennial herb, stem rooting at the nodes. Leaves simple, opposite, linear-oblong or oblanceolate, sub sessile, entire or crenate, 2.5-7 x 1-3 cm. Flowers yellow, in solitary, slender, long peduncled heads.

*Properties*: A decoction of the plant is used as deobstruent. Leaves are alterative and are used as a tonic.
Uses: Decoction of the plant is given in uterine haemorrhage and menorrhagia. Leaves are used to treat cough, cephalalgia and skin diseases.

Lobeliaceae

*Lobelia leschenaultiana* (Presl.) Scotsb.
Mal: Kattupukayila

*Distribution*: Southern montane wet scrub and Southern montane wet grasslands.

*Soil requirements*: Clay loam strongly acidic soils with impeded drainage, low in potash and phosphate and high in organic carbon.

*Description*: A large, usually biennial herb, stem hollow. Leaves simple, crowded, linear-oblong, serrate, softy hairy, thick. Flowers pale yellow, tinged with purple, in dense terminal spike.

*Properties*: Latex of the plant is extremely acrid.

*Uses*: Leaves are smoked in the same way as tobacco.

*Lobelia nicotianaefolia* Roth ex Roem. & Schult.
Mal: Kattupukayila

*Distribution*: Frequently seen in forest clearings at altitudes above 800 m in all forest types.

*Soil requirements*: Variety of soils with good drainage.

*Description*: A large perennial herb with hollow stem. Leaves simple, crowded, linear-oblong, margin toothed, nearly glabrous. Flowers white, tinged with lilac, in large terminal racemes.

*Properties*: Leaves are stomachic and diuretic. An infusion of leaves is antispasmodic.

*Uses*: Leaves are smoked in the same way as tobacco.

Ericaceae

*Gaultheria fragrantissima* Wall.

*Distribution*: Southern montane wet scrub and Southern montane wet temperate forests.

*Soil requirements*: Clay loam soils strongly acidic, low in potash and phosphate and high in organic carbon.

*Description*: A shrub. Leaves simple, alternate, oblong, acute, crenate, coriaceous, 7-12 x 3-6 cm. Flowers white or yellowish, in axillary racemes. (Plate XI, Fig. 1)

*Properties*: Oil from leaves is aromatic, stimulant, carminative and antiseptic.

*Uses*: Oil from leaves is used as a flavouring agent especially for dentifrices. It is used to treat rheumatism and neuralgia.

*Rhododendron arboreum* Sm.
Mal: Kattupoovarasu

*Distribution*: Southern montane wet temperate forests.

*Soil requirements*: Clay loam soils with impeded drainage, favours strongly acidic, low in potash and phosphate and high in organic carbon.

*Description*: A small tree, bark reddish-brown, about 2 cm thick, peels off in small flakes. Leaves simple, crowded at the tips of branchlets, elliptic-oblong, coriaceous, glabrous above, densely pubescent below, 7-12 x 4-6 cm. Flowers dark crimson, in showly terminal fascicles.
Uses: Young leaves are crushed and applied to forehead for headache. Flowers are used in the treatment of dysentery (Santapau & Henry, 1973).

Plumbaginaceae

Plumbago zeylanica Linn.
Mal: Veluthakoduveli
San: Swethachithraka
Distribution: Southern dry mixed deciduous and Laterite thorn forests.
Soil requirements: Sandy loam, slightly acidic soils well drained, low in organic carbon.
Description: A perennial under-shrub. Leaves simple, alternate; oovate, subacute, 3-7.5 x 2-3.5 cm, petiole amplexicaul at base and dialated into stipule like auricles, Flowers white, in elongated spikes; calyx glandular pubescent,
Properties: Said to possess properties similar to those Plumbago indica, but appears to be milder in action. Plumbagin, isolated from the plant is found to exhibit anti-cancer, antibacterial and antifungal activities (Krishnaswamy and Purushothaman, 1980).
Uses: This is commonly used for Citrakah by the physicians of North India. In Kerala, however, P. zeylanica is sparingly used, and that too only as a substitute for P. indica, whenever that is not available (Mooss, 1978).

Myrsinaceae

Ardisia solanacea Roxb.
Distribution: West coast semi-evergreen and West coast tropical evergreen forests, above 500 m elevation.

Soil requirements: Clay loam soils, poorly drained. Strongly acidic and high in organic carbon.
Description: A large shrub to a small tree, bark brown, smooth. Leaves simple, alternate, crowded at the tips of branchlets, ovate or oblanceolate, acute or acuminate. Attenuate at base, 8-20 x 4-6 cm. Flowers pink, in axillary and extra axillary umbellate racemes on about 5 cm long peduncles. Fruit a berry, black, about 0.7 cm in diameter. (Plate XI, Fig 3).
Properties: Plant is credited with carminative and stimulant properties. Root is a febrifuge.
Uses: Roots are used to treat diarrhoea and rheumatism.

Embelia ribes Burm. f.
Mal: Vizhal
San: Krimighna
Distribution: West coast tropical evergreen and Southern hill-top tropical evergreen forests.
Description: A large scandent shrub; bark dark brown, lenticellate. Leaves simple, alternate, elliptic or elliptic-oblong, acute, 5-7.5 x 2-3.5 cm. Flowers very small, white, in terminal panicked racemes. Fruit globose, 0.3-0.4 cm in diameter, black when ripe. (Plate XI, Fig 2)
Properties: Dried fruit is stomachic, anthelmintic, astringent, alterative and tonic. Fruits have anti-fertility activity (Arora, et al., 1971). Aquous extract of the fruit show antibacterial activity against Staphylococcus aureus and Escherichia coli.
Uses: Fruits are used against fevers, bronchitis, and diseases of chest and skin. Infusion of roots is
given in cases of cough and diarrhoea.

In Kerala for 'Krmighna' the fruits of *Embelia tsjeriam-cottam* are used.

*Embelia tsjeriam-cottam* (Roem. & Schult.) DC.

*Distribution*: Southern dry mixed deciduous and Southern moist mixed deciduous forests.

*Soil requirements*: Variety of soils. favours loamy, slightly acidic soils.

*Description*: A large shrub to a small tree; bark brown, horizontally cracked. Leaves simple, alternate, elliptic-obovate, entire or sometimes slightly dentate. 5-11 x 2.5-5 cm. Flowers small, greenish-white, in axillary and extra-axillary racemes. Fruit black, globose, 0.3-0.4 cm in diameter.

*Properties*: Fruit is antispasmodic, carminative and anthelmintic.

*Uses*: Fruit is used to treat piles. Dried bark of the root is used against toothache.

*Maesa indica* (Roxb.) DC.

*Syn. M. perrottetiana* DC.

*Mal*: Kireethi

*Distribution*: Southern montane wet scrub forests. Also frequently seen in forest clearings above 500 m elevations.

*Soil requirements*: Loose clay loam. strongly acidic soils.

*Description*: A shrub to a small tree. Leaves simple, ovate-oblong or elliptic-lanceolate, acute or acuminate, serrate. 7-15 x 3.5-7 cm. Flowers small, white, in axillary racemes. Fruit a small berry, creamy white.

*Properties*: Fruits are anthelmintic.

*Uses*: Root is recommended for syphilis.

*Sapotaceae*

*Madhuca longifolia*, (Koenig) Mc Bride

*Syn. Bassia longifolia* Koenig

*Mal*: Nattilippa

*San*: Madhukam

*Distribution*: West coast tropical evergreen and Southern hill-top tropical evergreen forests.

*Soil requirements*: Variety of soils, prefers sandy soils.

*Description*: A large tree; bark smooth, dark yellowish grey, exudes a milky exudation when cut. Leaves simple, crowded at the end of branchlets, linear-lanceolate or oblanceolate, 7.5-12.5 x 3.5-5 cm. Flowers white, in axillary fascicles of 2-8. Fruit a berry, ellipsoid, about 4 cm long.

*Properties*: Bark decoction is used as an astringent and emollient. Flowers are laxative, stimulant and anthelmintic.

*Uses*: Bark decoction and oil from seeds are good for skin diseases. Gummy juice is used to treat rheumatism.

*Madhuca neriifolia* (Moon) Lam

*Syn. Bassia malabarica* Bedd.

*Mal*: Attilippa, Kattilippa

*Distribution*: West coast tropical evergreen forests, mostly seen along the river banks.

*Soil requirements*: Occurs in loamy, poorly drained, slightly acidic soils.
Description: A medium sized tree; bark dark brown. Leaves simple, crowded at the tips of branchlets, linear-oblong or oblanceolate, acute or obtuse, 7.5-25x2.5-6 cm. Flowers yellowish white, in clusters of 4-10, axillary or from the scars of fallen leaves. Fruit ellipsoid, about 2.5 cm long.

Properties: Flowers are cooling and nutritive.

Uses: Flowers are used in the treatment of kidney complaints. Fruits are recommended in cases of rheumatism, biliousness, consumption asthma and worm trouble. Oil from seeds is used to treat rheumatism and for improved growth of hair.

Manilkara hexandra (Roxb.) Hubard
Syn. Mimusops hexandra oxb.
Mal: Pazhamunpala
Distribution: Dry evergreen forests.

Soil requirements: Variety of soils from pure sand to clayey loam, best growth is obtained in deep sandy loam and on soils overlying limestone.

Description: A small tree; bark blackish grey with conical protuberances, exudes a milky latex when cut. Leaves simple, alternate, elliptic-obovate, emarginate, 5-10 x 4-5 cm. Flowers pale yellow, axillary, solitary or in fascicles of 2-6. Berry reddish yellow, ellipsoid. 1.3 cm long.

Properties: Bark is astringent, demulcent, emollient and alterative. Fruit is an aphrodisiac. Bark and fruit have tonic properties.

Uses: Leaf extract is given against vaginal discharges. Fruit is used against biliousness, consumption, hallucination and leprosy.

Mimusops elengi Linn.
Mal: Ilanji
San: Bakula
Distribution: West coast tropical evergreen and West coast semievergreen forests.

Soil requirements: In the slope; favours sandy loam, poorly drained, medium acidic soil with low potash and phosphate and high organic carbon.

Description: A large evergreen tree; bark dark grey with shallow vertical fissures. Leaves simple, alternate, elliptic-oblong, shortly acuminate, very glossy, 5-10 x 3-5 cm. Flowers white, fragrant, in axillary clusters of 2-6. Berry ovoid, yellow, about 2.5 cm long. ((Plate XI, Fig. 4)

Properties: Bark is astringent, alexipharmic, and anthelmintic. Cooling and diuretic. It is not easily digestible. The flowers and fruits are astringent and sweet (Mooss. 1978).

Uses: A decoction of the bark forms a good gargle in odontalgia, inflammation of the alvioli as also in excess salivation (Mooss. 1978). Pulp of the ripe fruit is used against dysentery.

Ebenaceae

Diospyros candolleana Wight
Mal: Karimaram
Distribution: West coast tropical evergreen forests.

Soil requirements: Variety of soils from pure denuded soils on hill slopes to deep soils in moist valleys; good growth is obtained in loamy soils with dominant clay fractions.
**Description**: A medium sized tree; bark smooth greenish-black. Leaves simple, alternate, elliptic-oblong, shortly acuminate; the lateral nerves inconspicuous, 7-17 x 3.5-7 cm. Flowers pale yellow, male in dense fascicles; female 1-5, in sessile axillary or extra axillary clusters. Fruit ovoid, pointed, 2 cm long, green.

**Uses**: Decoction of the root bark is given in rheumatism and swellings

**Diospyros montana** Roxb.
- **Mal**: Malayakathi
- **Distribution**: West coast semi-evergreen forests.
- **Soil requirements**: Variety of soils, loam medium acidic, high in organic carbon.

**Description**: A small to medium sized tree; bark thin, grey or greyish black. Leaves simple, alternate, ovate or elliptic, obtuse or subacute at apex, pubescent when young, 2.5-7 x 1-2.5 cm. Flowers white; male in axillary cymes; female solitary. Fruit globose, apiculate, 2-3.5 cm in diameter, reddish yellow.

**Properties**: Fruit is poisonous
**Uses**: Fruit is applied externally to boils.

**Diospyros paniculata** Dalz.
- **Mal**: Karivella
- **Distribution**: West coast tropical evergreen and West coast semi-evergreen forests.

**Soil requirements**: Slightly acidic sandy loam soils with good drainage.

**Description**: A medium sized tree; bark black, rough. Leaves simple, alternate, oblong or oblong-lanceolate, obtusely acuminate. 7.5-18 x 2.5-5 cm. Flowers greenish white; male in few flowered axillary pedunculate cymes with conspicuous bracts; female solitary. Fruit ovoid, 2.5-4 cm long, green, densely tomentose.

**Uses**: Powdered bark is used in the treatment of rheumatism and ulcers. Powdered fruits are applied to burns. Decoction of the fruit is given in gonorrhoea to purify blood and in biliousness.

**Diospyros peregrina** (Gaertn.) Gurke.
- **Syn.**: *D. embryopteris* Pers.
- **Mal**: Panachi
- **San**: Athimukthaka. Virala
- **Distribution**: Seen along the river banks and sides of back waters. Commonly found in clayey soils.

**Description**: A medium sized evergreen tree; bark dark grey, smooth. Leaves simple, alternate, oblong, obtuse or subacute at apex, 12-20 x 5-7.5 cm. Flowers pale yellow; male in axillary cymes; female solitary. Fruit globose, 3.5-7 cm in diameter, yellowish red.

**Properties**: Bark and fruits are astringent. Unripe fruit is acrid, bitter and oleaginous.
**Uses**: Infusion of fruits is used as gargle in aphthae and sore throat. Fruit juice is used as an application for wounds and ulcers. Oil of the seeds is given in diarrhoea and dysentery.

**Diospyros topolia** Ham.
- **Distribution**: West coast tropical evergreen forests in South Kerala.

**Soil requirements**: Loamy soils with good drainage, medium acidic, high in organic carbon.
**Description**: A large evergreen tree; bark thick, black or dark greyish brown. Leaves simple, alternate, ovate or ovate-lanceolate, rounded at both ends, 10-20 x 3.5-7.5 cm. Flowers pale yellow; male in axillary few flowered pedunculate cymes; female solitary. Fruit ovoid, 2.5-5 cm in diameter, green scurfy pubescent.

**Uses**: Gum exuded from the freshly cut trees is used as a remedy for toothache.

**Symplocaceae**


**Mal**: Pachotti  
**San**: Lodhra  

**Distribution**: West coast tropical evergreen forests.

**Soil requirements**: Variety of soils with good drainage.

**Description**: A small tree; bark light grey, thin. Leaves simple, alternate, ovate-lanceolate, narrowed at the base, obtuse or shortly acuminate, irregularly toothed or entire, glabrous and shining, 7.5-14 x 2.5-5 cm. Flowers small, white, in compound axillary spikes. Fruit globose, faintly ribbed, 0.5 cm in diameter. (Plate XII, Fig. 2)

**Properties**: Bark is cooling, astringent and alexiteric. The flowers are pungent, acrid, cooling and astringent.

**Uses**: Bark is used against menorrhagia, bowel complaints, eye diseases and ulcers. A decoction of the bark is used as a gargle for giving firmness to spongy and bleeding gums.

**Oleaceae**

**Jasminum angustifolium** Vahl  
**Mal**: Kattumallika  
**San**: Vanamallika, Asphota

**Distribution**: Southern moist mixed deciduous, Moist teak bearing and West coast semievergreen for ests.

**Soil requirements**: Variety of soils with good drainage.

**Description**: Climbing shrub. Leaves simple, opposite, ovate, acute, rounded at base, 2.35 x 1-2 cm. Flowers white, tinged with purple in 1-3 flowered cymes. Corolla lobes lanceolate. acuminate, slightly fragrant.

**Properties**: Root is bitter.

**Uses**: Root is applied externally in cases of ringworm.

**Jasminum bignoniaceum** Wall. ex DC. Syn. *J. humile* Linn.

**Mal**: Manjakurumozhi  
**San**: Hemapushpika

**Distribution**: Southern montane wet scrub and Southern montane wet temperate forests.

**Soil requirements**: Clay loam soils with impeded drainage. strongly acidic, high in organic carbon

**Description**: An erect shrub with angular branches. Leaves alternate, imparipinnate; leaflets small, 5-15, ovate, acute, cuspidate. Flowers yellow, rather large, in short few flowered cymes, opposite to the leaves. Fruit black, globosa.

**Properties**: Flowers are astringent. They act as a tonic to the heart and bowels.

**Uses**: Milky juice of the plant is used far removing the unhealthy lining walls of chronic sinuses and fistulas.
**Jasminum ritchiei** Cl.

*Distribution*: West coast tropical evergreen forests.

*Soil requirements*: Variety of soils; favours slightly acidic soils with high organic carbon content.

*Description*: A much branched climbing shrub. Leaves simple, opposite. Elliptic, acuminate, cuneate at base, 3.5-10 x 2-4.5 cm, glabrous above and hairy on the nerves below. Flowers white, in 3-9 flowered cymes, corolla lobes linear, acute.

*Uses*: Leaves are used against toothache. Flowers are used in the treatment of piles.

**Jasminum rottlerianum** Wall. ex DC.

Mal: Vellakattumulla

*Distribution*: West coast tropical evergreen forests.

*Description*: A scandent fulvous hairy shrub. Leaves simple, opposite, elliptic, acute or acuminate, base usually rounded, 4-10 x 2.5-4 cm, pubescent below. Flowers white, in terminal dense cymes.

*Uses*: Leaves are recommended in case of eczema.

**Myxopyrum smilacifolium** Bl.

Syn: *M. serratum* A. W. Hill

Mal: Chathuravalli. Chathuramulla

*Distribution*: West coast tropical evergreen and West coast semi-evergreen forests.

*Description*: A large climbing shrub with angular branches. Leaves opposite. Lanceolate, acuminate, serrulate, 12-20 cm long. Flowers small, yellowish in trichotomous panicles. (Plate XII, Fig. 3)

*Uses*: Leaves are used as a remedy in asthma, cough, rheumatism and nervous complaints.

**Olea dioica** Roxb.

Mal: Edana, Vidana

*Distribution*: West coast semi-evergreen, Southern moist mixed deciduous and Moist teak bearing forests.

*Soil requirements*: Sandy medium acidic soils, with low potash, phosphate and organic carbon contents.

*Description*: A small to medium sized tree; bark brown, rough. Leaves simple, opposite, elliptic or ovate-lanceolate. Tapering at the base, remotely toothed or entire, 10-20 x 5-10 cm. Flowers dioecious, small, white, in divaricate axillary panicles. Fruit an ovoid drupe, about 1 cm long.

*Properties*: Bark is a febrifuge.

**Olea glandulifera** Wall.

*Distribution*: Southern montane wet temperate forests.

*Soil requirements*: Loamy sand, medium acidic soils, low in potash and phosphate and high in organic carbon.

*Description*: A small to medium sized tree; bark grey. Leaves simple, opposite, rhomboid lanceolate, elliptic or ovate, acuminate. Cuneate at base, up to 10 x 5 cm. Glandular in the nerve axils. Flowers white, corolla deeply lobed, in axillary and terminal panicles. Fruit a drupe, ovoid.

*Properties*: Bark and leaves are astringent and antiperiodic.
Apocynaceae

Alstonia scholaris (Linn.) R. Br.
   Mal : Ezhilampala, Pala
   San : Sapthachada
   Distribution : Southern moist mixed deciduous and Moist teak bearing forests.
   Soil requirements : Variety of soils with good drainage.
   Description : A medium sized to large tree; bark greyish brown, rough, lenticellate; exudes a milky latex when cut. Leaves simple, in whorls of 5-10, obovate or elliptic-oblong, obtuse or sometimes acute, 10-20 x 3.5-6 cm. Flowers greenish white, in terminal capitate cymes. Fruits cylindric, pendulous, 25-60 cm long and 3 mm in diameter.
   Properties : Bark acts as a bitter tonic, alterative and febrifuge in malaria.
   Uses : Bark is used in the treatment of diarrhoea, dysentery, liver complaints, skin diseases and rheumatic pains. Milky juice is applied to ulcers.

Alstonia venenata R. Br.
   Mal : Theepalla
   Distribution : Southern moist mixed deciduous and Southern dry mixed deciduous forest at elevations about 500 m.
   Description : A large shrub; bark light brown, thin. Leaves simple, in whorls of 3-6, oblong-lanceolate, acuminate, cuneate at base, 10-20 x 2-4 cm. Flowers white, in subumbellate, pedunculate cymes. Fruit falcately curved, tapering at both ends, 7-12 x 1 cm.
   Properties : Ripe fruit acts as a tonic, antiperiodic and anthelmintic.
   Uses : Ripe fruit is used in the treatment of syphilis, insanity and epilepsy.

Anodendron paniculatum (Roxb.) DC.
   Distribution : Southern moist mixed deciduous and West coast semievergreen forests.
   Description : A very large climbing shrub: bark brown, thick, smooth. Leaves simple, opposite, elliptic or oblong, shortly acuminate, rounded at base, glabrous and shining, 8.5-15 x 3.5-6.5 cm. Flowers small, yellow, in large terminal and axillary paniculate cymes. Fruit terete, narrowed from the base, 10-15 cm long.
   Properties : Root is emetic and expectorant.
   Uses : Root is prescribed in case of amoebic dysentery.

Carissa spinarum Linn.
   Mal : Cherumulchedi, Mulli
   Distribution : Southern dry mixed deciduous forests and Scrub jungles.
   Soil requirements : Loamy sand slightly acidic soils, well drained, usually along the slopes, low in potash and phosphate and medium in organic carbon.
   Description : A suberect or prostrate spinescent shrub, spines very sharp, often bifurcated. Leaves simple, opposite, elliptic, acute or obtuse, mucronate, acute at base 2.5-4 x 1-2 cm. Flowers white, sometimes tinged with pink, in few flowered corymbose cymes, usually terminal. Fruit a berry, subglobose. 0.6 cm in diameter, dark purple.
   Properties : Fruit is stomachic, antiscorbutic, refrigerant and digestive.
**Uses**: Root is used for making purgatives. Ground root is applied in worm-infested sores of animals. The root roughly ground and mixed with water drives away snakes by its smell. It is said that snakes avoid any plot or ground surrounded by a hedge of this plant.

**Chonemorpha fragrans** (Moon) Alston  
Syn. C. macrophylla G. Don  
Mal : Appuppanthadi  
*Distribution*: West coast tropical evergreen and West coast semi-evergreen forests.  
*Description*: A large climbing shrub with milky latex. Leaves simple, opposite, suborbicular 12-30 cm in either way. Flowers large, white, fragrant, in erect racemose cymes. Fruit a pair follicle, about 25 cm long; seeds many with silvery white hairs at the apex.  
*Properties*: Stem and roots are Yaxative and antibilious.  
*Uses*: Stem and roots are prescribed in cases of rheumatism, impure blood, chest diseases, leprosy, itches and fever.

**Holarrhena pubescens** (Buch. - Ham.) Wall. ex DC.  
Syn. H. antidysenterica (Roth) Wall. ex DC.  
**H. codaga** G. Don  
**Wrightia antidysenterica** Grah.  
Mal : Kudakappala  
San: Kudaja  
*Distribution*: Southern moist mixed deciduous and Moist teak bearing forests.  
*Soil requirements*: Sandy soils with good drainage.  
*Description*: A small tree with milky latex; bark greyish brown, smooth. Leaves simple, opposite, ovate-oblong or elliptic, acute or acuminate. 8-15 x 5-8 cm. Flowers creamy white, in terminal corymbose cymes. Fruits narrow, long pendulous follicles, seeds many, linear-oblong, about 1 cm long, tipped with brown hairs. (Plate XIII, Fig. 1)

*Properties*: The bark is pungent, astringent, cooling and digestive stimulant. The seeds are acrid, bitter, hot in action. easily digestible and digestive stimulant (Mooss, 1978).  
*Uses*: Bark is used against piles, diarrhoea, haemorrhages, indigestion and skin diseases. A decoction of the seeds with little honey is very beneficial in diarrhoea and dysentery. This is useful against bleeding piles also (Mooss, 1978).

**Ichnocarpus frutescens** (Linn) R. Br.  
Mal : Palvalli  
San : Syamalata  
*Distribution*: Southern moist mixed deciduous and Southern dry mixed deciduous forests.  
*Soil requirements*: Sandy clay loam soils with good drainage, slightly acidic, medium in potash and organic carbon and low in phosphate.  
*Description*: An extensively branched climbing shrub with slender rusty villous branches. Leaves simple, opposite, elliptic or lanceolate 4-7 x 2-3.5 cm. Flowers small, white, in terminal and axillary paniculate cymes. (Plate XIII, Fig. 2)  
*Properties*: Root acts as an alterative and tonic. It is said that root has properties similar to *Hemidesmus indicus*. It is diuretic and diaphoretic.
**Uses**: Leaves are recommended in case of fever. Roots are used in the treatment of skin eruptions.

**Rauvolfia serpentina** (Linn.) Benth. ex Kurz
- **Mal**: Amalpori, Sarpagandhi
- **San**: Sarpagandha

**Distribution**: Southern moist mixed deciduous and Moist teak bearing forests.

**Soil requirements**: Variety of soils, favours clay to clay loam, strongly acidic soils with plenty of humus, low in phosphate and medium in potash contents.

**Description**: An undershrub. Leaves simple, in whorls of three, lanceolate. acute or acuminate, 7-17 x 2.5-3.5 cm. Flowers in many flowered corymbose cymes; corolla white, tinged with violet; calyx and pedicels bright red, especially in fruit. (Plate XII. Fig. 4)

**Properties**: The air dried roots possess several alkaloids, the most important being reserpine which has a depressant action on the central nervous system and produces sedation and lowering of blood pressure.

**Uses**: Root is used as a remedy in painful afflictions of the bowel. A decoction of roots is given to increase uterine contraction, is administered in case of mild anxiety and chronic phychosis for its tranquilizing action.

**Tabernaemontana heyneana** Wall. ex A. DC.
- **Mal**: Kundalappala, Kunnanpala.

**Distribution**: West coast semi-evergreen and Moist deciduous forests.

**Soil requirements**: Sandy clay loam soils with good drainage, slightly acidic with medium potash and low phosphate contents.

**Description**: A small deciduous tree; bark grey, exudes a milky latex when cut. Leaves simple, opposite, elliptic-oblong or lanceolate, shortly acuminate, 7-18 x 4-7.5 cm. Flowers white, in many flowered pedunculate cymes. Fruit a pair of curved, boat-shaped, orange coloured follicles; seeds surrounded by red pulp.

**Uses**: Milky juice is used to treat eye diseases. Root is used as local anodyne.

**Vallaris solanacea** (Roth) O. Ktze.
- **Mal**: Vishappala

**Distribution**: Southern dry mixed deciduous forests.

**Description**: A large woody climbing shrub; bark greyish white, smooth, exudes a milky latex when cut. Leaves simple, opposite, elliptic-lanceolate or oblong-lanceolate, acuminate, glands often present in the axils of lateral veins, 5-10 x 2.5-3.5 cm. Flowers creamy white, fragrant. in axillary cymes.

**Uses**: Milky juice is applied to wounds and ulcers (Kirtikar & Basu, 1935; Chopra et al., 1956).

**Wrightia tinctoria** (Roxb.) R. Br.
- **Mal**: Nilappala, Thontappala

**Distribution**: Southern dry mixed deciduous and Southern moist mixed deciduous forests.
Soil requirements: In the slopes in sandy loam soils, slightly acidic, low in potash and phosphate and medium in organic carbon.

Description: A small deciduous tree; smooth, yellowish grey, exudes a milky latex when cut. Leaves simple, opposite, elliptic-oblong, acuminate or caudate, 7.5-15 x 2.5-6 cm. Flowers white, in terminal cymes. Fruit of two distinct pendulous follicles, cohering at the tip; seeds 1-2 cm long, with a tuft of deciduous hairs at the tips.

Properties: Bark is tonic. Seeds are aphrodisiac. The other medicinal properties are reported to be the same as those of Holarrhena pubescens.

Asciepiadaceae

Calotropis gigantea (Linn.) R. Br.
Mal: Erikku
San: Arka

Distribution: Southern dry mixed deciduous forests and scrub jungles.

Soil requirements: Sandy loam soils with good drainage; slightly acidic with low potash, high phosphate and medium organic carbon contents.

Description: A large shrub, with milky latex; young parts adpressed woolly tomentose. Leaves simple, opposite, obovate or oblong, acute or acuminate, subsessile, 10-20 x 3.5-10 cm. Flowers purplish or white in lateral umbellate cymes. Fruits oblong, 8-10 cm long; seeds many, with a tuft of hairs at the tip.

Properties: Root is pungent, hot in action, digestive, stimulant and purgative. Root bark is emetic, diaphoretic and expectorant.

Uses: Tincture of leaves is given in cases of intermittent fevers and leprosy. It is applied to paralysed parts. swellings and wounds. The juice of the young leaves is often recommended to be poured into the ears in case of ear-ache (Mooss, 1977). Powdered flowers are used in colds, coughs, asthma and indigestion. Root bark is given against dysentery, leprosy, secondary syphilis and rheumatism.

Cosmostigma racemosum (Roxb.) Wight

Mal: Vattu valli

Distribution: Southern moist mixed deciduous and Southern dry mixed deciduous forests.

Description: A twining shrub. Leaves simple, opposite, ovate, cordate, acuminate at apex, 7.5-12 x 5-7.5 cm. Flowers small greenish, in axillary or sublateral cymes. Fruit oblong, bluntly pointed, 7-12 cm long.

Properties: Root bark is chologogue.

Uses: Leaves are used to cure ulcerous sores. Root bark is useful in dyspepsia accompanied by fever.

Gymnema sylvestre (Retz.) Roem. & Schult.

Mal: Chakkarakolli
San: Meshasringi, Madhunasini

Distribution: Southern moist mixed deciduous forests.

Description: A large climbing shrub with milky latex. Leaves simple, opposite, ovate, elliptic, acute or shortly acuminate. pubescent or subglabrous, 3-5 x 1-3 cm. Flowers yellow. in densely pubescent cymes. (Plate fig. 3)
Properties: The plant is stomatchic, stimulant, laxative and diuretic. Root is emetic and expectorant. The leaves of the plant when chewed possess the property of suppressing sweet and bitter tastes for a few hours, however sour, astringent and pungent tastes remains unaffected. Gymnemic acid present in the leaves has been identified as the antiglucoseric agent of the leaves (Stocklin. et al., 1967)

Uses: The plant is said to be useful in cough, biliousness and sore eyes.

Hemidesmus indicus (Linn.) R. Br.
Mal: Narunanti, Nannari
San: Sariba

Distribution: Southern dry mixed deciduous, Laterite thorn forests and Southern moist mixed deciduous forests.

Soil requirements: Variety of soils

Description: A slender climbing herb with thickened roots. Leaves simple, opposite, very variable, usually elliptic-lanceolate. Flowers small, yellowish purple, in axillary subsessile cymes. (Plate XIII, Fig. 4)

Properties: Root is demulcent, alterative, diaphoretic, diuretic and tonic.

Uses: Root is recommended for fever, skin diseases, leucorrhoea, syphilis and rheumatism.

Holostemma adakodien Schult.
Syn. H. annulare (Roxb.) K. Schum.
Mal: Adakodien, Adapathiyan
San: Jeevanthi

Distribution: Southern moist mixed deciduous and Southern dry mixed deciduous forests.

Description: A large glabrous twining shrub with thick roots. Leaves simple, opposite, ovate-oblong, acuminate, deeply cordate, 7-5-12 x 5-7.5 cm. Flowers fairly large, pinkish, in few flowered axillary cymes. Fruit linear-oblong, 10-15 cm long. (Plate XIV, Fig. 1)

Properties: The roots are sweet cooling, revitalising, roborant, good for the voice, not easily digestible, and good for the eyes (Mooss, 1977).

Uses: The roots boiled in milk is a good tonic and also effective as an aphrodisiac (Mooss, 1977). The paste made from the roots is applied to the eyes in case of ophthalmia and is used as a remedy for scalding in gonorrhoea. Root is also useful against diabetes and spermatorrhoea.

Oxystelma secamone (Linn.) Karst.
Syn. O. esculentum R. Br.
Mal: Kinikinippala

Distribution: Southern dry mixed deciduous forests.

Description: A glabrous twining herb with milky latex. Leaves simple, opposite, linear-lanceolate, 2-8 x 0.3-0.8 cm. Flowers large, pink or white, in lateral, 2-4 flowered subumbellate cymes. Fruit 3.5-6 cm long.

Uses: Decoction of the plant is used as a gargle in aphthous ulcerations of mouth and in sore throat. Latex also is used as a wash for ulcers. Root is considered specific for jaundice.
Pergularia daemia (Forsk.) Chiov.
Syn. *P. extensa* N. E. Br.
*Daemia extensa* R. Br.
Mal: Velipparuthi
San: Kurudaka

Distribution: Southern dry mixed deciduous forests and scrub jungles.

Soil requirements: Sandy soils with good drainage, slightly acidic, high potash and phosphate contents.

Description: A slender, bad smelling, pubescent climber with milky latex. Leaves simple, opposite, suborbicular-cordate, acuminate, pubescent beneath, 5-10 x 3.5-8 cm. Flowers small, greenish, in lateral cymes. Fruit a pair of reflexed follicles, lanceolate, echinate with soft spines, 5-7 cm long. (Plate XIV, Fig. 2)

Properties: Plant is expectorant and emetic.

Uses: Leaf juice is used to cure infantile diarrhoea, asthma and rheumatic swellings. Fresh leaves are used as a poultice in carbuncle with good effects. Root dark is used as a purgative.

Tylophora indica (Burm. f.) Merr.
Mal: Vallippala

Distribution: Southern moist mixed deciduous, Southern hill-top tropical evergreen forests and scrub jungles.

Description: A twining herb with many long fleshy roots. Leaves simple, opposite, ovate, elliptic or acuminate, cordate at base, more or less pubescent beneath when young, 5-10 x 2.5-5 cm. Flowers greenish purlpe, in axillary umbellate cymes. (Plate XIV, Fig. 3)

Properties: Leaves are emetic, diaphoretic and expectorant.

Tylophora tenuissima (Roxb. ex Shult.) Wight & Arn.
Syn. *T. tenuis* Bl.

Distribution: Southern moist mixed deciduous, West coast semi-evergreen and West coast tropical evergreen forests.

Description: A slender twining, glabrous herb. Leaves simple, opposite, ovate, elliptic or oblong, obtuse or acute, often apiculate, 2-3.5 x 0.8-2 cm. Flowers purplish, small, in lateral, paniculate cymes.

Properties: An infusion of the plant is alexipharmic. A decoction is antidote to argenic poison.

Uses: Plant is used as a cure for perspiration and urticaria.

Wattataka volubilis (Linn. f.) Stapf
Syn. *Dragea volubilis* Benth. ex Hook.

Marsdenia volubilis T. Cooke
Mal: Vatlakkakkakodi

Distribution: Southern moist mixed deciduous, Southern dry mixed deciduous forests and scrub jungles.

Description: A large climbing shrub, bark greyish yellow. Leaves simple, opposite, broadly ovate, acuminate. 5-15 x 4-10 cm. Flowers green or yellowish green, in lateral drooping, umbellate cymes. Fruit oblong, slightly tapering to a blunt point, rugosely striate.

Properties: Tender stalks and roots are considered as emetic and expectorant.
Uses: Plant is used in the treatment of cold and eye diseases. Leaves are applied to boils and abscesses.

Loganiaceae

Buddleia asiatica Lour.
Distribution: Southern moist mixed deciduous and West coast semievergreen forests, above 500 m altitude.
Description: A large shrub, bark thin, grey or greyish brown. Leaves simple, opposite, lanceolate, acuminate, glabrous above and white tomentose beneath, 6.5-12 x 0.8-3 cm. Flowers small, white, in terminal and axillary spikes.
Uses: The plant is used in Philippines for skin diseases and as an arbortifacient.

Strychnos aenea A. W. Hill
Syn. S. bourdillonii Brandis
Mal: Vallikanjiram
Distribution: West coast tropical evergreen and West coast semievergreen forests.
Soil requirements: Clay loam soils, slightly acidic, high in potash and phosphate.
Description: A very large climbing shrub with thickened bifid tendrils. Leaves simple, opposite, ovate-elliptic, acute or acuminate, up to 10 x 5 cm. Flowers greenish, in cymes, arising from the mature stem. Fruit a berry, globose, about 1.5 cm in diameter.
Uses: Fresh leaves are applied to suppurating tumours. Fruit is used to treatment of mania. Root is given to check diarrhoea, and used as a liniment for pains in the joints. Roots are also used against intermittent fevers, cutaneous afflictions and pain and swelling from confluent small pox.

Strychnos colubrina Linn.
Mal: Cherukanjiravalli
Distribution: West coast tropical evergreen and West coast semievergreen forests.
Soil requirements: Clay loam slightly acidic soils high in potash, and organic carbon.
Description: A large climbing shrub with thickened bifid tendrils. Leaves simple, opposite, lanceolate, acuminate, up to 10 x 5 cm. Flowers greenish, in cymes, arising from the mature stem. Fruit a berry, globose, about 1.5 cm in diameter.

Strychnos nux-vomica Linn.
Mal: Kanjrram
San: Karaskara
Distribution: Southern moist mixed deciduous Southern dry mixed deciduous and Moist teak bearing forests.
Soil requirements: Sandy loam soils with good drainage, slightly acidic.
Description: A medium sized to large deciduous tree; bark thin, smooth, yellowish or blackish grey, covered with minute tubercles. Leaves simple, opposite, elliptic or ovate-elliptic, basally 3-nerved, 6-12 x 5-10 cm. Flowers greenish white, in terminal cymes. Fruit a berry, orange
Strychnos potatorum Linn f.

Mal : Thettamparal, Thettamaram
San : Kadaka

*Description*: A small tree; bark brownish black, corky, branchlets lenticellate with swollen nodes. Leaves simple, opposite, ovate or ovate-lanceolate, basally 3-5 nerved, 5-10 x 3.5-7 cm. Flowers white, in short axillary cymes. Fruit about 2 cm in diameter, containing 1 or 2 pale yellow circular compressed seeds (Plate XIV, Fig 4)

*Properties*: Plant is alexiteric and anthelmintic. It increases appetite. Seeds are emetic

*Uses*: Seeds are used as a local application in eye diseases. They are given as an emetic in dysentery and used against diabetes. The seeds are used to clear muddy water. Roots are used in the treatment of all kinds of leucoderma.

---

**Gentianaceae**

*Canscora diffusa* (Vahl) R. Br.

Mal : Jeerakappullu

*Distribution*: Southern moist mixed deciduous and West coast semievergreen forests.

*Description*: A slender herb with 4-angled stem. Leaves simple, opposite, lower elliptic, peltioled; upper ovate-lanceolate, sessile, small. Flowers small, pink, in lax terminal dichotomous cymes forming panicles.

*Properties*: Plant is a nerve tonic. It is used as a substitute for *Canscora, decussata.*

*Exacum bicolor* Roxb.

*Distribution*: Southern montane wet grasslands

*Soil requirements*: Silty loam, medium acidic soils, low in potash, medium in phosphate and high in organic carbon

*Description*: An erect herb. Leaves simple, opposite, ovate or oblong-lanceolate, acuminate, 5-ribbed, up to 10 x 15 cm. Flowers blue and white, in terminal cymes.

*Properties*: Plant is tonic and stomachic

*Swertia angustifolia* Buch.-Ham. var. *pulchella* Burkil

Syn. *S. affinis* Cl.

*Distribution*: Southern montane wet scrub and Southern montane wet grasslands

*Soil requirements*: Clay loam, loose, strongly acidic soils.

*Description*: An erect herb reaching up to 1 m in height. Leaves simple, opposite, lanceolate or linear-lanceolate up to 7.5 x 1.2 cm.
Flowers white, with blue spots, in terminal corymbose panicles.

Properties: Plant is bitter, stomachic, febrifuge and laxative. It is also used as a tonic.

**Swertia corymbosa** (Griseb.) Wight ex Cl.

Distribution: Southern montane wet scrub and Southern montane wet grasslands.

Soil requirements: Clay loam, loose, strongly acidic soils.

Description: An erect herb. Leaves simple, opposite, elliptic or spatulate or linear-oblong, obtuse up to 3.5 x 1-2 cm. Flowers white or pale blue, in terminal corymbose cymes.

Properties: Plant is bitter, stomachic, febrifuge and laxative. It is also used as a tonic.

**Boraginaceae**

**Cordia dichotoma** Forst. f.

Syn. *C. myxa* Roxb. auct. non Linn.

Mal: Cheruviri

Distribution: Occasional in moist teak bearing and Southern dry mixed deciduous forests.

Soil requirements: Sandy loam soils with good drainage, slightly acidic, medium in potash and high in phosphate and organic carbon.

Description: A medium sized tree with drooping branchlets; bark grey or brown, with shallow vertical fissures. Leaves simple, alternate, broadly ovate or suborbicular, base truncate, or cordate, 3-ribbed at base, 7-12 x 6-11 cm. Flowers white, in terminal and axillary panicles. Fruit yellow or pink, ovoid, 2.5-3.5 cm long, seeds embedded in sticky mucilage.

Properties: Bark is astringent. Fruit is astringent, anthelmintic, diuretic, demulcent and expectorant.

Uses: Bark is used in the treatment of gripe, dyspepsia and worms. A paste of leaves is a good application of heal ulcers. Fruit is used in the treatment of diseases of lungs, spleen and urinary tracts.

**Cordia wallichii** G. Don

Mal: Viri

Distribution: Southern moist mixed deciduous forests.

Soil requirements: Sandy loam soils with good drainage, slightly acidic, medium in organic carbon.

Description: A medium sized tree; bark brown, rough with longitudinal fissures. Leaves simple, alternate, ovate-orbicular, obtuse or acute at apex, truncate or cordate at base, pubescent beneath, 10-12 cm in either way. Flowers white, in terminal and lateral paniculate cymes. Fruit an ovoid drupe.

Properties: Leaves are aphrodisiac. Fruit is an expectorant, demulcent and astringent.

Uses: Leaves are used in the treatment of gonorrhoea. The ashes of the leaves are used as a wash in burning of the eyes. Fruit is used to treat bronchial afflictions and irritation of urinary passages. A decoction of the root is given as a gargle in stomatitis.

**Rotula aquatica** Lour.

Mal: Kaloorvenchi

Distribution: Along the banks of streams and rivers.
Description: A small branching shrub, branches often prostrate. Leaves simple, alternate, spatulate, up to 2.5 cm long. Flowers small, purple, on short lateral branches.

Uses: Root is used to treat piles, kidney stones and venereal diseases.

Trichodesma indicum (Linn.) Lehmann

Distribution: Southern dry mixed deciduous forests and scrub jungles.

Soil requirements: Loamy soils in the slopes with good drainage, slightly acidic, low in potash and organic carbon and high in phosphate.

Description: An erect annual hispid herb. Leaves simple, ovate or oblong, obtuse or subacute, pubescent, sessile, 3.5-10 x 0.5-5 cm. Flowers violet blue, solitary or in few flowered leaf opposed cymes.

Properties: Plant is diuretic. A cold infusion of leaves is considered depurative.

Uses: Plant is used as an emollient poultice. Root is applied to reduce swellings, particularly of the joints.

Convolvulaceae

Argyreia fulgens Chois.

Distribution: West coast tropical evergreen and West coast semi-evergreen forests.

Description: An erect silky pubescent shrub. Leaves simple, alternate, elliptic, acuminate. attenuate at base. densely white pubescent beneath, up to 10 x 5 cm. Flowers dark purple, in axillary cymes. Fruit a berry. crustaceous, 1.2 cm in diameter.

Properties: Leaves are antiphlogistic.

Uses: Leaves are used to treat skin diseases.

Cuscuta reflexa Roxb.

Mal: Akasavalli, Moodillathali

Distribution: Southern dry mixed deciduous forest and scrub jungles.

Description: An yellow leafless, twining, slender parasitic herb. Flowers white, small, in lateral clusters. Fruit a capsule, depressed globose, 0.6-0.8 cm in diameter: seeds 2-4, black.

Properties: Plant is a purgative. Seeds are carminative, anthelmintic and alterative.

Uses: infusion of the plant is used as a wash for sores. The plant is also useful in the treatment of muscular pains, headaches, paralysis, diseases of the spleen, vomiting, lumbago, Jaundice and diseases of the eyes and of the heart. Stem is recommended in cases of bilious disorders.

Erycibe paniculata Roxb.

Mal: Irumpiathali

Distribution: West coast tropical evergreen and West coast semi-evergreen forests.

Description: A large scandent shrub, young branches covered with reddish brown tomentum. Leaves simple, alternate, elliptic-oblong or obovate-oblong, 7.5-12 x 3.5-6 cm. Flowers small, white, fragrant in terminal pubescent panicles.

Uses: In Sri Lanka the bark is used against Cholera.

Evolvulus alsinoides (Linn.) Linn.

Mal: Krishnakranthi, kranthi

San: Vishnukrantha
**Distribution**: Southern moist mixed deciduous and Southern dry mixed deciduous forests.

**Soil requirements**: In the depressions between hillocks on the slopes; favours sandy loam, medium acidic soils with medium potash and low phosphate and organic carbon contents.

**Description**: A small perennial herb with many prostrate silky pubescent branches and woody root stock. Leaves simple, alternate, elliptic-oblung, very variable. Flowers light blue, axillary, solitary or sometimes in pairs.

**Properties**: Plant is bitter, antifebrile, antiphlogistic and vermifuge. Plant juice improves memory (Joseph, 1977).

**Uses**: Plant is used against dysentery. Leaves are smoked in chronic bronchitis and asthma. A decoction of the roots is often administered against intermittent fevers (Mooss, 1977).

**Ipomoea pes-tigridis** Linn.
- Mal : Pulichuvadi
- San : Vyaghranakhi

**Distribution**: Southern moist mixed deciduous forests

**Soil requirements**: Variety of soils with good drainage, favours slightly acidic soils high in potash, phosphate and organic carbon.

**Description**: A slender hairy climber. Leaves alternate, usually deeply 5-9 lobed; ovate-acuminate, hairy on both surfaces. Flowers white, in axillary pedunculate heads. Fruit a globose capsule, subtended by the calyx.

**Properties**: Root is a purgative.

**Uses**: Root is applied to boils and carbuncles. It is an antidote to poison.

**Merremia umbellata** (Linn.) Hallier f.
- Syn. *Ipomoea cymosa* Roem.

**Distribution**: Southern moist mixed deciduous, Moist teak bearing and West coast semievergreen forests; very frequent in forest clearings.

**Soil requirements**: In low lying site subjects to waterlogging in undulating areas; favours loamy soils, with poor drainage slightly acidic, high in potash and medium in phosphate.

**Description**: A slender climbing shrub. Leaves simple, alternate, ovate or oblong-lanceolate, rounded, cordate or hastate at base. Flowers white or cream coloured in axillary subumbellate cymes. Fruit a capsule; seeds with long spreading hairs.

**Uses**: Seeds are used in medicine.

**Physalis peruviana** Linn.
- Mal : Njottanjodien

**Distribution**: Native of America, now frequently seen in forest plantations at altitudes above 1000 m.

**Description**: A pubescent herb. Leaves simple, alternate, ovate-acuminate, cordate at base, often oblique at base, pubescent on both surfaces, 4-12 x 2-7 cm Flowers solitary, axillary; corolla yellow with purple centre Fruit a berry, enclosed by the enlarged bladder like calyx

**Properties**: Plant is diuretic.

**Uses**: Leaf juice is given in cases of bowel complaints and worms.

**Solanum indicum** Linn.
- Mal : Cheruchunta, Putharichunta
Solanum stramonifolium  N. Jacq.

Syn. S. ferox auct. non Linn.

Mal : Anachunta

Distribution: West coast tropical evergreen and Southern hill-top tropical evergreen forests.

Soil requirements: Slightly acidic soil with medium potash and phosphate and high organic: carbon contents.

Description: A stout prickly herb up to 3 m in height. Leaves simple, alternate, very large, ovate, acute, cordate at base, lobed, densely stellately hairy, spinescent on the nerves. Flowers white, in axillary racemes. Fruit a berry, densely covered with yellowish needle like hairs, 2.5-4 cm in diameter.

Properties: Fruits and roots are pungent, sedative, improve appetite and taste.

Uses: Plant is used to treat diuretic dropsy and gonorrhoea. Leaves are recommended for rheumatism. They are applied locally to relieve pain also. Stem, flowers and fruits are prescribed for burning of the feet attended with a vesicular, watery eruption. Bud and flower are used in the treatment of watery eyes. Fruit juice is given against sore throat. Seeds are used to cure toothache. Root is recommended for cough, asthma, catarrhal fever, chest pain and vomiting.

Scrophulariaceae

Artanema sesamoides Benth.

Mal : Vathamveratti

Distribution: West coast semi-evergreen forests, mostly confined to moist areas.

Soil requirements: Common in marshy localities and along the low lying banks of rivers where the flow has subsided. favours clayey soils.

Description: A stout herb attaining a height of about 2 m; stem quadrangular. Leaves simple, opposite, lanceolate, acute or acuminate, entire or serrate, 3 5-15 x 1-3 5 cm. Flowers fairly large, violet purple, in terminal lax racemes. Fruit globose; seeds many, oblong or rounded, or truncate at the end, covered with white tubercles. (Plate XV. Fig.
Properties: Seeds improve vitality and favour conception.
Uses: Seeds are used against biliousness. Decoction of the root is used to treat rheumatism, diarrhoea, kidney stones and syphilis.

**Bacopa monnieri** (Linn.) Wettst.
Syn. *Herpestis monniera* (Linn.) H. B. & K.
*Moniera cuneifolia* Michx.
Mal: Brahmi
San: Brahmi

**Distribution**: Confined to banks of streams in all forest types.

**Soil requirements**: Alluvial soils with impeded drainage.

**Description**: A glabrous somewhat succulent creeping herb, rooting at the nodes. Leaves simple, sessile, oblong or spatulate, obtuse, 0.6-2.5 x 0.2-0.5 cm. Flowers pale blue or white, solitary, axillary.

**Properties**: Plant is a nervine tonic, aperient and diuretic. It improves mental faculties and physical strength. It appears to be an anti-anxiety agent having adaptogenic effect (Singh & Singh, 1980).

**Uses**: The expressed juice of the plant is often prescribed in insanity, epilepsy and mental weakness. It is useful in oedema, anemia and fever (Mooss, 1977).

**Scoparia dulcis** Linn.
Mal: Meenankanni

**Distribution**: Frequent in forest plantations.

**Soil requirements**: Variety of soils with good drainage, favours slightly acidic soils.

**Description**: A much branched annual herb. Leaves simple, in whorls of three, elliptic, acute, serrate. Flowers small, white, in axillary clusters. Fruit a small globose capsule, enclosed by the calyx; seeds many.

**Properties**: An infusion of the plant is used as emetic. Root is mucilaginous, astringent and emollient.

**Uses**: Infusion of the plant is used againstague. Decoction of the root is given in blennorrhagia and in excessive menstruation. Locally used against the treatment of urolithiasis.

**Sopubia delphinifolia** (Roxb.) G. Don.

**Distribution**: Southern dry mixed deciduous forests and also in grasslands.

**Soil requirements**: Loamy soils, compact and strongly acidic.

**Description**: An annual much branched herb, stem grooved. Leaves opposite, 2.5-3.5 cm long, pinnatisect; segments filiform. Flowers pink, solitary, axillary or in few flowered terminal racemes.

**Properties**: Plant juice is astrin gent.

**Uses**: Plant juice is applied to the feet to heal sores caused by exposure to moisture.

**Torenia asiatica** (Linn.) Ktze. ex Schum.
Mal: Kakkappoovu

**Distribution**: Seen along the sides of water courses in Southern moist mixed deciduous and West coast semievergreen forests.

**Soil requirements**: Sandy loam soils, loose, slightly acidic.

**Properties**: A diffusely branched creeping herb. Leaves simple, opposite, ovate or lanceolate, serrate,
2.5-4.5 cm long. Flowers bluish purple with dark violet lobes, in axillary clusters.

*Uses*: Leaf juice is considered as a cure for gonorrhoea.

**Bignoniaceae**

*Oroxylum indicum* (Linn.) Vent.
- Mal: Palakapaiyani
- San: Dunduka, Syodaka

*Distribution*: West coast semi-evergreen and Southern moist mixed deciduous forests.

*Soil requirements*: Moist places with impeded drainage, favours sandy loam soils.

*Description*: A small to medium sized tree; bark smooth, brownish grey. Leaves opposite, 90-150 cm long, tripinnate near the base, bipinnate about the middle and simple pinnate towards the tip; leaflets ovate, acuminate, 3-5 on each pinnule. Flowers purplish, in large terminal racemes. Fruit flattened, 30-75 x 5-7 cm; seeds numerous, winged. (Plate XV. Fig. 2)

*Properties*: Bark is bitter, diaphoretic, purgative and stomachic. Fruit is expectorant and improves appetite. Root is one of the 'Dasamoola'. Root bark is astringent and carminative. It is also used as a tonic.

*Uses*: Bark is used against rheumatism. Fruit is used in the treatment of leucoderma. Root bark is used against diarrhoea and dysentery.

*Radermachera xylocarpa* (Roxb.) K. Schum.
- Mal: Vedankorana

*Distribution*: West coast semi-evergreen, Moist teak bearing and Southern moist mixed deciduous forests.

*Soil requirements*: Sandy loam soils, well drained, slightly acidic.

*Description*: A small to medium sized deciduous tree; bark light grey, smooth, flaky. Leaves opposite, 30-120 cm long, bipinnate; leaflets lanceolate, acute. Flowers creamy white, in terminal corymbose panicles. Fruit woody, cylindrical, with hard tubercles, 30-70 cm long; seeds many, winged.

*Uses*: Oil from wood is used in cutaneous afflictions (Chopra et al., 1956).

*Stereospermum chelonoides* (Linn. f.) DC.
- Syn. *S. suaveolens* DC.
- Mal: Poopoathiri
- San: Padala, Padal

*Distribution*: Southern moist mixed deciduous and Moist teak bearing forests.

*Soil requirements*: Medium acidic soils with medium potash, low phosphate and high organic carbon contents.

*Description*: A large deciduous tree; bark grey, flaking off in large flat scales. Leaves opposite, imparipinnate; leaflets 5-9, elliptic, acute or acuminate, pubescent beneath, 7.5-20 x 5-7.5 cm. Flowers dark purple, in terminal panicles. Fruit a linear capsule, 40-60 cm long, 2 cm broad, obscurely 4-ribbed; seeds many, winged.

*Properties*: Flowers are aphrodisiac. Root bark is considered to be cooling, diuretic and tonic. In
North India this species is the source of Patala.

Uses: Flowers are used against bilious diarrhoea and burning sensations. They are also used to check hiccough. Root and tender fruits are used the treatment of dyspepsia. cough and dropsy. Root is recommended in case of inflammations. eruptions, vomiting, asthma, fever and diseases of the blood.

Stereospermum colais (Buch. - Ham. ex Dillw.) Mabberley

Syn. S. chelonides auct. non (Linn.f.) DC.
S. tetragonum DC.
Mal : Pathiri
San : Padala, Padalee
Distribution: Southern moist mixed deciduous and Moist teak bearing forests.

Soil requirements: Medium acidic, soils, medium in potash. low in phosphate and high in organic carbon.

Description: A large deciduous tree; bark pale brown. Leaves opposite, imparipinnate; leaflets 7-11, ovate-oblong, caudate-acuminate, 9-12 x 2.5-5 cm. Flowers yellowish, streaked with red veins, in lax terminal panicles. Fruits somewhat twisted, smooth, 20-45 cm long; seeds numerous. winged. (Plate XV, Fig.3)

Properties: A decoction of leaves, flowers and roots is a febrifuge. In South India this species is used for Patala in ayurvedic preparation.

Uses: Leaf juice is used to treat manical cases.

Acanthaceae

Andrographis paniculata (Burm. f.) Wall. ex Nees

A. subspathulata Cl.
Mal : Kiriyathu, Niiaveppu
San : Bhunimba

Distribution: Southern dry mixed deciduous forests and scrub jungles.

Soil requirements: Dry areas, favours sandy loam soils, slightly alkaline.

Description: An erect much branched herb; branches quadrangular. Leaves simple, opposite. lanceolate, acute, 5-7 x 1-2.5 cm. Flowers small pink, in lax axillary and terminal racemes or panicles. Fruit a capsule, linear-oblong, acute at both ends; seeds many.

Properties: Plant is febrifuge, alterative and anthelmintic. It has also got tonic properties.

Uses: Plant is administered in cases of debility. dysentery, dyspepsia and bronchitis. Root and Leaves are used syphilitic cachexia and foul syphilitic ulcers.

Barleria cristata Linn.
Mal : Mulkurinji

Distribution: Southern dry mixed deciduous and Laterite thorn forests.

Soil requirements: Sandy loam soils, well drained slightly acidic, with medium potash, high phosphate and organic carbon contents.

Description: A herb, stem densely hairy at the nodes. Leaves simple, opposite, elliptic-oblong, acute or acuminate, pubescent on both surfaces, 6-10 x 2.5-4 cm. Flowers blue, in axillary and terminal dense spikes. Fruit ellipsoid, acute at both ends; seeds 4, silky hairy.

Uses: Plant is used against fevers, inflammations, bronchitis, biliousness, tympanitis and asthma.
**Dipteracanthus prostratus** (Poir.) Nees


*Distribution*: Southern dry mixed deciduous forests and scrub jungles.

*Soil requirements*: Variety of soils; sandy loam, slightly alkaline soils usually in the slopes.

*Description*: A small prostrate or straggling herb. Leaves simple, opposite, ovate or elliptic, acute, 2-7 x 1-4 cm. Flowers pale blue or purple, solitary, axillary. Fruit a capsule clavate, slightly pubescent; seeds 16-20, hygroscopically hairy at the margins.

*Properties*: Plant is febrifuge and emetic. Leaf is diaphoretic and insect repellent.

*Uses*: Leaf is used in the treatment of chronic rheumatism, eczema, facial paralysis, cephalgia and hemiplegia. Leaf juice is an efficient remedy in colic of children.

**Ecbolium viride** (Forsk.) Merr.

Syn. *E. linneanum* Kurz
Mal: Odiyamadantha
San: Neelasahachara

*Distribution*: West coast semi-evergreen forests.

*Soil requirements*: Sandy loam soils, medium acidic.

*Description*: An undershrub, stem thickened above the nodes. Leaves simple, opposite, lanceolate, or elliptic-lanceolate, acuminate, acute at base, 7-17 x 3-6 cm. Flowers bluish green, in terminal dense spikes, bracts foliaceous.

*Properties*: Bark is emollient. Flowers are vulnerary.

**Gymnostachyum febrifugum** Benth.

*Distribution*: West coast tropical evergreen forests in North Kerala.

*Soil requirements*: Sandy clay loam soils, strongly acidic, high in organic carbon.

*Description*: A nearly stemless scapigerous herb. Leaves simple, subradical, ovate, rounded at base, decurrent on the petiole, about 15 cm long. Flowers blue, in terminal spicate racemes.

*Uses*: Leaves are given as a remedy for gonorrhoea and ear diseases.

**Hygrophila salicifolia** (Vahl) Nees

Syn. *H. angustifolia* auct. non R. Br.

*Distribution*: Seen along swampy places in West coast semi-evergreen and West coast tropical evergreen forests.

*Soil requirements*: Sandy loam soils with impeded drainage.


*Properties*: Leaves are strongly diuretic.

*Uses*: Leaves are used in poulticing swellings.

**Justicia procumbens** Linn.

*Distribution*: Southern mixed deciduous. Moist teak bearing and Southern dry mixed deciduous forests.
Soil requirements: Variety of soils; slightly acidic soils with medium potash and organic carbon contents.

Description: A small pubescent herb with many slender divaricate branches, rooting at the nodes. Leaves simple, opposite, elliptic-lanceolate or linear, variable, up to 6 cm long. Flowers small, pale violet or pink, in terminal dense cylindrical spikes.

Properties: Plant is laxative, diaphoretic and diuretic.

Uses: Plant is used as a substitute for Fumaria parviflora. Juice of leaves is used to treat ophthalmia.

Nilgirianthus ciliatus (Nees) Bremek.
Syn. Strobilanthes ciliatus Nees
Mal: Karimkurinji

Distribution: West coast tropical evergreen forests.

Soil requirements: Sandy clay loam soils, strongly acidic, poorly drained.

Description: An undershrub, stem often winged at the nodes. Leaves simple, opposite, lanceolate, acuminate, serrate, up to 11 x 3.5 cm. Flowers white, or lilac, in dense, 1-2 cm long spikes. (Plate XV, Fig. 4)

Properties: Leaves, roots and seeds are diuretic.

Uses: Leaves are applied externally in gout, lumbago, pain in joints etc. (Mehrotra and Kundu, 1962). Leaves, roots and seeds are used in the treatment of jaundice, dropsy, rheumatism, anasarca and diseases of the urino-genital tract. Seeds are used against gonorrhoea and spermatorrhoea.

Rhinacanthus nasutus (Linn.) Kurz
Syn. R. communis Nees
Mal: Nagamulla

Distribution: Frequent in forest plantations and forest clearings.

Soil requirements: Variety of soils favours loamy sand, medium acidic soils.

Description: A shrub. Leaves simple, opposite, elliptic-lanceolate, acute, up to 12 x 7 cm. Flowers white, sessile or shortly pedicelled, solitary or 2 or 3 together, on lax terminal panicles.

Properties: Root is an aphrodisiac.

Uses: Leaves, roots and seeds are useful against ringworm and skin diseases.

Rungia pectinata (Linn.) Nees
Syn. R. parviflora Nees
Mal: Malankara

Distribution: Southern moist mixed deciduous and Moist teak bearing forests.

Soil requirements: Variety of soils; favours slightly acidic soils, medium in organic carbon.

Description: A much branched straggling herb. Leaves simple, opposite, elliptic-lanceolate or oblong-lanceolate, variable in size. Flowers blue, small, in terminal or axillary one sided spikes; bracts prominent, in two rows.

Properties: Juice of leaves is cooling and aperient. Root is febrifuge.

Uses: Leaf juice is given to children suffering from small pox. Leaves are applied to contusions to relieve pain and diminish swellings.
Verbenaceae

Callicarpa tomentosa (Linn.) Murray
Syn. C. lanata Linn.
Mal : Thontitherakam
Distribution : Southern moist mixed deciduous, West coast semi-evergreen and Southern hill-top tropical evergreen forests.
Soil requirements : Variety of soils. slightly acidic well drained.
Description : A large shrub to a small tree, young branches stellately pubescent. Leaves simple, opposite, ovate-acuminate, glabrous above, white tomentose beneath, 15-22 x 7-10 cm. Flowers small, reddish purple, in densely tomentose axillary cymes. Fruit a small black globose berry.
Properties : Plant is diuretic.
Uses : Leaves are used to prepare a wash for aphthae of the mouth. Decoction of bark and root is used to treat fever, hepatic obstruction and skin diseases.

Clerodendrum serratum (Linn.) Moon
Mal : Cheruthekku
San : Bharngi
Distribution : Southern moist mixed deciduous, West coast semi-evergreen and Moist teak bearing forests.
Soil requirements : Variety of soils with good drainage, slightly acidic, medium in organic carbon.
Description : A shrub, stem quadrangular. Leaves simple, in whorls of three or opposite. oblong or elliptic, acute, coarsely serrate, 10-15 x 6 cm. Flowers bluish white or pinkish white. in showy terminal panicles. Fruit ovoid, usually 4-lobed. about 6 mm long.
Properties : Root is stomachic and anthelmintic.
Uses : Leaves are recommended in cases of cephalalgia and ophthalmia. Root is useful in the treatment of febrile and catarrhal affections, malaria, bronchitis, asthma, diseases of blood, tumours, hiccup, epilepsy and tuberculous glands.

Clerodendrum viscosum Vent.
Syn. C. infortunatum Linn.
Mal : Peruku. Peruvelam, Thuniyangam
Distribution : Frequent in areas of forest clearings and plantations.
Soil requirements : Variety of soils, favours sandy loam soils, well drained, slightly acidic.
Description : A large shrub, young branches pubescent. Leaves simple, opposite, ovate or suborbicular, acuminate, cordate at base, tomentose, 10-25 x 8-20 cm. Flowers white, in terminal panicles. Fruit bluish black, fleshy, subtended by the enlarged pink calyx.
Properties : Plant is an aphrodisiac. Leaf is tonic and antiperiodic. Fresh leaf juice is vermifuge and febrifuge in malaria. especially to children.
Uses : Plant is used in the treatment of leucoderma and diseases of the blood. Leaves and roots are applied externally for tumours and certain skin diseases and given internally in cases of haemorrhoidal disturbances, conjection and torpidity of the bowel.

Gmelina arborea Roxb.
Mal : Kumbil, Kumizhu
San : Kasmari
Distribution: Sporadic in Southern moist mixed deciduous, Moist teak bearing and Southern secondary moist mixed deciduous forests.

Soil requirements: Variety of soils; favours loamy sand, slightly acidic soils medium potash and organic carbon and low phosphate contents.

Description: A medium sized to large tree; bark smooth, yellowish-grey. Leaves simple, opposite, deltoid ovate, acuminate, truncate or cordate at base, 2 glands present at the base of the lamina, 10-20 x 7.5-12 cm. Flowers fairly large, brownish yellow, in terminal cymose panicles. Fruit an ovoid drupe, 2 cm long.

Properties: Leaf juice is demulcent. Flowers are cooling and astringent. Fruit is bitter. Cooling, diuretic, carminative, antiseptic and antispasmodic. Essential oil of seeds show anthelmintic activity against tapeworm (Avddenoot et al., 1980.)

Uses: A decoction of the plant is given in tetanus, rheumatism and malaria. Decoction of leaf is given against flue, cold and yellow fever. Leaf juice is used to treat dysentery. Flowers and young leaves are given against consumption (Wesley Wong. 1976).

Premna herbacea Roxb.

Distribution: Southern moist mixed deciduous forest in North Kerala.

Soil requirements: Sandy loam slightly acidic soils, medium in potash and phosphate and low in organic carbon.

Description: A small herb with woody root stock. Leaves simple, opposite, ovate, serrate, sessile. usually pressed close to the ground, up to 10 x 7.5 cm. Flowers white, in small corymbs. Fruit globose.

Uses: A preparation of root is given internally for rheumatism.
**Premna tomentosa** Willd.

*Mal:* Kattuthekku. *Naithekku*

*Distribution:* Southern moist mixed deciduous forests.

*Soil requirements:* Sandy loam soils, slightly acidic with low organic carbon contents.

*Description:* A small to medium sized tree, young branches tomentose: bark light greyish brown. Leaves simple, opposite, ovate-acuminate, obtuse or cordate at base, stellately tomentose below, up to 20 x 12 cm. Flowers small, greenish yellow, in paniculate cymes. Fruit a drupe, subglobose.

*Uses:* Oil from the root is used as a remedy for stomach disorders.

**Stachy turpheta urticaefolia** (Salisb.) Sims.

*Syn.:* *S. indica* Vahl

*Mal:* Kadapananth

*Distribution:* Seen in forest plantations.

*Soil requirements:* Variety of soils: favours sandy loam, medium acidic, low in potash and phosphate and high in organic carbon.

*Description:* A herb. Leaves simple, opposite, elliptic-ovate, obtuse or acute, cuneate and decurrent at the base, serrate. Flowers blue, in terminal, slender spikes with closely packed bracts.

*Uses:* In Brazil the plant is used externally for purulent ulcers and given internally against fever and rheumatic inflammations.

**Tectona grandis** Linn. f.

*Mal:* Thekku

*San:* Sakam, Saka

*Distribution:* Mostly seen in the Moist teak bearing forests. Raised extensively in plantations.

*Soil requirements:* Variety of soils; favours loose soils with plenty of moisture. Slightly acidic, medium in potash, low in phosphate and high in organic carbon.

*Description:* A large deciduous tree; bark light brown, young branches 4-angled. Leaves simple, opposite, ovate or obovate, acute or acuminate, base usually decurrent on the petiole, softly tomentose below, 30-60 x 25-30 cm. Flowers small, white, in large terminal panicles. Fruit enclosed by the enlarged calyx.

*Properties:* Wood is acrid, cooling, demulcent, laxative and sedative. Bark is astringent. Fruits and seeds are diuretic. Oil from seeds promotes growth of hair. Root juice dissolves coagulate blood (Van Rheede, 1679).

*Uses:* Wood is used in the treatment of biliousness, piles, leucoderma, dysentery. The tribals of Bastar use the oil obtained by distillation of wood chips to cure eczema and ringworm (Jain, 1965).

**Vitex leuco xylon** Linn. f.

*Mal:* Attunochi

*Distribution:* Southern moist mixed deciduous forests; mostly seen along the banks of streams.

*Soil requirements:* Clayey soils, slightly acidic with medium potash and low phosphate contents.

*Description:* A small deciduous tree; bark grey, smooth. Leaves opposite, palmately compound; leaflets 3-5, elliptic or lanceolate. 7.5-12.5 x 2.5-4 cm. Flowers white, in axillary corymbose dichasial cymes.
Fruit a drupe, ovoid, dark purple. 2 cm long.

Properties: Fruit is vermifuge. Bark and roots are astringent.

Uses: Leaves are smoked in catarrh and headache. Root is recommended for intermittent fever.

**Labiatae**

**Anisochilus carnosus** (Linn. f.) Wall.
Mal: Karpuravalli, Padukurkka
Distribution: Southern moist mixed deciduous forests, often growing among the rocks.

Soil requirements: Variety of soils, commonly in sandy loam, well drained, slightly acidic soils, medium in organic carbon.

Description: An annual erect herb, stem bluntly 4-angled, often tinged with red. Leaves simple, opposite, broadly ovate, obtuse, crenate, base subcordate or rounded, somewhat fleshy, usually pubescent beneath, 2.5-6 x 1.2-4 cm. Flowers pale purple, in dense cylindric spikes. Seeds small, suborbicular, compressed, brown.

Properties: Plant is stimulant and expectorant.

Uses: Juice of fresh leaves is given against coughs and colds.

**Anisomeles indica** (Linn.) Ktze.

Syn. *A. ovata* R. Br.

Distribution: Southern moist mixed deciduous forests.

Soil requirements: Variety of soils, usually in sandy loam with good drainage, slightly acidic, medium in organic carbon.

Description: An suffruticose pubescent herb, stem acutely 4-angled. Leaves simple, opposite, ovate, acute, crenate, truncate or subcordate at base, pubescent on both sides, 3.5-9 x 2.5-6 cm. Flowers bluish purple, in dense whorls in terminal spikes. Seeds broadly ovoid, 0.2 cm long, nearly black.

Properties: Plant is carminative and astringent. It has got tonic properties also.

Uses: Oil from the plant is used against uterine afflications.

**Anisomeles malabarica** (Linn.) R. Br.

Mal: Karimthumpa, Pemaruthi

Distribution: Southern moist mixed deciduous and West coast semievergreen forests.

Soil requirements: Variety of soils, well drained, slightly acidic, medium in organic carbon.

Description: A densely tomentose shrub, stem obtusely 4 angled. Leaves simple, opposite, oblong-lanceolate, acute, rounded or shortly cuneate at base, very thick, 5.5-10 x 2.4.5 cm. Flowers purple, in dense whorls, in terminal spikes. Seeds ellipsoid, brown, 3-4 mm long.

Uses: Decoction of the plant or essential oil distilled from leaves is used externally in rheumatism, infusion of leaves is given in cases of colic, dyspepsia catarrhal affictions. intermittent fevers and fever arising from teething in children.

**Calamintha umbrosa** (Bieb.) Fisch. Mey.

Distribution: Southern montane wet scrub jungles and Southern hill-top tropical evergreen forests.
Soil requirements: Loamy soils, slightly acidic, low in potash and phosphate and high in organic carbon.

Description: A slender straggling pubescent herb. Leaves simple, opposite, ovate, serrate, up to 3.5 cm long. Flowers white or purplish, in axillary whorls. Seeds small, sub-globose, smooth.

Properties: Plant is antiphlegmatic and anthelmintic. It improves digestion.

Colebrookea oppositifolia Sm.

Distribution: West coast tropical evergreen forests.

Soil requirements: In the slopes in sandy loam soils, strongly acidic with low potash and phosphate and high organic carbon contents.

Description: A much branched shrub; young branches, grooved, pubescent. Leaves simple, opposite or in whorls of three, oblong-lanceolate, acute at base, crenulate, pubescent on both sides, 8-15 x 2-4.5 cm. Flowers very small, white, in terminal paniculate spikes. Seeds very small, oblong-ovoid, hairy at the tip.

Uses: Leaves are applied to wounds and bruises. A preparation of root is used in epilepsy.

Leucas zeylanica R. Br.

Distribution: Southern montane wet grasslands.

Soil requirements: Slightly low lying areas with better moisture conditions in sandy loam soils, strongly acidic, low in potash and phosphate and high in organic carbon.

Description: An erect much branched herb, branches 4-angled, grooved, hispid with long spreading hairs. Leaves simple, opposite. subsessile, linear-lanceolate, margin slightly recurved, entire or serrulate. hairy on both surfaces, 2.5-7.5 x 0.4-1.2 cm. Flowers white, in terminal whorls. Seeds ovoid-oblong, smooth, brown, 0.3 cm long.

Uses: Plant juice is a remedy for scabies, skin diseases, headache and colds.

Micromera capitellata Benth.

Distribution: Southern montane wet scrub jungles and grasslands.

Soil requirements: Strongly acidic soils with plenty of humus, low in potash and phosphate contents.

Description: A small herb with slender stems and woody rootstock. Leaves simple, opposite, ovate, sub-obtuse, pubescent on both sides, 1.2-5 x 0.6-1.5 cm. Flowers pale violet, sometimes white, very small, in verticillate distant cymes in the axils of floral leaves.

Properties: Plant is aromatic and carminative.

Uses: Used as a substitute for Mentha piperita.

Orthosiphon grandiflorus Boldingh.

Syn. O. stamineus Benth.

Mal: Kattuthrithavu

Distribution: West coast semi-evergreen and West coast tropical evergreen forests.

Soil requirements: Variety of soils; favours clayey soils, slightly acidic.

Description: An erect herb with woody rootstock. Leaves simple, opposite, ovate-acuminate, cuneate at base, serrate, glabrous up to 10 x 5 cm. Flowers white or lilac in
whorls in terminal racemes. Seeds ellipsoid, marked with wavy lines.

**Uses**: Leaves are used against kidney and bladder diseases.

### Plantaginaceae

**Plantago asiatica** Linn.

*Syn. P. major* Hook. f.

*Distribution*: Southern montane wet scrub jungles and Southern montane wet grasslands.

*Soil requirements*: Clay loam, slightly acidic soils medium in potash and high in phosphate and organic carbon.

*Description*: An erect herb with stout root stock. Leaves simple, radical, ovate or ovate-oblong, obtuse or subacute, entire or toothed, base decurrent on the petiole, 2.5-12 cm long. Flowers small, crowded or scattered on long slender lax spikes. Seeds angled, rugulose, black, 4-8 per fruit.

*Properties*: Leaves and roots are astringent. Seeds are tonic and stimulant.

*Uses*: Leaf juice is used as an eyewash in ophthalmia (Wesley Wong, 1976) and is applied to bruises. Leaves and roots are recommended against fever. Seeds is an useful remedy for dysentery. In Japan the watery extract of the seed is given for whooping cough.

### Nyctaginaceae

**Boerhavia diffusa** Linn.

*Mal*: Thazhuthama, Thavizhama

*San*: Punarnava

*Distribution*: Southern dry mixed deciduous forests and scrub jungles.

*Soil requirements*: Sandy soils, slightly acidic with low potash and phosphate contents.

*Description*: A stout herb with large fusiform roots and with prostrate or ascending 50-100 cm long shoots, thickened at the nodes. Leaves simple, opposite, unequal in size, broadly ovate or sub-orbicular, somewhat undulate. Flowers small, pink, in 4-10 flowered umbels. forming axillary and terminal panicles. Fruits clevate. 5-ribbed, glandular, 3 mm long.

*Properties*: Root is diuretic, expectorant, digestive, stimulant and laxative. It cures food poisoning.

*Uses*: A decoction of the roots in milk is often prescribed in oedema with much benefit (Mooss, 1977). Roots are used also in the treatment of asthma, anaemia and internal inflammation.

### Amaranthaceae

**Achyrantes aspera** Linn.

*Mal*: Kadaladi

*San*: Apamarga

*Distribution*: Laterite thorn forests and scrub jungles.

*Soil requirements*: Sandy soils, in the slopes with good drainage and permeability, medium acidic, medium in potash and low in phosphate.

*Description*: An erect herbageous undershrub, branches terete or obscurely 4-angular, pubescent. Leaves simple, opposite, elliptic or obovate, very variable in shape. Finely pubescent on both Eides, 3.5-6 x 2.5-4.5 cm. Flowers greenish white, deflexed, in elongate terminal spikes. Fruit an utricle, subtended by the spinescent bracteoles.
Properties: Plant is pungent, purgative and diuretic. Infusion of the root is astrigent.

Uses: The plant is used in the treatment of piles, enlargements of the cervical glands, dropsy, sores, skin eruptions and colic. The ashes of the whole plant is often prescribed in ascites and anasarca (Mooss, 1977). Leaf juice is applied to wounds. Seeds and leaves are used against hydrophobia. Leaves are used in the preparation of the ointment 'Zambuk' (Joseph, 1977). A paste of seeds with water in which rice has been washed, is reckoned to be beneficial in cases of bleeding piles (Mooss, 1977).

*Achyranthes bidentata* Bl.

*Distribution*: Southern hill-top tropical evergreen forests.

*Soil requirements*: Marshy areas with poor drainage and permeability, favours medium acidic soils with low potash and phosphate contents.

*Description*: An erect herb with slender pubescent branches. Leaves simple, opposite, ovate-lanceolate, acuminate. Very variable in shape and size, pubescent or glabrous. Flowers small, greenish, in slender spikes.

*Properties*: Plant is diuretic and astringent.

*Aerva lanata* (Linn) Juss.

*Mal*: Beiippuvu, Cherula

*San*: Bhadra

*Distribution*: Southern dry mixed deciduous and Southern moist mixed deciduous forests. Frequent in forest plantations.

*Soil requirements*: Sandy clay loam soils with good drainage and permeability, slightly acidic, medium in potash, phosphate and organic carbon.

*Description*: A small herb with a long tap root and many pubescent shoots. Leaves simple, alternate, elliptic, obovate or suborbicular, pubescent on both sides, 2-3 x 0.8-1.5 cm. Flowers very small, greenish white, in small dense axillary spikes. (Plate XVI, Fig. 1)

*Properties*: Plant is vermifuge, diuretic and lithientriptic (Mooss, 1978). Root is diuretic and demulcent.

*Uses*: Plant is used to treat lithiasis. Root is used against strangury (Mooss, 1978).

*Cyathula prostrata* (Linn.) Bl.

*Mal*: Cherukadaladi

*Distribution*: Seen in moist areas in West coast semievergreen and West coast tropical evergreen forests at lower elevations.

*Soil requirements*: Variety of soils with poor drainage and permeability, slightly acidic.

*Description*: A slender prostrate herb, rooting at the lower nodes. Leaves simple, opposite, elliptic-rhomboid or ovate. Flowers small, pale violet, in lax terminal spikes. (Plate XVI, Fig. 2)

*Uses*: Plant is used as an external applicant for various skin diseases. Decoction of roots is given for dysentery.

*Chenopodiaceae*

*Basella alba* Linn.

*Mal*: Basala

*San*: Upodaka, Upodika

*Distribution*: Southern dry mixed deciduous forests.
Soil requirements: Sandy loam soils with good drainage and permeability, strongly acidic to slightly alkaline.

Description: A slender, somewhat succulent twining herb. Leaves simple, alternate, ovate, acute, rounded or cordate at base, rather thick, 5-10 x 2.5-7 cm. Flowers white, in axillary pedunculate spikes. Fruit globose, fleshy. 0.5 cm in diameter.

Properties: Plant is sweet in taste, laxative, aphrodisiac, unctuous, cooling and alleviative of alcoholism (Mooss, 1977).

Uses: Leaf is used in the treatment of gonorrhoea, balanitis, urticaria and bleeding piles. Leaves are boiled in milk, pounded and reduced to a pulp and applied to boils to hasten suppuration (Mooss, 1977).

Chenopodium ambrosiodies Linn.

Mal: Kattayamodakam

Distribution: Frequent in the Eucalyptus plantations at Munnar.

Soil requirements: Loose clay loam, strongly acidic soils.

Description: An erect much branched glandular pubescent herb. Leaves simple, alternate, oblong-lanceolate, sinuate-dentate, the upper leaves almost entire, very variable in size. Flowers greenish yellow, very small, clustered in terminal and axillary simple or paniculate spikes. Seeds very small, orbicular, smooth and shining.

Properties: Plant is anthelmintic. Essential oil is tonic and anti-spasmodic.

Uses: Essential oil from the plant is used in the treatment of nervous disorders.

Polygonum glabrum Willd.

Polygonaceae

Distribution: West coast semi-evergreen and West coast tropical evergreen forests; mostly seen along the banks of streams.

Soil requirements: Sandy clay loam soils, well drained, slightly acidic, with high potash and organic carbon and medium phosphate contents.

Description: A stout herb, stem, procumbent below, usually reddish. Leaves simple, alternate, lanceolate, acuminate, tapering at the base, 7-20 x 2-3 cm; stipules closely sheathing the stem. Flowers small, pink, in paniculate slender racemes. Seeds small, suborbicular, black, shining.

Properties: Plant is a febrifuge.

Uses: An infusion of leaves is used against colic.

Rumex nepalensis Spreng.

Distribution: Southern hill-top tropical evergreen forests and Southern montane wet scrub jungles.

Soil requirements: Loose strongly acidic soils with good drainage and permeability.

Description: A tall stout herb, often with tuberous roots. Leaves simple, alternate, oblong or gular-ovate, acute or obtuse, cordate at base, long petioled, up to 35 x 12 cm. Flowers greenish yellow, in axillary clusters.

Properties: Root is purgative.

Uses: An infusion of leaves is given in colic and applied to syphilitic ulcers.
Aristolochiaceae

Aristolochia indica Linn.
Mal: Garudakodi, Karanavalli, Karalakam Iswaramooli, Iswaramulla
San: Iswari, Nakulashta

Distribution: Southern moist mixed deciduous, Southern dry mixed deciduous and West coast semi-evergreen forests.

Soil requirements: It grows under a variety of climatic and soil conditions however unfavourable in poor and dry soils.

Description: A slender climbing shrub. Leaves simple, alternate, variable in shape, linear to ovate-oblong, acute, rounded or cordate at base, 9-12 x 5-7 cm. Flowers greenish yellow, in few flowered axillary racemes. Fruit an oblong, 6-valved capsule, 3-5 cm long; seeds many, winged. (Plate XVI, Fig. 3)

Properties: Plant is considered to be antipoisonous, antiinflammatory, anodyne, cardiac and nerve stimulant, carminative, anthelmintic, blood purifier, expectorant, diuretic, diaphoretic and also uterine contractile (Karnick & Jopat, 1969). Fresh leaves remove constipation in children. In Murshidabad the plant is used as an abortifacient. B. coumaric acid, isolated from the roots is effective as an antifertility agent (Pakrashi & Pakrashi, 1979). Root is tonic, stimulant, emmenagogue, emetic and alexiteric.

Uses: Seeds are used to treat biliousness, dry cough and pain in the joints. Roots are recommended in cases of Cholera, diarrhoea and leucoderma.

Thottea siliquosa (Larnk.) Ding Hou
Syn. Apama siliquosa Lamk.
Brabantia wallichii R. Br.
Mal: Alpam

Distribution: West coast tropical evergreen and West coast semi-evergreen forests.

Soil requirements: Variety of soils poorly drained, strongly acidic.

Description: An erect shrub. Leaves simple, alternate, oblong-lanceolate, long acuminate, 3-5 ribbed at the base, pubescent below, 12-22 x 3-5 cm. Flowers dark purple, in axillary cymes. Fruit a linear capsule, 7-10 cm long. (Plate XVI, Fig. 4)

Properties: The root is considered to be antivenomous by the local vaidyans.

Uses: A preparation of the plant is said to be beneficial for carbuncles and inveterate ulcers. Roots are used in the treatment of cholera, diarrhoea and dysentery.

Piperaceae

Piper longum Linn.
Syn. Chavica roxburghii Miq.
Mal: Thippali
San: Pippali

Distribution: Southern moist mixed deciduous, Moist teak bearing and West coast semi-evergreen forests.

Soil requirements: Variety of soils with good drainage and permeability, favours sandy loam, medium acidic soils.

A slender under-shrub, creeping and rooting at the nodes. Leaves simple, alternate, ovate or oblong, acute, unequally

Piperaceae
cordate at base, 7-ribbed. Flowers very small, in slender spikes. Fruit red when ripe. (Plate XVII, Fig. 1)

Properties: Dried fruits are pungent, hot in action, aphrodisiac, laxative and curative of dysphonia and cough. Dried unripe fruit is alterative and tonic. Root is pungent, stomachic, laxative anthelmintic and carminative. It improves appetite.

Uses: A paste of fruit with ghee and rock salt is much beneficial in cough (Mooss, 1977). It is given internally against colic and cholera. Decoction of immature fruit and root is given in chronic bronchitis. Root is used in the treatment of bronchitis, abdominal pains, tumours and diseases of the spleen.

Piper nigrum Linn.
Mal: Kurumulaku Kodi
San: Mareedha-valli

Distribution: West coast tropical evergreen and West coast semi-evergreen forests.

Soil requirements: Variety of soils, favours loamy strongly acidic soils.

Description: A stout climbing shrub, rooting at the nodes. Leaves simple, alternate, broadly ovate, acuminate, 5-9 ribbed, base unequal, 10-17 x 5-10 cm. Flowers minute, on slender spikes, up to 10 cm long. Fruit globose, 0.5 cm in diameter, red when ripe.

Properties: Fruit is not very hot in action, easily digestible, appetising and a digestive stimulant. The undried green fruits are sialagogue.

Uses: Powdered fruit with ghee, honey and sugar may be taken in cases of alteration of voice and cough (Mooss, 1977). Fruit is used as a stimulant in weakness following fever, vertigo and coma; as stomachic in dyspepsia and flatulence; as antiperiodic in malarial fever and as alterative in paraplegia and arthritic diseases.

Piper trioium Roxb.

Syn. P. attenuatum Buch.-Ham.

Distribution: West coast tropical evergreen and Southern hill-top tropical evergreen forests.

Soil requirements: Strongly acidic, loose clay loam soils.

Description: A slender climber, stem often zig-zag and rooting at the nodes. Leaves simple, alternate, ovate, suborbicular, acuminate, base cordate, often oblique, up to 10 x 8 cm. Fruit globose, very small.

Properties: Root is an excellent diuretic.

Chloranthaceae

Sarcandra chloranthoides Gardn.

Syn. Chloranthus glaber (Thunb.) Makino
C. brachystachys Bl.

Distribution: West coast tropical evergreen forests above 700 m altitude.

Soil requirements: Loamy soils, loose, strongly acidic.

Description: A small shrub. Leaves simple, opposite, lanceolate, coarsely serrate, up to 17 cm long. Flowers small, in terminal spikes. Berry globose, purplish black. (Plate XVIII, Fig. 2)

Properties: Plant is a good stimulant.
Myristicaceae

Myristica malabarica Lamk.
   Mal : Kattujathi
   Distribution : West coast tropical evergreen and Myristica swamp forests.
   Soil requirements : Strongly acidic loamy soils with poor drainage and permeability.
   Description : A medium sized tree: bark greenish black, smooth. Leaves simple, attenuate, linear-oblong, subacute, 10-20 x 5-10 cm. Male flowers creamy yellow, in panicles; female in axillary clusters of 3-4. Fruit cylindrical, 5-7.5 x 2.5 cm; aril yellow, irregularly lobed.
   Uses : Fat from the seeds is applied to indolent ulcers; it allays pain, cleanses the surface and establishes healthy action.

Lauraceae

Cinnamomum verum J. S. Presl
   Mal : Ilavangam, Karuva, Vayana
   San : Thwaku
   Distribution : West coast tropical evergreen and Southern hill-top tropical evergreen forests.
   Soil requirements : Clay loam soils, slightly acidic.
   Description : A small to medium sized tree, bark reddish brown, smooth. Leaves simple, subopposite, oblong, acute, usually rounded at base, 3-5 ribbed, up to 15 x 7 cm, bright pink when young, glossy. Flowers small, grey or pale yellow, in terminal and axillary panicles.
   Properties : Leaves and bark are carminative, stimulant, diuretic, diaphoretic, deobstruent and galactagogue. The oil distilled from the leaves is a powerful stimulent.
   Uses : Bark is useful for checking nausea and vomiting. It is used to treat biliousness, thirst, parched mouth, bronchitis, diarrhoea, urinary diseases, influenza and diseases of the heart and rectum.

Litsea glutinosa (Lour.) Robsn.
   Syn. L. chinensis lamk.
   L. sebifera Pers.
   Mal : Kallakaruva
   Distribution : West coast semi-evergreen forests.
   Soil requirements : Variety of soils with good drainage and permeability, favours loamy soils, slightly acidic:
   Description : A small medium sized tree; bark brown. Leaves simple
alternate, elliptic or oblong, obtuse, glabrous or grey pubescent beneath. 10-18 x 6-8 cm. Flowers small, white or yellowish, in axillary corymbose or racemose few flowered umbels.

Properties: Bark is demulcent, astringent, aphrodisiac, anodyne, emollient and styptic. Leaves are considered to be antiseptic and emollient.

Uses: Bark is given in cases of diarrhoea and dysentery. Oil from seeds is recommended for rheumatism.

Litsea stocksii (Meissn.) Hook f.

Mal: Varicheera

Distribution: West coast tropical evergreen forests.

Description: A small tree. Leaves simple, subopposite or alternate, elliptic-oblong, obtuse or subacute, 10-20 x 5-7 cm. Flowers small, in umbellules arranged in racemes. axillary or from the axils of fallen leaves. Fruit ellipsoid, 1.2 cm long, dark purple, supported by the cup shaped perianth lobes.

Uses: A cold infusion of leaf is given to remove irritation of bladder and urethra. Oil from seeds is used as an application to sprains, bruises and itch.

Neolitsea cassia (Linn.) Kosterm.

Syn. N. zeylanica (Nees) Merr.

Litsea zeylanica Nees

Mal: Venkana

Distribution: Southern hill-top tropical evergreen and West coast tropical evergreen forests, above 500 m elevations.

Soil requirements: Clay loam soils poorly drained, very slightly acidic with medium organic carbon content.

Description: A small to medium sized tree; bark smooth, grey. Leaves simple, alternate or subopposite, usually crowded towards the ends of branchlets, elliptic or oblong-lanceolate, acuminate, 3-ribbed, 5-15 x 3-6 cm. Flowers small, yellowish in 3-7 flowered umbellules, arranged in axillary and extra-axillary clusters. Fruit an oblong berry, 1.2 cm long, dark purple, subtended by the disc like perianth.

Uses: Roots are used for poulticing eruptions on fingers.

Persea macrantha (Nees) Kosterm.

Syn. Machilus macrantha Nees

Mal: Uravu, Kulamavu

Distribution: Southern hill-top tropical evergreen, West coast tropical evergreen and West coast semi-evergreen forests.

Soil requirements: Variety of soils, favours clay loam soils poorly drained; strongly acidic and high in organic carbon.

Description: A large tree; bark pale brown, rough. Leaves simple, alternate, usually crowded at the tip of branchlets, oblong or spatulate, 7.5-17 x 2.5-6.5 cm. Flowers small, yellow, in terminal panicles. Fruit globose, black, 1.2-2 cm in diameter.

Properties: Bark is used to treat tuberculosis, asthma and rheumatism. Leaves are applied to ulcers.

Thymelaeaceae

Gnidia glauca (Fres.) Gilg

Syn. Lasiosiphon (Graham) Dcne.
Mal : Nanchu, Nanku  

*Distribution*: Southern hill-top tropical evergreen and Southern montane wet temperate forests.  

*Soil requirements*: Loose Clay loam soils with impeded drainage and permeability. strongly acidic.  

*Description*: A large shrub to a small tree; bark grey, smooth. Leaves simple, alternate, crowded at the tip of branchlets, lanceolate-oblong, acute, glabrous or silky pubescent beneath, 5-7 x 2-2.5 cm. Flowers yellow, in dense terminal heads, surrounded by the silky-villous bracts. Fruit ellipsoid-oblong, about 1 cm long, enclosed by the perianth.  

*Properties*: Plant is a vesicant.  

*Uses*: Leaves are applied to swellings and contusions.  

**Loranthaceae**  

*Dendrophthoe falcata* (Linn. f.) Etting.  

*Syn*: *Loranthus longiflorus* Desv.  

Mal : Ithil, Valiaithikkanni  
San : Vrikshadani  

*Distribution*: Southern moist mixed deciduous and Southern dry mixed deciduous forests. Frequent in teak plantations.  

*Description*: A large woody epiphytic shrub with haustorial roots, Leaves simple, opposite or alternate, elliptic to orbicular-cordate, coriaceous, variable in size. Flowers deep pink or pale yellow in axillary and extra-axillary recemes. Fruit an oblong berry, about 1 cm long, seed embedded in a sticky mucilage.  

*Properties*: Plant is cooling, alexipharmic, aphrodisiac and alternative.  

*Uses*: A preparation of the plant is given in fever, diseases of the blood, ulcers, epilepsy and biliousness.  

**Santalaceae**  

*Santalum album* Linn.  

Mal : Chandanam  
San : Chandana  

*Distribution*: Confined to the Southern dry mixed deciduous forests at Marayur.  

*Soil requirements*: Loamy sand slightly acidic with good drainage and fair permeability, low in potash, phosphate and organic.  

*Description*: A small tree with slender drooping branches; bark dark brown to black, rough, wood scented. Leaves simple, opposite, elliptic-ovate, or oblong, subacute 3.5-6.5 x 2-3 cm. Flowers brownish purple in terminal and axillary paniculate.
cymes. Fruit a globose drupe, purplish black, about 1 cm in diameter.  

Properties: Wood is bitter, cooling, exhilarating, alexiteric, antipyretic, aphrodisiac and diaphoretic. A triterpenoid extracted from the bark has been found to inhibit growth in some forest insects (Sankaranarayana et al., 1980).

Uses: Wood is made into a paste and applied to headache and skin diseases. Oil from heartwood is used in the symptomatic treatment of dysuria, gonorrhoeal urethritis and cystitis.

**Euphorbiaceae**

Acalypha fruticosa Forsk.

Distribution: Southern dry mixed deciduous forests and scrub jungles.

Soil requirements: Variety of soils, sandy loam to loam, medium to slightly acidic with good drainage.

Description: A much branched shrub, with waxy glands. Leaves simple, alternate, ovate, obtusely acuminate, cuneate at base, crenate, glandular beneath, up to 7.5 x 3.5 cm. Flowers small, in slender spikes, female at the base of the spikes. Fruit a 3-lobed pubescent capsule with yellow glands in between the lobes.

Properties: Leaves are stomachic, alterative and attenuant.

Uses: Leaves are used in the treatment of dyspepsia.

Acalypha indica Linn.

Mal: Kuppameni
San: Harithamanjari

Distribution: Frequent in forest plantations at low elevations.

Antidesma bunius (Linn.) Spreng.

Mal: Aryaporiyan

Distribution: West coast evergreen and West coast tropical evergreen forests.
Soil requirements: Clay loam soils with plenty of moisture, strongly acidic, high in organic carbon.

Description: A small tree; bark greyish brown, smooth. Leaves simple, alternate, elliptic-oblong or obovate, acute or acuminate, 10-15 x 3.5-5 cm. Flowers small, yellowish; male in spikes; female in few flowered racemes. Fruit dark red, ovoid, about 1 cm in diameter.

Properties: Bark is poisonous and to contain an alkaloid (Burkill, 1935).

Uses: Young leaves are used in the treatment of syphilitic cachexia.

Antidesma ghaesembilla Gaertn.

Distribution: Southern moist mixed deciduous forests at altitudes below 400 m.

Soil requirements: Sandy loam soil with good drainage and permeability, loose, medium acidic.

Description: A small tree; bark greyish brown, branchlets pubescent. Leaves simple, alternate, orbicular-oblong or broadly elliptic pubescent below, 5-10 x 3-6 cm. Flowers small, in axillary panicked spikes. Flowers subglobose, reddish-purple, 0.5 cm in diameter.

Properties: Bark is astringent. It has got tonic properties also. Wood is reported to be an emmenagogue.

Aporusa lindleyana (Wight) Baill.

Mal: Ponvetti, Vetti

Distribution: West coast tropical evergreen and West coast semi-evergreen forests.

Soil requirements: Variety of soils, clay loam to loam, loose, strongly acidic with plenty of moisture.

Description: A small to medium sized tree; bark brown with shallow vertical grooves. Leaves simple, alternate, elliptic-oblong, acuminate, acute or rounded at base, shining. Flowers yellowish; male in dense 2.5-3.5 cm long spikes; female in very short, often clustered racemes. Fruit globose, about 1 cm in diameter.

Uses: A decoction of the root is given against jaundice, fever and headache, seminal loss and insanity.

Baliospermum montanum (Willd.) Muell. -Arg.

Syn. B. axillare Bl.

Mal: Nagadanthi
San: Danthi, Nikumbha

Distribution: West coast semi-evergreen and Moist teak bearing forests

Description: An undershrub, reaches to a height of 1-2 m. Leaves simple, alternate; the upper small, lanceolate, the lower, broadly ovate, often palmately lobed, sinuate-toothed, 12-30 cm long and as broad as long, 2 glands present at the base of the lamina. Flowers small in axillary racemes or panicles. Fruit a capsule, obovoid, pubescent, about 1 cm long; seeds ellipsoid, smooth, caruncled. (Plate XVII, Fig. 3)

Properties: Seeds are purgative, stimulant and rubifacient. Oil from seeds is hydragogue and cathartic. Root is purgative, anthelmintic, diuretic and

Uses: A decoction of leaves gives relief in asthma. Oil from seeds is applied externally in rheumatism. Root is used to treat skin diseases, abdominal complaints, piles, enlarged
spleen, itching, inflammations, anemia, leucoderma, jaundice, dropsy and anasarca.

**Bischofia javanica** Bl.

*Distribution*: West coast tropical evergreen and West coast semi-evergreen forests.

*Soil requirements*: Sandy loam soils, medium acidic, medium in potash and phosphate and high in organic carbon.

*Description*: A large tree; bark dark brown, exudes a red exudation when cut. Leaves alternate, trifoliolate; leaflets ovate or ovate-oblong, acuminate, crenate, 7-15 x 3.5-7.5 cm. Flowers small in axillary paniculate racemes. Fruit a globose berry. brown, 1-2 cm in diameter; 3-6 seeded.

*Properties*: Leaves are rich in Vitamin C.

*Uses*: Leaf juice is considered to cure sores.

**Breynia vitis-idaea** (Burm. f.) C. E. C. Fischer

*Syn. B. rhamnoides* (Retz.) Muell. - Arg.

*Mal*: Kattuneeruri

*Distribution*: Southern moist mixed deciduous and West coast semievergreen forests.

*Description*: A large shrub; branchlets angular. Leaves simple, alternate, distichous, elliptic, obtuse or subacute, 1.5-3.5 x 1.2-2.5 cm. Flowers globose, yellowish red, 0.5 cm in diameter.

*Uses*: Dried leaves are smoked like tobacco to cure swollen uvula and tonsils.

**Bridelia scadens** Willd.

*Syn. B. stipularis* sensu Hook. f. non Bl.

*Mal*: Cherultolpanachi, Kanji-kottam

*Distribution*: Southern moist mixed deciduous, Moist teak bearing and West coast semievergreen forests.

*Soil requirements*: Silty loam soils, well drained, slightly acidic with low potash and organic carbon and medium phosphate contents.

*Description*: A large climbing Shrub; branchlets often with long deflexed spines. Leaves simple, alternate, elliptic, obtuse, rounded or cordate at base, pubescent beneath, 2.5-10 x 1.2-5 cm. Flowers small. greenish yellow, in small dense axillary clusters or spikes. Fruit a drupe. ellipsoid or oblong, bluish black, 1.5 cm long.

*Uses*: Bark is used to prepare a mouth wash. Leaves and stem cure eczema. Root and stem are recommended in the treatment of asthma, cough and internal sores.

**Bridelia squamosa** (Lamk.) Grah.

*Syn. B. retusa* Spreng.

*Mal*: Mullan-kaini, Mullu-venga

*Distribution*: Southern moist mixed deciduous. Moist teak bearing and Southern dry mixed deciduous forests.

*Soil requirements*: Variety of soils, also capable of surviving on dry shallow soils. It can withstand drought.

*Description*: A medium sized tree; bark grey or brown, covered with conical thorns towards the base when young. Leaves simple, alter-
nate, ovate-elliptic or oblong, subacute, obtuse or rounded at base, finely pubescent below. Flowers small, yellow in 5-10 cm long, axillary spikes. Fruit a drupe. Globose, purplish black, subtended by the calyx, about 0.5 cm in diameter.

**Properties**: Roots and bark are astringent.

**Uses**: Bark with gingily oil is used as liniment in rheumatism.

*Cleistanthus collinus* (Roxb.) Benth.

Mal : Oduku

**Distribution**: Southern moist mixed deciduous and Southern dry mixed deciduous forests.

**Soil requirements**: Silty loam soils with good drainage and permeability, slightly acidic, low in potash and organic carbon and medium in phosphate.

**Description**: A small to medium sized deciduous tree; bark dark brown, flaking off in rounded flakes. Leaves simple, alternate, elliptic-obovate or orbicular, retuse at apex, 5-12 x 2.5-7.5 cm. Flowers small, yellowish green, in axillary clusters. Fruit obovoid, nearly black when dry, 2-2.5 cm in diameter.

**Properties**: Plant is astringent and extremely poisonous. Extract of leaves, roots and fruits are violent gastro-intestinal irritant.

**Uses**: Bark is applied externally in cases of cutaneous diseases.

*Croton caudatus* Geisel

**Distribution**: West coast semi-evergreen forests.

**Soil requirements**: Clay loam, medium acidic soils, medium potash and phosphate and high in organic carbon.

**Description**: A scandent shrub. Leaves simple, alternate, ovate, or orbicular-cordate, acute or acuminate, crenate, stellately tomentose beneath, 5-15 x 3-8 cm. Flowers fascicled in slender terminal racemes. Fruit oblong with 6 slender ridges, scabrid pubescent, 2-2.5 cm long.

**Uses**: Leaves are applied as a poultice to sprain. In Lakhimpur Uttar pradesh, the young leaf buds with the leaves of *Caesalpinia sappan* are used to treat liver diseases.

*Croton roxburghii* Balak.

Syn. *C. oblongifolius* Roxb.

**Distribution**: Southern dry mixed deciduous forest and scrub jungles.

**Soil requirements**: Variety of soils, sandy loam to loam, strongly acidic, slightly alkaline with organic carbon contents.

**Description**: A small to medium sized tree; bark grey or brownish. Leaves simple, alternate, oblong-lanceolate, acute, crenate, scaly when young, becomes glabrous when old. Flowers yellowish green, solitary or fascicled on long racemes, the male flowers in the upper part of the race and female flowers on the lower part. Fruit subglobose, covered with small orbicular scales, about 1.2 cm in diameter.

**Properties**: Bark, root, fruits and seeds are purgative. Bark and roots are alterative also.

**Uses**: Bark is useful in cases of sprains and diseases of the liver.
Croton reticulatus  Heyne

*Distribution*: West coast tropical evergreen and West coast semievergreen forests.

*Soil requirements*: Clay loam soils, medium acidic, low in potash and phosphate and high in organic carbon.

*Description*: A small tree; branchlets covered with ferruginous scales. Leaves simple, elliptic, lanceolate, acute or acuminate, base acute or rounded, furnished with a pair of stalked glands. Flowers in terminal racemes, male towards the upper part of the raceme and female towards the base. Fruit ovoid-oblong, slightly 3-lobed, apiculate, covered with reddish brown stellate hairs and scales, about 1 cm in diameter.

*Properties*: Bark is stomachic.

Drypetes roxburghii  (Wall.) Hursuwa

*Syn*: Putranjiva roxburghii  Wall.

*Mal*: Poothilanji

*Distribution*: Reported to occur in the west coast tropical evergreen forests in North Kerala.

*Description*: A small to medium sized tree with pendent branches; bark dark grey with horizontal lenticels. Leaves simple, alternate, elliptic-oblong, acute, distantly serrulate, 6.5-10 x 2-4 cm. Flowers small, yellow, in axillary clusters. Fruit ellipsoid, white, tomentose, 1-2 cm long.

*Properties*: Plant is fragrant, cooling, pungent, aphrodisiac, laxative and diuretic.

*Uses*: Plant is used to treat biliousness, thirst, burning sensations, erysipelas and elephantiasis. A decoction of leaves and fruits is given against cold and fevers.

Emblica officinalis  Gaertn.

*Syn*: Phyllanthus emblica  Linn.

*Mal*: Nelli

*San*: Amalaki, Dhathri

*Distribution*: Southern moist mixed deciduous, Southern dry mixed deciduous and Dry teak bearing forests.

*Soil requirements*: Variety of soils, loose, medium acidic with low potash and medium phosphate and organic carbon contents.

*Description*: A small to medium sized tree; bark grey, flaking off in irregular, thin flakes. Leaves simple, linear-oblong, 1.3 cm long, closely set and slightly overlapping. Flowers small, in axillary clusters. Fruit globose, 1-2.5 cm in diameter, yellowish.

*Properties*: Fruit is refrigerant, diuretic, laxative, acrid, alexiteric, carminative, alterative, antipyretic. It is an ingredient of ‘Chyavanaprasha’. Fruit helps the abundant growth of hair. Flowers are cooling and aperient. Root and bark are astringent.

*Uses*: Fruits are used in the treatment of a number of diseases such as burning sensations, vomiting, biliousness, urinary discharges, diabetes, leprosy, constipation, Inflammations, erysipelas, piles, anaemia, strangury. anuria, ophthalmia and incipient blindness. Fermented liquor prepared from the fruit is used as a remedy in jaundice, dyspepsia and cough. Dried fruit is used in the treatment of haemorrhage, diarrhoea, dysentery, anaemia, jaundice and dyspepsia. Taking bath daily in water boiled with a small quantity of the fruit will prevent the signs of old age. It is used in 'Kayakalpa Cikilsa' arid 'Dhara'. Seeds are used
in the treatment of asthma, bronchitis and biliousness.

**Euphorbia antiquorum** Linn.
Mal: Chathurakkalli
San: Vajrakantaka

*Distribution*: Laterite thorn forests and in scrub jungles.

*Soil requirements*: Sandy slightly acidic soils with good drainage and permeability, high in potash, low in phosphate and organic carbon.

*Description*: A large spinescent leafless shrub with triangular succulent stem and milky latex. Leaves small, caducous. Flowers yellow, in 3-flowered cymes.

*Properties*: Plant is digestive and purgative. Latex is irritant purgative and expectorant. It kills maggots in the wounds. Root bark is purgative.

*Uses*: A decoction of the stem is recommended in cases of gout, Latex is used against rheumatism, nerve diseases, toothache, dropsy, earache and cutaneous diseases.

**Euphorbia hirta** Linn.
Mal: Nilapala
San: Rakrabinduchada

*Distribution*: Southern dry mixed deciduous forests and scrub jungles. Also seen in forest plantations.

*Soil requirements*: Sandy loam soils, slightly acidic with medium potash and high phosphate and organic carbon contents.

*Description*: A slender scandent annual hispid herb with milky latex. Leaves simple alternate, ovate-lanceolate, unequal at base, serrate, 2.5-3.5 cm long. Flowers small, in axillary capitate cymes.

*Uses*: Plant is used in the treatment of bowel complaints of children, dysentery and colic. Decoction of the plant is given against bronchial afflictions and asthma. In Trinidad the plant is used to treat fever, influenza, measles and hypertensions (Wesley Wong, 1976).

**Euphorbia laeta** Heyne ex Roth
Syn. *E. rothiana* Spreng.

*Distribution*: Southern hill-top tropical evergreen and Southern montane wet scrub forests.

*Soil requirements*: Loamy soils well drained strongly acidic.

*Description*: A tall herb with milky latex. Leaves simple, linear-lanceolate or oblanceolate, 4.5-9 cm long, the floral leaves broadly ovate-cordate. Flowers small, greenish, terminal and in the axils of upper leaves. Fruit a capsule, about 0.5 cm in diameter.

*Properties*: Juice of the Plant is acrid and irritant.

**Euphorbia thymifolia** Linn.
Mal: Chithrappala

*Distribution*: Frequent in forest plantations.

*Soil requirements*: Loamy sand, slightly acidic soils, medium in potash low in phosphate and high in organic carbon.

*Description*: An annual prostate hispid pubescent herb. Leaves simple, opposite, very small, obliquely oblong, rounded at apex, crenulate. Flowers very small, axillary, solitary or 2-3 together. Fruit obtusely keeled, pubescent. Very small.
Properties: Dried leaves and seeds are aromatic, astringent, stimulant and laxative.

Uses: Plant juice is a remedy for ringworm and other skin diseases. Root is used in the treatment of amenorrhoea.

**Euphorbia tirucalli** Linn.
  Mal: Thirukkalli
  Distribution: Southern dry mixed deciduous forests.
  Soil requirements: Loose loamy sand, slightly acidic soils, medium in potash and organic carbon and low in phosphate.
  Description: A small leafless tree with milky latex; bark brown or greenish brown; branches green, cylindrical. Leaves small, caducous. Flowers small, greenish, clustered in the fork of branches.
  Properties: Latex is vesicant, rubifacient, purgative and counter irritant.
  Uses: Latex is applied for warts and rheumatism and used in the treatment of neuralgia, toothache, cough and asthma.

**Glochidion zeylanicum** (Gaertn.) Juss.
  Mal: Neervetti
  Distribution: West coast tropical evergreen and West coast semi-evergreen forests.
  Description: A small tree. Leaves simple, alternate, ovate-oblong, obtuse, rounded at base, glabrous, 5-12.5 x 2.5-5 cm. Flowers small in axillary clusters, yellow. Fruit a capsule, globose, about 2 cm in diameter.
  Properties: Bark is stomachic. Fruits are cooling and restorative.
  Uses: Pounded leaves are applied to itches.

**Hoinonoia riparia** lour.
  Mal: Kaloorvanchi, Puzhavanchi
  San: Asmabheda
  Distribution: West coast semi-evergreen and Southern moist mixed deciduous forests; mostly seen along the banks of streams.
  Soil requirements: Variety of soils with plenty of moisture, slightly acidic.
  Description: A large shrub to a small tree. Leaves simple, alternate, linear, serrulate towards the tip, glandular scaly beneath, 7.5-15 x 0.8-2 cm. Flowers dioecious, small, sessile, in axillary spikes. Fruit globose, 3 mm in diameter, pubescent.
  Properties: Root is laxative and diuretic.
  Uses: Decoction of the root is used in the treatment of piles, stone in the bladder, gonorrhoea and syphilis. Root is used against ulcers and vesical calculi.

**Macaranga peltata** ( Roxb.) Muell.-Arg.
  Mal: Vatta
  Distribution: Mostly seen in Southern secondary moist mixed deciduous forests.
  Soil requirements: Sandy loam soils usually in moist areas, slightly acidic, high in organic carbon.
  Description: A small to medium sized tree; bark dark grey, smooth exudes a red gummy exudate when cut. Leaves simple, alternate, peltate. Orbicular, 12-25 cm in either way. Long petioled. Flowers small, yellowish, in axillary and extra axillary
panicles. Fruit a capsule, globose, about 0.5 cm in diameter, glandular. 

*Uses*: Gum is applied to venereal sores.

**Mallotus philippensis** (Lamk.) Muell.-Arg.  
Mal: Chenkolli, Kunkumapoovumaram, Kurangumanjal  

*Distribution*: West coast semi-evergreen, West coast tropical evergreen and Southern moist mixed deciduous forests.  

*Soil requirements*: Loamy soils, well drained, medium acidic with low potash and phosphate and high organic carbon contents.  

*Description*: A small tree; bark grey or pale brown. Leaves simple, alternate and opposite, ovate-lanceolate, acute or acuminate, 3-ribbed at the base, 7-16 x 4-7 cm. Flowers yellow, in terminal spikes. Fruit 3 lobed, about 1 cm in diameter, covered with bright red powdery substances.  

*Properties*: Leaf is bitter, cooling, purgative, vulnerary, detergent, maturant, carminative and alexiteric. It improves appetite but cause flatulence; heals ulcers and wounds. Glands and hairs on the fruits are bitter, cathartic, styptic and anthelmintic especially against tape worm.  

*Uses*: Leaves are used in the treatment of stone in the bladder, bronchitis and enlargement of spleen.

**Phyllanthus fraternus** Webst.  
*Syn*: *P. niruri* auct. non Linn.  
Mal: Kizhanelli  
San: Tharnalakee  

*Distribution*: Seen in forest plantations.

**Soil requirements**: Variety of soils favours sandy loam slightly acidic low in potash and phosphate and medium in organic carbon.  

*Description*: An annual herb with slender spreading branchlets. Leaves simple, distichous, often overlapping, elliptic-oblong, small. Flowers small, axillary. Fruits depressed globose, about 2 mm in diameter. (Plate XVII, Fig. 4)  

*Properties*: Plant is bitter, astringent, cooling, alleviative of thirst, cough, haemorrhage, anemia and pectoral lesion.  

*Uses*: The whole plant, particularly the leaves, is very beneficial, in jaundice. It is used as a diuretic in dyspical afflictions, gonorrhoea and other troubles of the genito-urinary tract. An infusion of young shoots is given in dysentery. Latex is applied to sores. Powdered leaves and roots are applied as a poultice to lessen oedematous swellings and ulcers.

**Sauropus quadrangularis** (Willd.) Muell.-Arg.  

*Distribution*: Southern moist mixed deciduous and Moist teak bearing forests.  

*Description*: A shrub with slender angular branchlets. Leaves simple, alternate, elliptic-oblong or obovate, 1-2 x 0.8-1.2 cm. Flowers small, axillary. Fruit depressed globose. about 1 cm in diameter.  

*Uses*: Dried leaves are smoked in tonsillitis.

**Securinega leucopyrus** (Willd.) Muell.-Arg.  
*Syn*: *fluggea leucopyrus* Willd.  
Mal:  

125
**Securinega virosa** (Roxb. ex Willd.) Baill.

**Mal** : Karimulli, Perumklavu

**Distribution** : Southern dry mixed deciduous forests and also in scrub jungles.

**Soil requirements** : Variety of soils usually in dry areas.

**Description** : An unarmed shrub with angular branchlets. Leaves simple, alternate, elliptic or obovate, acute, 2.5-7 cm long. Flowers yellowish. in axillary clusters. Fruit globose, white, about 0.5 cm in diameter.

**Properties** : Plant is cooling and aphrodisiac. It is also used as a tonic.

**Uses** : Plant is used in the treatment of strangury, biliousness and diseases of blood. Leaves are used to destroy worms in sores. Roots are used against gonorrhoea.

**Tragia involucrata** Linn.

**Syn.** *T. hispida* Willd.

**Mal** : Choriyanam, Kodithuva

**San** : Kochura

**Distribution** : Southern moist mixed deciduous and Southern dry mixed deciduous forests.

**Soil requirements** : Variety of soils, mostly in dry areas, slightly acidic.

**Description** : A twining hispid herb with stinging hairs. Leaves simple, alternate, oblong-lanceolate to broadly ovate, acuminate. serrate. 2.5-10 x 2-5 cm. Flowers in terminal and leaf opposed racemes. Fruit 3-lobed, hispid, about 8 mm in diameter.

**Properties** : Root is diaphoretic and alterative.

**Uses** : Root is given against fever and body pains. An infusion is given in ardent fever and itching of the skin. It forms the basis of an external application in leprosy and it aids in the extraction of guinea worm.
locally in gout and rheumatic afflications.

**Ulmaceae**

**Aphananthe cuspidata** (Bl.) Planch.
Syn. *Gironniera cuspidata* (Bl.) Planch. ex Kurz
*G. reticulata* Thw.
Mal : Bhuthiyunarthi
*Distribution*: West coast tropical evergreen forests,
*Description*: A large buttressed tree; bark pale brown, flaking off in small strips with the lower end detached and the upper end attached. Leaves simple, alternate, oblong-ovate, acuminate, truncate or acuminate at base. Male flowers in paniculate cymes. Female flowers solitary, axillary. Fruits yellow, ovoid, shortly beaked, 8 mm long.
*Properties*: The plant is used as a blood purifier.

**Celtis timorensis** Spanoghe
Syn. *C. cinnamomea* Lindl. ex Planch.
Mal : Poochakkurumaram
*Distribution*: West coast tropical evergreen forests.
*Description*: A small to medium sized tree; bark pale green, smooth. Leaves simple, alternate, obliquely-ovate, long acuminate, entire or serrate. 3 ribbed, 7-15 x 2.4-5 cm. Flowers greenish, small, male in short racemose cymes; female in slender cymes. Fruit globose, acuminate.
*Properties*: Wood decoction is used as a blood purifier.
*Uses*: Wood is used in medicines for headache and as a fumigator to drive off mosquitoes.

**Holoptelea integrifolia** (Roxb.) Planch.
Mal : Aval
San : Poothi-Karanjah, Udakirya
*Distribution*: West coast semi-evergreen and occasionally in Moist teak bearing forests
*Soil requirements*: Loamy sand, slightly acidic soils, loose with good drainage, low in phosphate, medium in potash and high in organic carbon.
*Description*: A medium to large tree; bark whitish grey, flaking off in irregular flakes. Leaves simple, alternate, elliptic or broadly oblong, acuminate, rounded or cordate at base. 7-12 x 2.5-5 cm. Flowers greenish purple in corymbose fascicles. Fruit samaroid, nearly orbicular, about 2.5 cm in diameter.
*Uses*: Juice of boiled bark is applied to rheumatic swellings.

**Trema orientalis** (Linn ) Bl.
Syn. *Celtis orientalis* Linn.
Mal : Amathali
*Distribution*: Mostly seen in secondary forests.
*Soil requirements*: The soils on which it grows vary widely in texture and structure, clay loam soils with good water supply is most suitable. Alluvial soils along the streams also support good growth.
*Description*: A small tree: bark greyish, smooth. Leaves simple, alternate, oblong, lanceolate. unequal at base, crenate. white or grey pubescent beneath, 7-15 x 2.5-6
Flowers small, greenish, in axillary cymes. Fruit a drupe, black, about 0.5 cm in diameter.

*Uses*: Plant is used in the treatment of epilepsy.

**Moraceae**

*Antiaris toxicaria* (Pers.) Lesch.

**Mal**: Aranjili, Mara-uri

**San**: Valkala-vriksha

**Distribution**: West coast tropical evergreen and West coast semi-evergreen forests.

**Description**: A very large tree, often buttressed, bark thick; grey. Leaves simple, alternate bifarious, elliptic-oblong, acuminate, rounded or cordate at base, entire or serrulate. Scabrous on both sides, 10-12 x 5-7 cm. Male flowers small, fascicled on axillary flat receptacles. Female flowers solitary, axillary. Fruit globose, red, velvety, 1.5-2 cm in diameter; 1-seeded. (Plate XIX, Fig. 2)

**Properties**: Seeds are febrifugal.

*Uses*: The sap 'antiarin' is used as an arrow poison. Seeds are given in cases of dysentery.

*Artocarpus gomezianus* Wall. ex Trecul **ssp. zeylanicus** Jarrett

**Syn.**: *A. lakoocha* auct. non Roxb.

**Mal**: Kadaplavu. Theettiplavu

**Distribution**: Southern moist mixed deciduous and West coast semi-evergreen forests.

**Soil requirements**: Variety of soils; favours sandy clay loam, slightly acidic with low potash, medium phosphate and high organic carbon contents.

**Description**: A medium sized tree; bark greyish brown or black, exudes milky latex when cut. Leaves simple, alternate, oblong or ovate, cuspidate, base truncate or subcordate, grey tomentose beneath. Flowers yellow, in axillary, globose heads. Fruits yellow, irregularly globose, 5-8 cm in diameter; seeds few, flat.

**Properties**: Unripe fruit causes constipation, impotency, eye troubles and fever. Ripe fruit also has the properties, but it is tonic to the liver. Seeds are purgative.

*Uses*: Bark in the form of powder is applied to small pimples and cracky skin.

*Artocarpus heterophyllus* Lamk.

**Syn.**: *A. integrifolia* Linn.

**Mal**: Plavu

**San**: Panasa

**Distribution**: West coast tropical evergreen and Southern hill-top tropical evergreen forests; widely cultivated.

**Soil requirements**: Variety of soils, favours sandy clay loam, slightly acidic with low potash, medium phosphate and high organic carbon contents.

**Description**: Medium to large tree; bark blackish, mottled with black and green, rough with warty excrescences. Leaves simple, alternate, ovate-oblong, acute, 10-25 x 5-12 cm. Male flowers on cylindrical receptacles. Female flowers on ovoid-oblong receptacles. Fruit a large sorosis, up to 50 cm long, containing a large number of ovoid smooth seeds.

**Properties**: Ripe fruit is said to be antidote to all kinds of animal poisons. It is laxative, oleagenous and aphrodisiac. Unripe fruit is astringent and carminative.
Uses: Juice of the plant is applied to glandular swellings and abscesses to promote suppuration. Extract of wood is useful for the relaxation of ulva and for the inflammation of throat and tonsils. Leaves are used to treat skin diseases. Roots are given in case of diarrhoea.

Artocarpus hirsutus Lamk.
Mal: Anjili, Ayani
Distribution: West coast tropical evergreen, West coast semievergreen and Southern secondary moist mixed deciduous forests.

Soil requirements: Variety of soils, well drained, medium potash, low phosphate and high organic carbon.

Description: A large tree; bark grey or greyish brown. Leaves simple, alternate. deeply lobed in young tree, entire in mature trees, broadly ovate, acute, base narrowed, pubescent on the petioles and on the veins beneath. Flowers yellowish green, small, male in axillary cylindrical peduncles, female in ovoid heads. Fruits yellow, ovoid or globose, 5-7.5 cm in diameter, covered with hispid spines.

Uses: Dried leaves along with other medicines are applied over bubos and swelled testicles.

Ficus amplissima J E. Sm.
Syn. F. tsiela Roxb.
Mal: Koyali
Distribution: Southern moist mixed deciduous and West coast semievergreen forests.

Soil requirements: Variety of soils.

Ficus benghalensis Linn.
Mal: Peral
San: Nyagrodha
Distribution: Often planted as avenue trees. Sometimes seen in secondary forests.

Soil requirements: Variety of soils; favours sandy loam soils with
good drainage, slightly acidic, low in potash, medium in phosphate and organic carbon.

**Description**: A large tree with numerous aerial roots; bark greyish white, smooth, exudes a milky latex when cut. Leaves simple, alternate, ovate or elliptic obtuse, subcordate or rounded at base, pubescent when young, 10-20 x 5-10 cm. Fruit bright red, in axillary pairs, about 1.3 cm in diameter. (Plate XVIII, Fig. 2)

**Properties**: The bark is astringent to the bowels, cooling in action, not easily digestible and improves complexion (Mooss, 1977). Milky juice is aphrodisiac, tonic, vulnerary and maturant. Seeds are cooling. Aerial root is styptic and aphrodisiac.

**Uses**: Bark is used in the treatment of ulcers, erysipelas, burning sensation and vaginal disorders (Mooss, 1977). Milky juice is used in the treatment of piles, and gonorrhoea. It is applied externally for pains, rheumatism and lumbago. The slender twigs of the tree are recommended for use as tooth brush and their continued use will strengthen the gums and teeth. A decoction of leaf buds in milk is beneficial in cases of haemorrhages. The tender hanging roots can be used in the same way (Mooss, 1977). Leaves are applied as a poultice to abscesses. Aerial roots are used in the treatment of gonorrhoea, syphilis, biliousness, dysentery and inflammation of the liver. Tender ends of the aerial roots are an effective remedy for obstinate vomiting.

**Ficus dalhousiae** Miq.  
Mal : Kallal

**Distribution**: Southern moist mixed deciduous and West coast semievergreen forests.

**Soil requirements**: Sandy loam, soils with impeded drainage, slightly acidic, high in potash and phosphate.

**Description**: A small tree with grey bark, smooth. Leaves simple, alternate, ovate-elliptic or ovate, acute or acuminate, cordate at base, softly pubescent when young, 14-25 x 10-17 cm, petiole up to 10 cm long. Fruit in sessile axillary pairs, yellowish when ripe, about 2 cm in diameter. (Plate XVIII, Fig. 3)

**Uses**: Leaves and bark are recommended for liver complaints and skin diseases. Fruit is used in the treatment of heart diseases.

**Ficus drupacea** Thumb. var. **pubescens** (Roth) Corner  
Syn. F. *mysorensis* Heyne  
Mal : Kallal

**Distribution**: Occasional in the Southern moist mixed deciduous forests.

**Description**: A very large tree with few aerial roots. Leaves simple, alternate ovate or ovate-elliptic, shortly acuminate, rounded or emarginate at base. Grey tomentose when young, 10-20 x 3.4-7.5 cm. Fruits in axillary pairs, oblong or subovate, 2.3 cm long, orange-red when ripe.

**Uses**: Used in native medicines (Ramarao, 1914).

**Ficus exasperata** Vahl  
Mal : Tharakam

**Distribution**: Mostly seen in the Southern secondary most mixed deciduous forests.
**Description**: A small to medium sized tree; bark pale grey, smooth. Leaves simple, alternate, ovate or oblong-lanceolate, obtuse or acuminate, rounded at base, rarely 3-5 lobed, scabrid and hispid on both surfaces 8-15 x 2.5-6 cm. Fruits peduncled, in axillary pairs, globose, scabrous hispid, yellow, 1.3-2 cm in diameter.

**Uses**: Bark and juice of the plant are recommended in cases of enlargement of liver and spleen. The root is used against the burging sensation of bowels (Van Reede, 1679).

**Ficus hispida** Linn. f.

- **Mal**: Erumanakku, Parakam, Peyathi
- **Distribution**: Mostly seen in the secondary forests.
- **Soil requirements**: Variety of soils. in the slopes. slightly acidic with low potash, medium phosphate and high organic carbon contents.
- **Description**: A small tree; bark grey or brown, rough. exudes milky latex when cut. Twigs with hollow internodes. Leaves simple. opposite, elliptic or oblong, shortly acuminate, rounded or subcordate at base, entire or serrate, scabrous on the upper surface, 10-30 x 5-10 cm Figs ovoid or subpyriform, hispid, yellowish when ripe, clustered on mature stem or on elongated branches arising from mature stem (Plate XIX, Fig. 1)
- **Properties**: All parts of the plant are cooling, acrid, astringent to the bowel and antidiysenteric. Powdered bark is antiperiodic and acts as a tonic. Fruit, seeds and bark are purgative and emetic.

**Uses**: The plant is useful in the treatment of ulcers, biliousness, psoriasis, anaemia, piles. jaundice and haemorrhage of the nose and mouth.

**Ficus microcarpa** Linn. f.

- **Syn. F. retusa** Linn.
- **Mal**: Kallithi.
- **San**: Plaksha
- **Distribution**: West coast semi-evergreen and Southern moist mixed deciduous forests.
- **Soil requirements**: Variety of soils ranging from shallow and dry soils on hill top slopes and alluvium along stream banks.
- **Description**: A medium sized to large tree with numerous thin aerial roots; bark brown, fairly smooth, latex milky. Leaves simple. alternate, ovate, obtuse, shortly acuminate, narrowed at base; 5-10 x 2.5-5cm. Fruits in axillary sessile pairs, globose, greenish yellow, about 1 cm in diameter.
- **Properties**: The plant is pungent, bitter, and aphrodisiac.

**Uses**: The plant: is used in the treatment of leucoderma, ulcers, leprosy, itching and biliousness. Bark is recommended in cases of liver diseases. Powdered leaves and bark are given against rheumatic headache. Leaves and root bark are applied for wounds and bruises. In China the aerial rootlets are considered to be a remedy for toothache.

**Ficus racemosa** Linn.

- **Syn. F. glomerata** Roxb.
- **Mal**: Athi
- **San**: Sadaphala. Udumbara
**Ficus talbolti** King

**Distribution**: West coast tropical evergreen forests.

**Soil requirements**: In the slopes in sandy loam soils with good drainage slightly acidic, high in potassium and organic carbon and low in phosphate.

**Description**: A large tree; bark greyish or yellowish green, smooth. exudes a milky latex when cut. Leaves simple, alternate, elliptic-lanceolate, ovate or ovate-oblong, acute, obtuse at base, 10-17 x 3.5-6.5 cm. Fruits in pairs or fascicled on the twigs, sub-globose 0.5-1 cm in diameter, yellow, scabrid.

**Properties**: Root bark is stomachic and aperient.

**Uses**: Leaf juice is given in burning fevers (Van Rheede, 1679). A decoction of the root is used as an aperient. It is an excellent remedy against any kind of diseases in the mouth (Van Reede, 1679).
Streblus asper Lour.
Mal: Paruva

Distribution: West coast semi-evergreen, Southern moist mixed deciduous and Moist teak bearing forests.

Description: A small tree; bark grey. irregularly ribbed. exudes a milky latex when cut. Leaves simple, alternate. ovate or rhomboid, acute, margin irregularly toothed, 2.5-10 x 1-2.5 cm. Flowers small, greenish yellow; male in axillary heads; female on slender pedicels. Fruits an yellow berry. 1-seeded.

Properties: Milky juice is astrigent and antiseptic;

Uses: Plant is useful in the treatment of leprosy, piles, diarrhoea, dysentery, elephantiasis and tuberculous glands. Decoction of the bark is used against fever, dysentery and diarrhoea. Roots are applied to unhealthy sinuses and ulcers.

Urticaceae

Girardinia divesifolia (Link) Friis
Syn. G. zeylanica Dcne.
Mal: Anachoriyanam

Distribution: Southern hill-top tropical evergreen forests.

Soil requirements: Clayey slightly acidic soils, high in potash and organic carbon.

Description: An undershrub with stinging hairs. Leaves alternate, 3-7 lobed, acuminate, serrate, truncate or cordate at base, 3-ribbed, adpressed hairy. Flowers small, greenish yellow, in pedunculate racemose cymes; the male flowers in the lower and female flowers in the upper axils. (Plate XIX. Fig. 3)

Uses: Leaves are used against headache and swollen joints. A decoction of leaves is given in cases of fever.

Laportea crenulata Gaud.
Mal: Anachoriyanam

Distribution: West coast tropical evergreen and Southern hill-top tropical evergreen forests.

Description: A large shrub to a small tree; bark greyish white smooth. Leaves simple, alternate, crowded towards the apex of the branchlets, oblong-lanceolate, acute or acuminate. narrowed or obtuse at base, crenate or entire with small stinging hairs towards the base of the lamina, 12-30 x 5-10 cm. Flowers small, pale green, in dichotomously branched cymes. Fruit small, black, shining. (Plate XIX, Fig. 4)

Uses: Seeds are used in the same way as coriander. Root juice is given against continuous fevers.

Oreocnide integrifolia (Gaud) Miq.
Syn. Villebrunea integrifolia Miq.

Distribution: West coast tropical evergreen and West coast semi-evergreen forests.

Soil requirements: Variety of soils, loam to sandy loam, strongly acidic with high organic carbon contents.

Description: A small, much branched tree; brown, smooth. Leaves simple, alternate, lanceolate or oblanceolate, acuminate, obtuse or acute at base, entire or somewhat crenulate, pubescent on the nerves beneath, 10-18 x 3.5-6 cm. Flowers very
small, in globose clusters on shortly peduncled dichotomous cymes. usually from the axils of fallen leaves.

_Uses_: In Java, the plant juice is taken for the retention of urine, also used as eyewash and for pimples. In Sumatra, poultice of the leaves is applied against headache.

**Pouzolzia zeylanica** (Linn.) Benn.
Syn. _P. indica_ Gaud.
Mal: Kallurukki
_Distribution_: Occurs in forest plantations and in open areas in the forests.

_Soil requirements_: Variety of soils; favours sandy loam soils, well drained, slightly acidic, medium in organic carbon.

_Description_: A small slender herb. Leaves simple, alternate or opposite, ovate or ovate-lanceolate. obtuse, acute or acuminate at apex. acute or rounded at base 2-3.5 x 0.8-1.5 cm. Flowers very small, in axillary clusters.

_Uses_: Plant is used in the treatment of syphilis and gonorrhoea.

**Salicaceae**

_Salix tetrasperma_ Roxb.
Mal: Attupala, Vanchi
_Distribution_: West coast semi-evergreen forests, mostly seen along the banks of rivers.

_Soil requirements_: Loamy soils with impeded drainage.

_Description_: A medium to large tree; bark rough with vertical fissures, greyish brown, thick. Leaves simple, alternate, lanceolate, acuminate. narrowed or rounded at base, serrate, 5-15 x 2.5-5 cm. Flowers small in catkins. Fruit a capsule. ovate, 0.5 cm long; 4-6 seeded.

_Properties_: Bark is a febrifuge.

**Gnetaceae**

_Gnetum ula_ Brogn.
Syn. _G. scandem_ Roxb.
Mal: Karuthaodal. Ula
_Distribution_: West coast tropical evergreen and West coast semievergreen forests.

_Description_: A large woody climber, branchlets with thickened nodes. Leaves simple, opposite. ovate-oblong or elliptic. Flowers small, whorled in solitary or panicked spikes. Fruits reddish-orange, oblong, apiculate, 3-4 cm long. (Plate XX, Fig. 4)

_Properties_: Stem and roots are antiperiodic.

**Cycadaceae**

_Cycas circinalis_ Linn.
Mal: Intha, Intalappana
_Distribution_: Southern moist mixed deciduous forests

_Soil requirements_: Loose soils with good drainage

_Description_: A small palm-like tree; stem with tessellated diamond shaped scars of fallen leaves. Leaves pinnate, 1.5-3 m long; leaflets 80-100 pairs, linear, acuminate. 15-30x1 cm. Flowers dioecious; male collected in erect cone consisting of short axis with imbricate scales bearing 3-5 anthers, female cone with carpophylls bearing 6-10 ovules. Seeds ovoid, orange-red, 2.4-3.5 cm long.

_Properties_: Gum is an antidote to poison (Van Reede, 1679). Pollen is narcotic.
Uses: Juice of tender leaves is given against flatulence and vomiting. Bark and seeds are ground to a paste and applied as poultice for sores and swellings. Female cone is made into a paste and applied to the joints to remove nephritic pains and to mitigate involuntary flow of semen in gonorrhoea (Van Reede, 1679).

**Orchidaceae**

*Acampe praemorsa* (Roxb.) Rlatt. & Mc Cann

*A. wightiana* Lindl.

Mal: Valia-maravazha

**Distribution**: Southern moist mixed deciduous, West coast semi-evergreen and Moist teak bearing forests. Also frequent in teak plantations.

**Description**: An epiphytic herb with stout elongated stem and thick velamin roots. Leaves distichous, linear-oblong, ligulate, irregularly 2-lobed at apex, thickly coriaceous, 10-20 cm long. Flower perianth yellow with red, lip white with red stripes, in supra-axillary corymbose panicles.

**Properties**: Plant act as a tonic. **Uses**: Plant is used in the treatment of rheumatism.

*Cymbidium aloifolium* (Linn.) Sw.

**Distribution**: West coast semi-evergreen and Southern moist mixed deciduous forests.

**Description**: An epiphytic herb. Leaves distichous, linear-oblong, slightly obliquely notched at apex, 30-50 x 2-3.5 cm. Flowers yellowish red in pendulous racemes.

**Properties**: Plant is emetic and purgative. Furnishes salep which is used as a nutrient and demulcent. The juice from the pod is used against ear ache (Joseph, 1977).

*Dendrobium ovatum* (Willd.) Krzl.

Syn. *D. barbatulam* auct. non Lindl.

**Distribution**: Southern moist mixed deciduous and Moist teak bearing forests.

**Description**: An epiphytic herb, stem terete, elongated. Leaves lanceolate, acute 7-10 x 0.5-1.3 cm. Flowering stem without leaves, Flowers white with a pinkish tinge, in many flowered terminal and lateral stout racemes.

**Properties**: Plant is emollient. Plant juice is stomachic and laxative. It excites the flow of bile.

*Eulophia epidendraea* (Retz.) Fischer

**Distribution**: Southern moist mixed deciduous, West coast semi-evergreen and Moist teak bearing forests.

**Soil requirements**: Variety of soils, well drained, medium acidic and medium in organic carbon.

**Description**: A terrestrial herb with pseudobulb. Leaves linear. 15-70 cm long, l-ribbed. Flowers greenish white, in 30-75 cm long racemes. Leafless at the time of flowering.

**Uses**: Tubers are used as vermicuflge.

*Eulophia nuda* Lindl.

**Distribution**: West coast semi-evergreen forests and grassland above 500 m elevations.

**Description**: A terrestrial herb with spherical tuberous rhizome. Leaves elliptic-lanceolate. acute, pli-
cate, base narrowed into a long tubular sheaths, 20-35 cm long. Flowers greenish purple, in 30-50 cm long racemes. (Plate XX. Fig. 1)

**Uses**: Tubers acts a vermifuge. Tubers are applied to tumours and tuberculous glands of the neck. They are used to treat bronchitis and diseases of blood.

**Flickingeria macraei** (Lindi.) Seidenf.

*Syn. Ephem erantha macraei* (Lindl.) Hunt & Summerh.

**Description**: An epiphytic herb with creeping rhizome and pendulous nodose stem bearing narrowly fusiform pseudobulbs. Leaves 2, linear-oblong, obtuse, terminal on the pseudobulbs. Flowers white or pinkish, 1-3, from below the base of the leaves.

**Properties**: Plant is stimulant and demulcent, alterative, astringent to the bowels, aphrodisiac and expectorant. Fruit is aphrodisiac (Joseph, 1977).

**Uses**: Plant is used in the treatment of asthma, bronchitis, consumption, fever, burning sensations, biliousness and diseases of the blood.

**Habenaria susannae** (Linn.) R. Br.

*Syn. Platanthera susannae* (Linn.) Lindl.

**Distribution**: Grasslands above 700 m elevations.

**Description**: A stout herb with tuberous roots. Leaves ovate-oblong to oblong-lanceolate, acute or acuminate, 5-12 x 2.5-5 cm, the upper smaller and sheathing, passing into leafy bracts. Flowers white, large with a long spur, fragrant.

**Properties**: Tubers are used as a cure for blebs or bullae, especially those occurring on the palm of the hand.

**Luisia tenuifolia** Bl.

**Distribution**: Southern moist mixed deciduous forests.

**Description**: An epiphytic herb. Leaves terete, 10-18 cm long, very variable in thickness. Flowers yellowish with purple tinge, in few flowered short spikes.

**Properties**: Plant acts as an emollient.

**Uses**: Plant is applied as poultice to boils, abscesses and tumours.

**Pholidota pallida** Lindl.

*Syn. P. imbricata* Lindl.

**Distribution**: Southern moist mixed deciduous and West coast semievergreen forests below 1000 m elevation.

**Description**: An epiphytic herb. Leaves with large oblong-ovate pseudobulb, solitary, elliptic-lanceolate or oblanceolate, 10-18 x 2.6 cm. Flowers white with yellow or pink shade, 6 mm long, closely set with conspicuous bracts on long pendulous raceme arising from the top of the pseudobulb.

**Uses**: Pseudobulbs finelymacerated with mustard oil and applied to joints to remove rheumatic pains. Water extracts of crushed pseudobulbs have curative property if taken internally (Sarkar Agarwal, 1978).
**Rhynchostylis retusa** (Linn.) Bl.

*Distribution*: Southern moist mixed deciduous and West coast semievergreen forests. Also frequent on teak in plantations.

*Description*: An epiphytic herb with elongated stout stem. Leaves linear oblong, deeply channelled, unequally 2-lobed at apex, very thick, 15-45 x 1.2-2.5 cm. Flowers pale pink with dark spots, 1.2 cm long, in many flowered long pendulous racemes.

*Properties*: Plant is an emollient (BSI, 1960).

**Satyrium nepalense** D. Don

*Distribution*: Southern montane wet scrub and Southern montane wet grasslands.

*Soil requirements*: Variety of soils; loam, clay loam, poorly drained, medium acidic.

*Description*: An erect leafy herb with tuberous roots, stem up to 65 cm high, sheathed above. Leaves very variable, lanceolate, ovate, oblong or suborbicular. Flowers pink or white, in many flowered dense spikes.

*Uses*: The tuberous roots are used in tonic preparations.

**Vanda spathulata** Spreng.

*Mal*: Ponnampon-maravazha

*Distribution*: Mostly confined to the Southern dry mixed deciduous forests.

*Description*: An epiphytic herb, sometimes terrestrial. Leaves ovate or linear-oblong, obtuse or subacute at apex, 5-10 x 1-3 cm. Flowers golden yellow, in leaf opposed racemes up to 5 cm long.

**Vanda tessellata** (Roxb.) Hook. ex G. Don

*Syn*: *V. roxburghii* R. Br.

*Mal*: Maravazha

*Distribution*: Southern dry mixed deciduous forests.

*Description*: An epiphytic herb with scandent stem. Leaves linear-oblong, apex 3 toothed, keeled, thickly coriaceous. 15-20 x 1-2 cm. Flowers yellowish, tessellated with brown, in 6-10 flowered axillary, up to 25 cm long racemes. (Plate XX, Fig. 2)

*Properties*: Root is alexiteric and antipyretic.

*Uses*: A paste of the leaves is applied to the body during fever. Leaf juice is instilled into the aural meatus as a remedy for otitis media. Root enters into the composition of various medicated oils for external application in nervous disorders and rheumatism. It is used to treat bronchitis, inflammations, hiccough, piles, boils on the scalp etc.

**Zingiberaceae**

**Alpinia allughas** Rosc.

*Mal*: Mala-inchikoova

*Distribution*: West coast semi-evergreen and West coast tropical evergreen forests.

*Soil requirements*: Clayey with poor drainage, strongly acidic, high in potash and low in phosphate.

*Description*: A perennial stout herb with scaly rhizomes. Leaves
linear or oblong-lanceolate, acuminate, cuspidate, 20-35 x 4.5-10 cm. Flowers pink in erect terminal panicles. Fruit black, globose, 1.5 cm in diameter; seeds many, small, black, angular.

Properties: The properties and uses are the same as those of A. galanga.

Alpinia calcarata Rosc.

Distribution: West coast tropical evergreen and West coast semi-evergreen forests.

Soil requirements: Clay loam soils well drained, slightly acidic with low potash, high phosphate contents.

Description: A perennial herb, stem 50-125 cm tall, with horizontal rhizome. Leaves linear-lanceolate or linear, finely acuminate. 15-30 x 2.5-4.5 cm. Flowers white, lip variegated with red and yellow, in terminal, narrow, dense-flowered panicles. Fruit red.

Uses: Used as a substitute for A. galanga.

Alpinia galanga (Linn.) Willd.

Mal: Aratha, Chittaratha
San: Rasna

Distribution: West coast tropical evergreen forests. Often cultivated.

Soil requirements: Variety of soils, with good drainage; favours slightly acidic soils, low in potash and high in phosphate.

Description: A tall herb with horizontal rhizomes. Leaves oblong-lanceolate, acuminate, 18-40 x 3.5-10 cm. Flowers greenish white, lip striped with red, in terminal panicles or racemes. Fruit a berry, orange-red. (Plate XX. Fig. 3)

Properties: Rhizome is used against rheumatism, fever, catarrhal afflictions, especially in bronchial catarrh, diabetes, burning sensation of the liver and tubercular glands. Hakims use the rhizome against impotency. As a drug it is supposed to improve the voice.

Alpinia malaccensis (Burm. f.) Rosc.

Distribution: West coast tropical evergreen and West coast semi-evergreen forests.

Soil requirements: Clayey soils, poorly drained, strongly acidic with high potash and organic carbon and low phosphate contents.

Description: A perennial herb, leafy stem 2-3 m high, rhizomes horizontal. Leaves narrowly-oblong or oblong-lanceolate, acuminate, pubescent beneath, up to 90 cm long long and 18 cm broad. Flowers white, lip yellow with red stripes, in terminal racemes. Fruit globose, pubescent, yellow, about 2.5 cm in diameter.

Properties: Fruit is emetic

Uses: In Java rhizomes are applied to sores.

Costus speciosus (Koen.) Sm.

Mal: Anakoova, Channakoova

Distribution: West coast semi-evergreen, Southern moist mixed deciduous and Moist teak bearing forests.

Soil requirements: Variety of soils, sandy loam to loam, medium acidic.

Description: A tall herb with horizontal rhizome and spirally twisted stem. Leaves oblong or oblong-lanceolate, acuminate, 12-30 x 5-7.5 m. Flowers white or pinkish white.
in dense terminal spikes. Fruit globose, trigonous, red, about 2 cm in diameter; seeds black with a white aril. (Plate XXI, Fig. 2)

Properties: Root is bitter, astringent, purgative, depurative, stimulant, tonic and anthelmintic (Nadakarni, 1954). The drug 'Diosgenin' is extracted from the rhizome.

Curcuma aromatica Salisb.
Mal: Kasthuirimanjal, Kattumanjal
Distribution: West coast tropical evergreen forests. Also cultivated.
Soil requirements: Variety of soils with impeded drainage.

Description: A tall herb with palmately branched rootstock and sessile annulate tubers. Leaves oblong-elliptic or oblong-lanceolate, caudate acuminate, pubescent below, often variegated above, 30-60 x 10-18 cm. Flowers yellow, subtended by large red or pink bracts. in dense spikes. (Plate XXI. Fig. 1)

Properties: Rhizome is tonic and carminative.

Uses: Rhizome is externally applied to bruises and sprains and to promote eruptions.

Elettaria cardamomum (Linn.) Maton
Mal: Elam
San: Ela
Distribution: West coast tropical evergreen forests above 800 m altitude. Also cultivated.

Soil requirements: Variety of soils with impeded drainage.

Description: A tall herb with horizontal rootstock. Leaves linear-lanceolate, acuminate, pubescent below, 25-60 x 5-7.5 cm. Flowers white, in large panicles which directly arises from the rootstock. Fruits subtrigonoous, about 1 cm long; seeds obovoid-angular with a pleasant aromatic odour.

Properties: Seeds are aromatic, stimulant, stomachic, carminative and diuretic. Essential oil from seeds inhibit pathogenic bacterial activity. The antibacterial activity is reported to be comparable to that of standard antibacterial drugs (Narayan et al., 1980).

Zingiber montanum (Koen.) Link ex A. Dietrich

Syn. Z. casunmunnar Roxb
Mal: Eri-channa
Distribution: West coast tropical evergreen forests

Soil requirements: Variety of soils

Description: A perennial herb with tuberous horizontal rootstock. Leafy stem 1.2-2 m tall. Leaves oblong-lanceolate, acute or acuminate, pubescent beneath, 15-20 x 2.5-7 cm. Flowers whitish, lip yellowish, in dense bright red or greenish bracteate spikes.

Properties: Rhizome is a stimulant, carminative and flavouring agent.

Uses: Rhizome is given in cases of dyspepsia and flatulent colic. It is prescribed as an adjunct to many tonic and stimulating remedies.

Zingiber zerumbet (Linn.) Rosc. ex Sm.
Mal: Kattinchi
Distribution: Southern moist mixed deciduous and West coast semievergreen forests.
Soil requirements: Variety of soils in the moist places, sandy loam to loam, medium acidic.

Description: A perennial herb, rootstock not much branched, yellowish inside. Leafy stem 1-1.5 m tall. Leaves oblong-lanceolate or lanceolate, acuminate, 20-30 x 5-7 cm. Flowers pale yellow, in greenish, ovate-oblong bracteate spikes.

Uses: Used for the same purpose as that of Zingiber officinale.

Dioscoreaceae

Dioscorea bulbifera Linn.
Mal: Kattukachil
San: Alukabhedha
Distribution: Southern moist mixed deciduous forests.
Soil requirements: In moist areas, slightly acidic loamy soils.

Description: A large unarmed climbing herb with axillary warted bulbils; tuber large, elongated or globose. Leaves simple, opposite and alternate, broadly ovate, acuminate, cuspidate or caudate, deeply cordate at base, membraneous, 7-20 cm on either way. Flowers small in axillary spikes.

Properties: Underground stem is bitter, tonic, alterative, aphrodisiac, stomachic, anthelmintic and expectorant. It improves appetite and complexion.

Uses: Underground stem is used to treat dyspepsia, urinary discharges, leucoderma, bronchitis, biliousness, strangury, piles, dysentery, syphilis and ulcers. In Guinea the skin and the juice of this yam are used as vesicatory.

Dioscorea hispida Dennst.
Distribution: West coast semi-evergreen and Southern moist mixed deciduous forests.
Soil requirements: Variety of soils usually in the moist areas, medium acidic.

Description: A large climbing, more or less prickly herb with lobed root tubers. Leaves 3-foliolate; leaflets cuneate-ovate, cuspidately caudate-acuminate, the lateral leaflets sometimes shortly 2-lobed. Male flowers in dense clustered spikes; female distant in solitary spikes.

Properties: Milky juice of underground stem possess narcotic properties.

Uses: Milky juice of underground stem along with juice of Antiaris toxicaria is used as arrow poison.

Dioscorea oppositifolia Linn.
Distribution: Southern moist mixed deciduous and Moist teak bearing forests.

Description: A large climbing herb with slender unarmed stems; rootstock with many long cylindrical tubers. Leaves simple, opposite or subopposite. very variable in shape. Male flowers in dense shortly pedunculate spikes; female distant, in solitary or fasciculate axillary spikes.

Uses: Underground stem is used for external application to reduce swellings.

Dioscorea pentaphylla Linn.
Mal: Nurankizhangu
Distribution: Southern moist mixed deciduous, Moist teak bearing and West coast semi-evergreen forests.
Soil requirements: Variety of soils; favours well drained medium acidic, sandy loam soils.

Description: A slender twining herb. prickly towards the base, often bulbils present in the leaf axils; root tubers oblong, very long. Leaves alternate, 3-5 foliolate; leaflets elliptic or ovate-lanceolate, pubescent beneath, 5-10 x 2.5-5 cm. Male flowers small, greenish, in racemes; female in pendulous spikes.

Properties: Underground stem possesses narcotic and tonic properties.

Uses: Tubers are used for dispersing swellings.

Liliaceae

Asparagus gonocladus Baker
Mal: Sathavari
Distribution: Southern moist mixed deciduous, Southern dry mixed deciduous and Moist teak bearing forests.

Soil requirements: Loamy soils, well drained, medium acidic, low in potash and phosphate and high in organic carbon

Description: A much branched subscandent shrub with short recurved spines; roots tuberous, much elongated. Leaves very minute, scaly. Cladoaees, narrowed at both ends, flat, usually falcate. 2-6 together, 2-2.5 cm x 2 mm. Flowers small, white, in 2.5-7 cm long racemes.

Properties: Root is an aphrodisiac

Uses: Root is used against cutaneous diseases. Root is used for the same purposes that of A. racemosus.

Asparagus racemosus Wild.
Mal: Sathavari
San: Abhiru, Sathavari

Distribution: West coast semi-evergreen and Southern moist mixed deciduous forests.

Soil requirements: Loamy soils with good drainage, slightly acidic, low in potash and phosphate and medium in organic carbon contents.

Description: A subscandent undershrub armed with spines, main stem terete, branchlets striate. Leaves minute, scaly. Cladodes very slender, 2-2.5 cm x 1 mm. Flowers white, fragrant, small, in simple racemes.

Properties: Root is refrigerant, demulcent, diuretic, aphrodisiac, antiseptic, alterative, antidysenteric and galactagogue. It improves the intellectual faculties, digestive power and physical strength (Mooss, 1977).

Uses: Root is used in the treatment of biliousness, throat complaints, tuberculosis. leprosy, epilepsy, diseases of blood, kidney and liver, gleet and gonorrhoea. A decoction of tubers in milk is very beneficial in strangury. The expressed juice of the fresh roots with a little honey is given against colic (Mooss, 1977).

Crinum defixum Ker-Gawl.
Mal: Velutha-polathali

Distribution: West coast semi-evergreen and Southern moist mixed deciduous forests.

Description: Herb with tunicate ovoid bulbs with a fusiform base, 5-7.5 cm in diameter. Leaves to a bulb, linear, deeply channelled down the face, obtuse or acute, concave, thick, 50-90 x 2-2.5 cm.
Flowers white, 6-7.5 cm long, in 6-12 flowered umbels; scapes 40-75 cm long. Fruits subglobose, 2.5-3.5 cm in diameter; seeds 1-2, rugose.

**Properties**: Bulb is nauseant, emollient, emetic and diaphoretic. It is toxic to cattle.

**Uses**: Bulb is used for the treatment of burns, whitlow and carbuncle. A few drops of the leaf juice are instilled into the ear in cases of otitis.

**Crinum latifolium** Linn.

Mal : Chuvanna-polathali, Kattulli

**Distribution**: West coast semi-evergreen and Southern hill-top tropical evergreen forests.

**Soil requirements**: Well drained medium acidic, loamy soils.

**Description**: Herb with subglobose tunicate bulb, 12-16 cm in diameter. Leaves numerous to a bulb, lorate, acuminate, membraneous, margins slightly scabrous, 30-60 x 7-12 cm. Flowers slightly fragrant, white, streaked with purple, 7.5-15 cm long, in 10-20 flowered umbels, scapes 30-50 cm long. Fruit subglobose. 3.5-5 cm in diameter,

**Uses**: Bulbs are used as a rubefacient in rheumatism. Also applied to piles and abscesses to cause suppuration. Leaf juice is used in cases of earache.

**Curculigo orchioides** Gaertn.

Mal : Nilappana
San : Musali

**Distribution**: Southern moist mixed deciduous, West coast semi-evergreen forests and Southern montane wet grasslands.

**Soil requirements**: Variety of soils, sandy loam to loam, well drained, medium to strongly acidic.

**Description**: Herb with elongated tuberous rootstock. Leaves linear, plicate. Membraneous. Glabrous or sparsely hairy, the base sheathing, 12-2.5 cm. Flowers bright yellow, about 1 cm long, in short racemes. Fruit 1.2 cm long, hypogeous, 1-4 seeded; seeds oblong. Deeply grooved in wavy lines. (Plate XXII, Fig. 3)

**Properties**: Root is bitter, viriligenic, roborant, not easily digestible and rejuvenative.

**Uses**: A decoction of the roots in milk is often prescribed in the cases of leucorrhoea, gonorrhoea. General debility (Mooss, 1977). Piles, jaundice, asthma and bronchitis. Roots are used as a poultice for itch and skin diseases

**Gloriosa superba** Linn.

Mal : Menthonni
San : Lamgali, Visalya

**Distribution**: Southern moist mixed deciduous, Southern dry mixed deciduous and West coast semi-evergreen forests.

**Soil requirements**: Clay loam soils well drained medium acidic with low potash and phosphate and medium organic carbon contents.

**Description**: A herbaceous climber with cylindric bifurcately branched rootstock. Leaves sessile, ovate-lanceolate, acuminate, the tip ends in a spiral tendril, cordate at base, 7-15 x 2-4 cm. Flowers large, showy, axillary, solitary or subcorymbose towards the ends of branches, greenish yellow at first, becoming red. Fruit a
linear-oblong capsule, 4.5 cm long. (Plate XXII, Fig. 1)

Properties: Root is tonic, stomachic, purgative, cholagogue and anthelmintic.

Uses: Used in the treatment of leprosy, parasitical affections of skin, piles and colic. Sarch from the root is given internally in gonorrhoea but according to Mooss (1977) it is not generally used internally, considering it as poisonous.

Hypoxis aurea Lour.

Distribution: Southern montane wet grasslands.

Description: Small herb with subglobose or elongated rootstocks. Leaves radical, 6-12, narrowly linear, subcoriaceous, acute, keeled, 9-30 cm x 2-4 mm. Flowers yellow, in 1-2 flowered filiform scapes. Fruit a thin walled oblong capsule, 0.5-1 cm long, crowned by the erect perianth segments.

Uses: Plant is used as tonic and aphrodisiac in China and Malaysia.

Smilax aspera Linn.

Distribution: Southern montane wet scrub, Southern hill-top tropical evergreen and Southern montane wet temperate forests.

Description: A climbing shrub, often prickly. Leaves simple, alternate, ovate, deltoid or broadly cordate, 5-9 ribbed. Leaf sheaths at base often forming tendrils. Flowers white, in sessile umbels on axillary peduncles.

Uses: Used as a substitute for Hemidesmus indicus.

Smilax zeylanica Linn.

Mal: Kareelanchi

Distribution: Southern moist mixed deciduous, West coast semi-evergreen and Moist teak bearing forests.

Description: A prickly climbing shrub. Leaves alternate, ovate-oblong or orbicular, acute or acuminate, 5-7 ribbed, 7-15 x 3.5-7 cm; leaf sheaths at base often forming tendrils. Flowers white, in pedunculate, many flowered umbels. Fruit a globose berry, red when ripe, about 0.8 cm. (Plate XXII, Fig. 4)

Uses: Root is used as a substitute for Hemidesmus indicus in the treatment of venereal diseases. Applied for rheumatism. Given in cases of bloodless dysentery.

Commelinaceae

Aneilema scapiflorum Wight

Distribution: West coast tropical evergreen forests.

Description: A herb with elongated tuberous roots. Leaves radical, linear, acuminate, ensiform, 10-20 x 1 cm. Flowers pale blue, in erect elongate panicles or terminal leafless scapes.

Properties: Root is an astringent and possesses tonic properties.

Uses: Root is used to treat colic, piles, infantile convulsions, asthma and spermatorrhoea.

Commelina benghalensis Linn.

: Southern hill-top tropical evergreen forests.

Soil requirements: Clayey slightly acidic soils, high in potash, phosphate and organic carbon.
**Description** : A herb with slender dichotomously branched stem, creeping and rooting below. Leaves alternate, ovate or oblong, obtuse, unequal at base, 2.5-7 x 1-3.5 cm, leaf sheath short or long. Flowers blue in sessile, 2-3 flowered cymes with conspicuous auricled bracts.

**Properties** : Plant is bitter, emollient, demulcent, refrigerant and laxative.

**Uses** : Plant is used in the treatment of leprosy.

*Cyanotis tuberosa* Schult. f.

**Distribution** : Growing in humus on moist rocks and crevices in trees, in evergreen forests.

**Description** : A suberect or prostrate herb, nodes swollen and hirsute, roots fusiform. Leaves sessile, linear or broadly ensiform, often purple beneath, 10-25 x 1.5-2.5 cm. Flowers bluish purple, in densely hirsute, axillary pedunculate cymes; bracts shorter than the cymes and falcately curved.

**Uses** : Root is used in the treatment of continued fever.

*Murdannia nudiflora* (Linn,) Brenan

*Syn. Commelina nudiflora* Linn.

**Distribution** : In grasslands

**Soil requirements** : Side of swamps, medium acidic with medium potash, low phosphate and high organic carbon contents.

**Description** : A slender diffuse herb with fibrous roots. Leaves simple, sessile, lanceolate or ovate-lanceolate, acute or acuminate, 3.5-7 x 1-2 cm. with prominent leaf sheaths. Flowers dark blue, in axillary, 1-3 flowered cymes, subtended by 2-3 cm long ovate or ovate-lanceolate spathe.

**Uses** : Plant is used to treat burns, itches and boils. Leaves are used for poulticing sores.

### Palmae

*Calamus travancoricus* Bedd. ex Hook. f.

Mal : Arichural, Cheruchural

**Distribution** : West coast tropical evergreen and West coast semievergreen forests.

**Soil requirements** : Clayey soils with poor drainage, strongly acidic, low in phosphate and high in potash.

**Description** : Slender clustering climbing palms. Leaves pinnate, up to 40 cm long, with sheathing bases covering the stem; leaflets grouped into 3-4, 25 x 2 cm; petiole and sheaths covered with spines. Plants dioecious, inflorescence up to 60 cm long, terminating into a flagellum. Fruit covered with scales, 0.5 cm in diameter.

**Uses** : Tender leaves are used in the treatment of biliousness, worms, dyspepsia and ear diseases.

*Caryota urens* Linn.

*Mal* : Anappana, Choontappana, Ollattippana

**Distribution** : West coast tropical evergreen and West coast semievergreen forests.

**Description** : A large palm, trunk 12-18 m high and 25-45 cm in diameter, with prominent leafscars. Leaves bipinnate, 5-6 x 3-5 m, primary divisions 2.5-3 long; leaflets cm long, fasciculate or alternate, cuneiform, obliquely truncate, irregu-
larly serrate. Inflorescence 2.5-4 m long, with many drooping branches. Fruits 1.5-2 cm in diameter, reddish when ripe.

*Properties*: Fruit is acrid and cooling.

*Uses*: Fruit is used in the treatment of hemicrania. Freshly drawn toddy is laxative.

**Phoenix pusilla** Gaertn.

*Mal*: Chitteenthal

*Distribution*: in grasslands.

*Soil requirements*: Sandy loam soils slightly acidic with low potash and phosphate and high organic carbon contents.

*Description*: A small palm, stem very short, bulbiform, 15-25 cm in diameter, covered with bases of the petiole. Leaves pinnate 50-150 cm long; leaflets linear, 25-50 x 1-1.5 cm, fasciculate; petiole-about 20 cm long, with stiff spines. Inflorescence 15-25 cm long, spadix branched, bearing many flowers. Fruit oblong-ellipsoid. purplish when ripe, about 1.5 cm long.

*Properties*: Fresh juice is cooling and laxative.

*Uses*: Gum is used against diarrhoea and genito-urinary diseases.

**Pinanga dicksonii** (Roxb.) Scheffer

*Mal*: Kanakkamuku, Kattukamuku, *Mal*a-adakk*a

*Distribution*: West coast tropical evergreen and Southern hill-top tropical evergreen forests.

*Description*: A slender palm, trunk green, reaching to a height of 5-7 m and 2.5-5 cm in diameter. Leaves pinnate, about 1.2 m long; leaflets numerous, sessile, 30-60 x 2-2.5 cm. Inflorescence with 4-8 branches, densely packed with imbricate flowers. Fruit ellipsoid 1.2-2 cm long.

*Uses*: Fruit is used as a substitute for betel-nut.

**Araceae**

**Acorus calamus** Linn.

*Mal*: Vayampu

*San*: Vacha

*Distribution*: In marshy places at altitudes above 800 m. (Munnar)

*Soil requirements*: Damp marshy places, strongly acidic to slightly alkaline soils.

*Description*: A stout herb with creeping rootstock. Leaves distichous, ensiform, linear, very long. Flowers in sessile, densely flowered cylindric spadix.

*Properties*: Rhizome is pungent, promotes digestive power, improves voice and intellectual capacities, causes vomiting when given in large doses. Considered to be an antidote to poison. It is a very powerful insecticide (Mukherjee and Govind, 1960).

*Uses*: Rhizome in the form of a paste is administered to young children for improving the mental faculties. It is used to treat dyspepsia, colic, remittent fevers, bronchitis, asthma and dysentery in children.

**Arisaema tortuosum** (Wall.) Schott.

*Distribution*: Southern hill-top tropical evergreen and Southern montane wet scrub forests.

*Soil requirements*: Moist clay loam soils in the slopes, strongly acidic.

*Description*: A tall herb with spherical tubers, up to cm in
diameter. Leaves 2 or 3, pedatisect, 30 cm to 1 m, the sheath often mottled with purple; leaflets sessile or petiolate, ovate-lanceolate or linear-lanceolate, caudately acuminate, almost radially arranged. Peduncle 60-120 cm long; spathe green outside, purple inside, tube as long as the ovate-oblong limb, berry 4-5 seeded, red when ripe. (Plate XXII, Fig. 2)

Uses: Seeds and roots are used in veterinary medicine.

Cryptocoryne spiralis (Retz.) Fisch. ex Wydl.

Mal : Nattathividayam
Distribution: Grows in marshy areas and along the margins of ponds.
Description: A herb with creeping tuberous rootstock. Leaves radical, linear. acute or acuminate. 7-20 x 0.5-2 cm. Spathe deep green outside, purple and transversely lamellate inside.
Uses: Rhizome in combination with other drugs is used to treat infantile vomiting, cough, fever and abdominal complaints.

Lagenandra toxicaria Dalz.

Distribution: West coast tropical evergreen and Myristica swamp forests.
Description: A herb with thick creeping rootstock, about 5 cm in thickness. Leaves elliptic-oblong, obtuse or acute; midrib very stout; 15-30 x 5-10 cm, petiole as long as the lamina. Spathe 7.5-22 cm long, tubular below, the limb ovate-lanceolate, acuminate.
Properties: Plant is very poisonous and insecticidal.
Uses: Plant is used as a remedy for itch.

Pothis scandens Linn.

Mal : Anapparuva, Paruvakodi
Distribution: West coast tropical evergreen and West coast semi-evergreen forests.
Soil requirements: Variety of soils well drained, medium acidic.
Description: A slender climbing shrub. Leaves simple, ovate, elliptic or lanceolate, acute or acuminate, 5-20 x 1-5 cm; petiole broadly winged. Spathe very small, axillary.
Uses: Powdered leaves are applied to the body in case of small pox. Stem is used for smocking in cases of asthma.

Remusatia vivipara (Roxb.) Schott.

Mal : Maravaarachempu
Distribution: West coast tropical evergreen forests.
Description: A tuberous herb with long bulbiferous shoots, bearing small scaly bulbils. Leaves peltate, orbicular-ovate or cordate, acute or acuminate, 10 x 8 cm to 45 x 30 cm. Spathe 10-12 cm long, coriaceous, tube oblong, greenish, limb broadly orbicular-ovate, golden yellow.
Uses: Juice of the plant mixed with cow's urine is considered to be alexipharmic. The root with turmeric is made into an ointment and used as a remedy for itch.

Gramineae

Bambusa arundinacea (Retz.) Roxb.

Syn. B. bambos Druce
Mal : Mula
San : Vamsa
Distribution: Southern moist mixed deciduous, Southern dry mixed
deciduous forests and in 'Bamboo brakes'.

**Soil requirements**: Variety of soils, medium acidic.

**Description**: Tall thorny bamboo. Stem many, crowded; tufted on a rootstock; culms 20-30 m long, covered with prominent culmsheaths when young. Branches horizontal with spines at the nodes. Leaves linear-lanceolate; acuminate 10-20 x 1.5-2.5 cm. Flowers in large panicles often on the entire branches.

**Properties**: Leaf is emmenagogue. Bamboo manna has tonic properties. Stem and leaves are cooling and laxative. Seeds are sweet, aphrodisiac and alextieric. Root also is used as a tonic.

**Uses**: Bamboo manna is used to treat fevers, cough, leprosy; jaundice, anaemia, and strangury. Stem and leaves are used in the treatment of diseases of blood, biliousness, leucoderma, inflammations, strangury and wounds and piles. Juice of the flower is instilled into the ear for ear-ache and deafness. Seeds are used against biliousness. Root is applied against ringworm and bleeding gum.

**Cymbopogon flexuosus** (Steud.) Wats

- Mal: Inchipullu
- **Distribution**: In grasslands, also seen in forest plantations.
- **Soil requirements**: Variety of soils, favours loamy sand, medium acidic soils, low in potash and phosphate.
- **Description**: A densely tufted, 1-2 m tall aromatic herb. Leaves flat, scabrous, 20-100 x 1-1.5 cm. Spikelets in long slender flexuous panicles.

**Uses**: An infusion of fresh leaves is administered as a diaphoretic and stimulant in catarrh and febrile conditions. The oil is used as a carminative and as an application in chronic rheumatism and other painful affections. The lemon grass oil is used in the perfume industry.

**Cynodon dactylon** (Linn.) Pers.
- Mal: Karuka
- San: Durva
- **Distribution**: Mostly seen in forest plantations and openings in all types of forests.
- **Soil requirements**: Sandy loam soils, well drained, with medium acidic, low potash and phosphate and high organic carbon contents.
- **Description**: Slender prostrate herb, rooting at nodes. forming matted tufts. Leaves narrowly linear or lanceolate, finely acute, pungent, 2-10 cm x 1-3 mm. Spikes 2-6, radiating from the top of slender peduncle.

**Properties**: Plant juice is astringent and diuretic. A decoction of the root is also diuretic.

**Uses**: Plant juice is applied to fresh cuts and wounds. It is used in the treatment of dropsy, anasarca, hysteria, epilepsy, insanity, chronic diarrhoea, dysentry and catarhal ophthalmia. An infusion of roots is recommended for chronic gleet. A decoction of the root is given in cases of dropsy and secondary syphilis.

**Dactylocteniom aegyptium** (Linn.) P. Beauv

- **Distribution**: Mostly seen in forest plantations and open places in the forests.
**Soil requirements**: Sandy loam soils with good drainage, slightly acidic, medium in potash and low in phosphate and organic carbon.

**Description**: Annual prostrate herb, stem profusely branched, rooting at nodes. Leaves linear, acuminate, glabrous or hairy, 2.5-10 cm x 2-4 mm. Spikes 2-6, digitatively radiating, 1-3.5 cm long, rachis dorsally flattened.

**Uses**: Grains are given to women after childbirth. Decoction of seeds is renowned in Africa as an alleviator of pain in kidney.

*Dendrocalamus strictus* (Roxb.) Nees

**Mal**: Kal-mula

**Distribution**: Southern moist mixed deciduous and Southern dry mixed deciduous forests.

**Soil requirements**: Variety of soils favours loamy soil, slightly acidic low in potash and phosphate and high in organic carbon.

**Description**: A densely tufted bamboo with strong culms which are solid or with a small cavity, 5-15 m high and 2.5-7.5 cm in diameter. Culm sheaths covered with golden brown stiff hairs. Leaves oblong, with twisted acumen, scabrous along the margins, 2.5-7.5 (-15) cm by 0.6-30 mm. Spikelets in dense globose heads.

**Properties**: Silicious matter acts as a tonic and astringent. Leaves are ecbolics to animals.

**Heteropogon contortus** (Linn.) P. Beauv

**Mal**: Ramacham

**San**: Usiram

**Distribution**: In grasslands and Southern dry mixed deciduous forests.

**Soil requirements**: Sandy loam, medium acidic soils, low in potash and phosphate and high in organic carbon.

**Description**: A perennial herb, stem slender, densely tufted, erect or decumbent below. Leaves linear, acuminate, flat, 15-25 cm x 2-5 mm. Spikelets in racemes, 3-7 cm long, awns of the racemes often twisted together.

**Properties**: Root is stimulant and diuretic.

**Paspalum scrobiculatum** Linn.

**Mal**: Varaku

**San**: Kodrava

**Distribution**: In forest plantations, mostly seen in moist places.

**Soil requirements**: Loamy soils, medium acidic with medium potash, low phosphate and high organic carbon contents.

**Description**: An annual tufted herb. Leaves bifarious, linear, finely acuminate, 10-30 cm x 2-8 mm. Spikes 2-6, distant and spreading, 2.5-12 cm long; spikelets 2 ranked, sessile.

**Properties**: Plant acts as a tonic and alexiteric. It occasionally develops narcotic properties.

**Uses**: Plant is used in the treatment of ulcers.

**Vetiveria zizanioides** (Linn.) Nash.

**Syn.**: *Andropogon muricatus* Retz.

**Mal**: Ramacham

**San**: Usiram

**Distribution**: In grasslands and Southern dry mixed deciduous forests.

**Soil requirements**: Low lying poorly drained lands where the soils are generally sandy loam to clay, strongly acidic to slightly alkaline, low in phosphate, medium in potash, and medium in organic carbon.

**Description**: A coarse perennial grass, 1-2 m tall, rhizome stout with spongy aromatic roots, culms more or less compressed below. Leaves narrow, distichous at base, 30-90 cm by 3-10 mm. Spikelets in terminal panicles.

**Properties**: An infusion of roots is considered refrigerant, febrifuge, diaphoretic, stimulant, stomachic, anthelmintic and emmenagogue.

**Uses**: It is applied externally for cooling in fevers. In Trinidad roots are used in the treatment of pleurisy (Wesley Wong, 1976).
4. Helicteres isora
Plate III 1. Elaeocarpus serratus 2. Elaeocarpus tectorius
3. Elaeocarpus tuberculatus 4. Hugonia mystax
Plate IV
1. Tribulus terrestris
2. Toddalia asiatica
3. Chloroxylon swietenia
4. Aphanamixis polystachya
Toona
Plate VI
1. Celastrus paniculata
2. Allophylus cobbe
3. Sapindus laurifolius
4. Connarus monocarpus
Plate VII
1. Dalbergia volubilis
2. Dalbergia symapathetica
3. Mucuna pruriens
4. Pseudarthria viscida
Plate VIII

1. Desmodium gangeticum
2. Desmodium heterocarpon
3. Desmodium velutinum
4. Pongamia pinnata
Plate 1. Cassia fistula
Plate 2. Acacia rugata
Plate 3. Saraca asoca
Entada pursaetha
Plate X

1. Borreria articularis
2. Rubia cordifolia
3. Valeriana beddomei
4. Valeriana ernottiana
Plate XI  1. Gaultheria fragrantissima  2. Embelia ribes
3. Ardisia solanacea  4. Mimusops elengi
Plate XII

1. Terminalia bellirica  
2. Symplocos cochinchinensis ssp. 
3. Myxopyrum smilacifolium  
4. Rauvolfia serpentina
Plate XIII

1. Holarrhena pubescens
2. Ichnocarpus frutescens
3. Gymnema sylvestre
4. Hemidesmus indicus
Plate XIV  
1. Holostemma adakodien  
2. Pergularia daemia  
3. Tylophora indica  
4. Strychnos potatorum
Spermum
Plate XVII  1. Piper longum
            3. Baliospermum montanum
            2. Sarcandra chloranthoides
            4. Phyllanthus fraternus
Plate XIX  
1. Ficus hispida  
3. Girardinia zeylanica  
2. Antiaris toxicaria  
4. Laportea crenulata
Plate XX

1. Eulophia nuda
2. Vanda tessellata
3. Alpinia galanga
4. Gnetum ula
Plate XXII 1. Gloriosa superba
2. Arisaema tortuosum
3. Curculigo orchioides
4. Smilax zeylanica
Plate XXIII  Medicinal Plant Garden


Balakrishnan, V. V. 1975. Plants and their medicinal properties. Cherry Books, Madras.


Brandis, D. 1906. Indian Trees. Bis-
hen Singh Mahendra Pal Singh (1979 reprint), Dehra Dun.

Bressers. J. 1951. The Botany of
Ranchi District, Bihar. Catholic
Press, Ranchi.

BSI. 1960. List of medicinal plants
deposited in various herbaria of
the Botanical Survey of India.

Burkill, I. H. 1909. A working list of
the flowering plant of Balu-

Burkill. I. H. 1935. A dictionary of
the economic products of the
Malay peninsula. 2v. Crown age-
ents for the Colonies. London.

Chakravarthy. B. K.. Gupta. S., Gam-
I-Epicatechin - A novel antidia-
betic drug. Indian Drugs, 18 : 184-185.

Champion, H. G. and Seth, S. K.
1968. A Revised survey of the
forest types of India. Manager of
publications, Delhi.

Chandrasena. J. P. C. 1935. The che-
mistry and pharmacology of
Ceylon and Indian medicinal
plants. Colombo.

Chopra. R. N.. Nayar. S. L, and Cho-
ptra. l. C. 1956. Glossary of Indi-
an medicinal plants. Council of
Scientific and Industrial Rese-
arch. New Delhi.

Dabad Ghao. P. M. and Sankara-
arayanan. K. A. 1973. The grass
cover of India. Indian Council of
Agricultural Research. New Delhi.

Dalziel. J. M. 1948. The useful plants
of west tropical Africa. Crown
agents for the colonies. London.

Dastur. J. F. 1951. Useful plants of
India and Pakistan. D. B. Tara-
porevala Sons & Co., Bombay.

De Somay. 1916. Greenmanures and
manuring in the tropics. John
Bale Sons & Daniels Son Ltd..
London.

Dey. A. C. 1980. Indian medicinal
plants used in Ayurvedic prepara-
tions. Bishen Singh Mahendra

Dey. Kannyalai 1973. The indigenous
drugs of India. The chronica
Botanica. New Delhi.

Gupta, R. 1980. Plants for environ-
mental conservation. Bishen
Singh Mahendra Pal Singh.
Dehra Dun.

Hole, R. S. 1911. The Indian forest
memoirs - On some Indian forest
grasses and their ecology. Supdt.
Govt. Printing, Calcutta.

Howes, F. N. 1949. Vegetable gums
& resins. Chronica Botanica.
New Delhi.

Humphreys, I. R. 1979. Tropical past-
ure seed production. FAO. Rome.

Jain, S. K. 1965. Medicinal plant
lore of the tribals of Bastar. Eco-
nomic Botany. 19:236-250.


Martindale, 1941-43. The extra pharmacopoeia, 22nd Ed. 2v.


Abortifacient — An agent that causes abortion
Acrid — Biting, pungent
Ague — A burning fever
Alexipharmic — Antidote to poison
Alexiteric — Protective to infectious diseases
Alterative — Causing a favourable change in the disordered functions of the body or metabolism
Amenorrhoea — Failure of menstruation
Amnesia — Partial or total loss of memory
Anaemia — Lack of enough blood causing paleness
Analgesic — An anodyne
Anasarca — Diffused dropsy in the skin and subcutaneous tissue
Anodyne — A medicine that allays pain
Anthelmintic — Destroying or expelling worms
Antiemetic — Preventing vomiting
Antilithic — An agent which prevent the formation of caliculi or promote their dilution
Antiperiodic — Preventing the regular recurrence of a disease
Antiphlogistic — Acting against heat or inflammation
Antipruritic — Preventing or relieving itching
Antipyretic — Counteracting fever
Antiscorbutic — Acting against scurvy

Antispasmodic — Opposing spasms or convulsions
Aperient — A laxative or mild cathartic
Aphthae — Ulcer on the surface of a mucous membrane
Arthritis — Inflammation of a joint
Astringent — Having power to contract organic tissues
Aural — Relating to the ear
Bilious — Affected by or pertaining to bile
Bleb — A collection of fluid beneath the skin
Blennorrhogia — Discharge of mucous
Bubo — Inflammatory swelling of the gland
Cachexia — Depressed habit of mind
Calculus — A concretion formed in any part of the body usually compounds of salts of organic or inorganic acids
Carminative — Drug curing flatulence
Cataplasm — Poultice
Catarrh — Inflammation of a mucous membrane
Cathartic — Having the power of cleansing the bowels, purgative
Cephalalgia — Headache
Chilblains — Itching or burning especially on the fingers, toes, heel, nose and ears on exposure to extreme cold
Cholagogue — A drug which causes increased flow of bile into the intestine
**Cicatrice** — Scar over a healed wound

**Colic** — Relating to the colon

**Colon** — The division of the large intestine extending from the cecum to the rectum

**Conjunctivitis** — Inflammation of conjunctiva

**Cystitis** — Inflammation of a bladder, especially urinary bladder

**Demulcent** — Soothing

**Deobstruent** — Relieving or removing obstruction

**Deodorant** — Removing the odour

**Depurative** — Puritying

**Diaphoretic** — Promoting sweating

**Diuretic** — Promoting the discharge of urine

**Dropsy** — An excessive accumulation of clear or watery fluid in any of the tissues or cavities of the body

**Dysmenorrhoea** — Difficult or painful menstruation

**Dyspepsia** — Indigestion

**Dysphonia** — Difficulty or pain in speaking

**Dysuria** — Difficulty or pain in passing urine

**Ecbolic** — Accelerating childbirth

**Embrocate** — To moisten and rub

**Emetic** — Causing vomiting

**Emmenagogue** — Medicine intended to restore the merises

**Emollient** — Softening

**Emphysema** — Inflation of stomach etc.

**Errhine** — Sternotomatory

**Erysipelas** — An inflammatory disease, generally on the face, marked by a bright redness of the skin

**Febrifuge** — That which drives off fever

**Febrile** — Feverish, relating to fever

**Flatulence** — Distention of stomach by gases formed during digestion

**Galactagogue** — Medicine that promotes secretion of milk

**Gastralgia** — Pain in the stomach

**Gleet** — Chronic discharge of thin mucus from the vagina

**Gravel** — Small concretions, usually of uric acid, calcium oxalate or phosphates formed in the kidney

**Gripe** — A sharp pain in the stomach

**Haematemesis** — Vomiting of blood

**Haematenia** — Presence of blood in the urine

**Haemoptysis** — Spitting of blood

**Haemostatic** — Styptic

**Hemicrania** — Headache confined to one side

**Hemiplegia** — Paralysis of one side of the body

**Hiccough** — A diaphragmatic spasm causing a sudden inhalation which is interrupted by a spasmodic closure of the glottis, producing a noise

**Hydragogue** — Removing water or serum

**Hypochondriasis** — A morbid concern about one's own health and exaggerated attention to any unusual bodily or mental sensations

**Lepetigo** — A skin disease characterised by thickly set clusters of pustules

**Laxative** — Having the action of loosening the bowels

**Leucoderma** — Absence of pigment in the skin

**Leucorrhoea** — An abnormal mucous discharge from the vagina

**Lithiasis** — The formation of calculus of any kind

**Lithotriptic** — An agent that effects the dissolution of calculus

**Lumbago** — Pain in mid or lower back
Micturition — The desire to urinate

Nauseant — An agent that causes nausea

Oleaginous — Oily, greasy

Opacity — An opaque or non-transparent area

Otitis media — Inflammation of the middle ear

Paraplegia — A stroke in one side

Perthisis — Hemiplegia

Pharyngitis — Inflammation of the mucous membrane and underlying part of the pharynx

Phlegmatic — Generating phlegm

Plasy — Loss of control in the muscles of the body

Poultice — A soft mush prepared by various substances with oily or watery fluids

Psoriasis — A condition characterised by the eruption of circumscribed, discrete and confluent reddish, silvery scaled lesions

Purigo — An eruption on the skin causing great itching

Roborant — A strengthening agent

Rubifacient — An external application that reddens the skin

Sciatica — Neurites of the sciatic nerve

Sialaqogue — Anything that stimulates the flow of saliva

Slough — Dead tissue in a sore

Soporific — Inducing sleep

Spermatorrhoea — Involuntary seminal discharge

Sternutatory — That causes sneezing

Stomachic — Anything that is good for the stomach.

Styptic — Astringent, checking bleeding

Strangury — Difficulty in discharging urine

Sudorific — Diaphoretic

Tympanitis — Inflammation of the tympanic membrane

Vermifuge — Drug that expels worms

Vertigo — Dizziness

Vesicant — Blistering

Vulnerary — Useful in healing wounds
Index to Botanical Names

Abarema bigemina (Linn.) Kosterm. 57
A. lebbeck (Linn.) Benth. 58
A. marjinata (Lamk.) Merr. 58
A. odoratissima (Linn. f.) Benth. 58
A. procera (Roxb.) Benth. 59
A. stipulata Boiv. 58
Allophylus cobbe (Linn.) Raeusch 37
A. rheedii Radlk. 37
Alpinia allughas Rosc. 137
A. calcarata Rosc. 138
A. galanga (Linn.) Willd. 138
A. malaccensis (Burm. f.) Rosc. 138
Alstonia scholaris (Linn.) R. Br. 88
A. venenata R. Br. 88
Amoora rohituka (Roxb.) Wight & Arn. 29
Ampolocissus araneosa (Dalz. & Gihs.) Planch. 35
A. arnottina Planch. 35
A. tomentosa (Heyne ex Roth) Planch. 35
Anamirta cocculus (Linn.) Wight & Arn. 3
A. paniculata Colebr. 3
Andrographis paniculata (Burtn.) Wall. ex DC. 102
A. subspathulata 102
Andropogon muricatus Retz 148
Anisochilus carnosus (Linn. f.) Wall. 108
Anisomeles indica (Linn.) Ktze. 108
A. malabarica (Linn.) R. Br 108
A. ovata R. Br. 108
Anodendron paniculatum (Roxb.) DC. 88
Anogeissus latifolia (Roxb. ex DC.) Wall. ex Guill. Perr. 61
Anthocepalus cadamba Miq. 71
A. chinensis (Lamk.) Rich. ex Walp. 71
A. indicus A. Rich. 71
Antiaris toxicaria (Pers.) Lesch. 128
Antidesma bunius (Linn.) Spreng. 118
A. ghaesembilla Gaertn. 119
Apama siliquosa Larnk. 113
Aphananthe cuspidata (Bl.) Planch. 127
Aporusa lindleyana (Wight) Baill. 119
Ardisia solanacea Roxb. 82
Argyreia fulgens Chois. 97
Arisaema tortuosum (Wall.) Schott 145
Aristolochia indica Linn. 113
Artanema sesarnoides Benth. 99
Arternisia nilagirica (Cl.) Pamp. 78
A. vulgaris auct. non Linn. 78
Artocarpus gornezianus Wall. ex Trecul ssp. zeylanicus Jarrett 128
A. heterophyllum Lamk. 128
A. hirsutus Larnk 129
A. integrifolius auct. non Linn.f. 128
A. lakoocha auct. non Roxb. 128
Asparagus gonocladus Baker 141
A. racernosus Willd. 141
Asteriastigma macrocarpa Bedd. 8
Atalantia malabarica (Rafin.) Tanaka 24
A. monophylla Corr. 24
Atylosia barbata Bal. 43
A. goensis (Dalz.) Dalz. 43
Azadirachta indica A Juss. 29
Bacopa monnieri (Linn.) Wettst. 100
Baliospermum axillare Bl. 119
B. rnonotanum (Willd.) Muell.-Arg. 119
Bambusa arundinacea (Retz.) Roxb. 146
B. bambos Druce 146
Barleria cristata Linn. 102
Barringtonia acutangula (Linn.) Gaertn. 64
Basella alba Linn. 111
Bassia longifolia Koenig 83
B. malabarica Bedd. 83
Bauhinia malabarica Roxb. 56
B. racemosa Larnk. 52
Biophytum sensitivum (Linn.) DC. 22
Bischofia javanica Bl. 120
Blumea lacer (Burmm.) DC. 78
Bccagea dalzellii Hook. f. & Thorns. 2
Boerhavia diffusa Linn. 110
Bombax ceiba Linn. 17
B. malabaricum DC. 17
Borreria articularis (Linn.) F. N. Will. 71
B. hispida K. Schum. 71
Bragntia wallichii R. Br. 113
Preynia rhamnoides (Retz.) Muell-Arg. 120
Breynia vitis-idaea (Burmm.) C. E. C. Fischer 120
Bridelia retusa Spreng. 120
B. scandens Willd. 120
B. stipularis auct. non Bl. 120
B. squamosa (Lamk.) Grah. 120
Brynopsis laciniosa auct. non Linn.
Buchanania lanza Spreng. 39
B. latifolia Roxb. 39
B. lanceolata Wight 39
Buddleia asiatica Lour. 94
Butea frontosa Koen. ex Roxb. 43
B. rnonosperrna (Larnk.) Taub. 43
Caesalpinia bonduc (Linn.) Roxb. 53
C. crista Linn. 53
Calamus travancoricus Bedd. ex Hook. f. 144
Calamintha umbrosa (Bief.) Fisch. & Mey. 108
Callicarpa lanata Linn 105
C. tomentosa (Linn.) Murray 105
Calophyllum apetalum Willd. 10
C. decipiens Wight 10
C. elatum Bedd. 11
C. polyanthum Wall. ex Choisy 11
C. tomentosum auct. non Wight 11
C. wightianum Wall. ex Planch. & Triana 10
Calotropis gigantea (Linn.) R. Br. 91
Calycopteris floribunda (Roxb.) Poir. 61
Canscora diffusa (Vahl) R. Br. 95
Canthium dicoccum (Gaertn.) Teys. & Binn. 71
C. didymum Gaertn. 71
Capparis grandis Linn. f. 6
Carallia brachiata (Lour.) Merr. 61
C. integerrima DC. 61
C. lucida Roxb. 61
Cardiospermum halicacabum Linn. 38
Careya arborea Roxb. 64
Carissa spinarum Linn. 88
Caryota urens Roxb. 144
Casearia elliptica Willd. 7
C. esculenta Roxb. 7
C. tomentosa Roxb. 7
Cassia absus Linn. 53
C. fistula Linn. 53
C. occidentalis Linn. 54
C. mimosoides Linn. 54
C. rhombifolia Roxb. 53
C. tora Linn. 55
Cassine glauca (Rottb.) Ktze. 32
Catunaragum spinosum (Thumb.) Tirvengadum 71
Cayratia carnosa (Wall.) Gagnep 36
C. mollissima (Wall.) Gagnep 36
C. pedata (Larnk.) Juss. ex Gagnep 36
Cedrela toona Roxb. 31
Celastrus paniculatus Willd. 32
Celtis cinnamomea Lindl. ex. Planch. 127
C. orientalis Linn. 127
C. timorensis Spanoghe 127
Centella asiatica (Linn.) Urban 69
Cerisoides turgida (Roxb.) Tirvengadum 72
Chaslia curviflora Thw. 72
C. ophioxylonoides (Wall.) Craib 72
Chavica roxburghii Miq. 113
Chenopodium ambrosioides Linn. 112
Chloranthus brachystachys Bl. 114
C. glaber (Thunb.) Makino 114
Chloroxylon swietenia DC. 24
Chomelia asiatica O. Ktze. 76
Chonemorpha tragrans (Moon) Alston 89
C. macrophylla G. Don 89
Chukrasia tabularis A. Juss. 30
Cinnamomum iners Reinw. 115
C. macrocarpum Hook. f. 115
C. verum J. S. Presl 115
Cissampelos pariera Linn. 3
Cissus adanta Roxb. 36
C. quadrangularis Linn. 36
C. repens Larnk. 36
Citrus medica Linn. 24
Cleistanthus collinus. (Aoxb). Benth. 121
Clematis gouiana Roxb. 1
 Clerodendrum infortunatum Linn. 105
C. serratum (Linn.) Moon 105
C. viscosum Vent. 105
Cocos cordifolius (Willd.) DC. 5
C. hirsutus (Linn.) Diels 3
C. macrocarpus Wight & Arn. 4
C. malabaricus DC. 5
C. villosus (Lamk.) DC. 3
Cochlospermum gossypium DC. 7
C. religiosum (Linn.) Alston 7
Colebrookea oppositifolia Sm. 109
Commelina benghalensis Linn. 143
C. nudiflora Linn. 144
Connarus monocarpus Linn.  42
Cordia dichotoma Forst. f.  96
C. myxa auct. non Linn.  96
C. wallichii G. Don  96
Coscinium fenestratum (Gaertn.) Coleb.  4
Cosmostigma racemosum (Roxb.) Wight  91
Costus speciosus (Koen.) Sm.  138
Crataeva nurvala Buch. - Ham.  6
C. religiosa Hook. f. & Thoms.  6
Crinum defixum Ker-Gawl.  141
C. latifolium Linn.  142
Crotalaria retusa Linn.  43
C. verrucosa Linn.  44
Croton caudatus Geisel  121
C. oblongifolius Roxb.  121
C. reticulatus Heyne  122
C. roxburghii Balak.  121
Cryptocoryne spiralis (Retz.) Fisch. ex Wydl.  146
Curculigo orchioides Gaertn.  142
Curcuma aromatica 'Slaisb.'  139
Cuscuta reflexa Roxb.  97
Cyanotis tuberosa Schult. f.  144
Cyathula prostrata (Linn.) Bl.  111
Cycas circinalis Linn.  134
Cyclea peltata (Lamk.) Hook. f. & Thoms.  4
Cymbidium aloifolium (Linn.) Sw.  135
Cymbopogon flexuosus (Steud.) Wats.  147
Cynodon dactylon (Linn.) Pers.  147
Cynometra iripa Kostl.  55
C. mimosoides sensu Gamble  55
Dactylocteniurn aegyptium (Linn.) P. Beauv  147
Daemia extensa R. Br.  93
Dalbergia lanceolaria Linn. f.  44
D. latifolia Roxb.  44
D. multiflora Heyne ex Wall.  45
D. sympathetica Nimmo ex Grah.  45
D. volubilis Roxb.  45
Dendrobium barbatulum auct. non  135
D. ovatum (Willd.) Krazl  135
Dendrocalamus strictus (Roxb.) Nees  148
Dendrophthoe falcata (Linn.f.) Ettingh.  117
Derris trifoliata Lour.  45
D. uliginosa Benth.  45
Desmodium gangeticum (Linn.) DC.  45
D. gyrans DC.  46
D. heterocarpon (Linn.) DC.  46
D. latifolium DC.  47
D. motorium (Houtt.) Merr.  46
D. polycarpum DC.  46
D. pulchellum (Linn.) DC.  49
D. retroflexum (Linn.) DC.  46
D. styracifolium (Osb.) Merr.  46
D. triflorum (Linn.) DC.  46
D. triquetrum (Linn.) DC.  47
D. velutinum (Willd.) DC.  47
Desmotrichum fimbriatum Bl.  136
Dillenia indica Linn.  1
D. speciosa Thumb.  1
Dimocarpus longan Lour.  38
Dioscorea bulbifera Linn.  140
D. hispida Dennst.  140
D. oppositifolia Linn.  140
D. pentaphylla Linn.  140
Diospyros candolleana Wight  84
D. embryopteris Pers.  85
D. montana Roxb.  85
D. paniculata Dalz.  85
D. peregrina (Gaertn.) Gurke  85
D. toposia Ham.  85
Diplolicia glaucescens (Bl.) Diels  4
Diplocyclos palmatus (Linn.) C. Jeffery  67
Dipteracanthus prostratus (Poir.) Nees  103
Emilia sonchifolia (Linn.) DC.  79
Embelia ribes Burm. f.  82
E. tsjeriam-cottam (Roem. & Schult.) DC. 83
Entada pursaetha DC. 59
E. scandens auct. non Benth. 59
Ephemerantha macraei (Linn.) Hunt & Sumnerh. 136
Ervatarnia heyneana (Watt. ex A.DC.) T. Cooke 90
Erycibe paniculata Roxh. 97
Erythroxylum acuminatum (Arn.) Walp. 21
E. monogynum Roxb. 21
E. moonii Hochr. 21
Eugenia caryophyllae Wight 64
Eulophia epidendraea (Retz.) Fischer 135
E. nuda Lindl. 135
Euodia lunuankenda (Gaertn.) Merr. 24
E. roxburghiana Benth. 24
Euphorbia antiquorum Linn. 123
E. hirta Linn. 123
E. laeta Heyne ex Roth 123
E. rothiana Spreng. 123
E. thymifolia Linn. 123
E. tirucalii Linn. 124
Euphoria longan (Lour.) Steud. 38
Feronia elephantum Corr. 25
F. limonia (Linn.) Swingle 25
Flemingia graharniana Wight & Arn. 47
F. strobilifera (Linn.) Ait. 48
Flickingera rrcrae (Lindl.) Seidenf. 136
Fluggea leucopyrus Willd. 125
F. microcarpa El. 125
Ficus amplissima J.E. Srn 129
F. arnottiana (Miq.) Miq. 129
F. asperrima Roxb. 130
F. benghalensis Linn. 129
F. dalhousiae Miq. 130
F. drupacea Thunb. var pubescens (Roth) Corner 130
F. exasperata Vahl 130
F. gibbosa El. 132
F. glomerata Roxb. 131
F. hispida Linn. f. 131
F. microcarpa Linn. f. 131
F. mysorensis Heyne 130
F. racemosa Linn. 131
F. retusa auct. non Linn. 131
F. talboti King 132
F. tinctoria Forst. f. ssp. parasitica (Koeri. ex Willd) Corner 132
F. tsie Roxb. 129
Garcinia cambogia (Gaerin.) Desv. 11
G. gummigutta (Linn.) Robs. 11
G. indica Choisy 11
G. morella (Gaertn.) Desv. 11
G. tinctorla (DC.) Dunn 12
G. xanthochymus Hook. f. ex T. Anders. 12
Gardenia montana Roxb. 72
G. turgida Roxb. 72
Garuga pinnata Roxb. 28
Gaultheria fragrantissima Wall. 81
Geophila reniformis D. Don 72
G. repens (Linn.) I. M. Johnston 72
Girronniera cuspidata (Bl.) Planch. ex Kurz 127
G. reticulata Thw. 127
Girardinia diversifolia (Likh) Friis 133
G. zeylanicaDcne. 133
Glochidion zeylanicum (Gaertn.) 124
Gloriosa superba Linn. 142
Glycosmis cochinchinensis auct. non Pierre ex Engi. 25
G. pentaphylla (Retz.) DC. 25
Gmelina arborea Linn. 105
Gnetum scandens Roxb. 134
G. ula Brogn. 134
Gnidia glauca (Fres.) Gilg 116

185
Gomphia angustifolia Wall. 28
G. serrata (Gaertn.) Kanis 28
Grewia microcos Linn 19
G. tiliifolia Vahl 19
G. villosa Willd. 19
Gymnema sylvestre (Retr.) Roem. & Schult. 91
Gymnostachyum febrifugum Benth. 103
Habenaria susannae (Linn.) R. Br. 136
Haldina cordifolia (Roxb.) Ridsdale 73
Hardwickia pinnata Roxb. ex DC. 55
Hemidesmus indicus (Linn.) R. Br. 92
Herpestis monniera (Linn.) H. B. & K. 100
Heteropogon contortus (Linn.) P. Beauv. 148
Heynea trijuga Roxb. 31
Hibiscus furcatus Roxb. 14
H. lampas Cav. 17
Hiptage benghalensis (Linn.) Kurz 22
H. madabolta Gaertn. 22
Holarrhena antidysenterica (Roth) Wall. ex DC. 89
H. codaga G. Don 89
H. pubescens (Buch-Ham.) Wall. ex DC. 89
Holigarna arnottiana Hook. f. 40
Holoptelia integrifolia (Roxb.) Pianch. 127
Holostemma adakodien Schult. 92
H. annulare (Roxb.) K. Schum. 92
Hornonoia riparia Lour. 124
Hugonia nystax Linn. 21
Humbolditia vahliana Wight 55
Hybanthus enneaspermus (Linn.) f. v. Muell. 6
Hydnocarpus laurifolia (Dennst.) Sleumer 8
H. macrocarpus (Bedd.) Warb. 8
H. pentandra (Buch-Ham.) Oken 8
H. wightiana Bl. 8
Hydrocotyle asiatica Linn. 69
H. javanica Thunb. 70
H. rotundifolia Roxb. ex DC. 70
H. sibthorpioides Lamk. 70
Hygrophila angustifolia acut. non. R. Br. 103
H. salicifolia (Vahl) Nees 103
Hymenodictyon excelsum (Roxb.) Wall. 73
H. orixense (Roxb.) Mabberley 73
Hypericum japonicum Thumb. ex Merr. 10
Hypoxis aurea Lour. 143
Ichnocarpus frutescens (Linn.) R. Br. 89
Impatiens chinensis Linn. 23
Indigofera cassioides Rottl. ex DC. 48
I. ennaeaphylla anct. non Linn. 48
I. linnaei Ali 48
I. pulchella auct. non Roxb. 48
I. tinctoria Linn. 48
Ioniaidium suffruticosum (Linn.) Ging 6
Ipomoea cymosa Roem. 98
I. pes-tigidis Linn. 98
Ixora arborea Roxb. ex Sm. 73
I. coccinea Linn. 73
I. parviflora Vahl 73
Jambosa hemispherica Walp. 64
Jasminum angustifolium Vahl 86
J. bignoniacem Wall. ex DC. 86
J. humile Linn. 86
J. ritchiei Cl. 87
J. rotterianum Wall. ex DC. 87
Jussiaea suffructicoso Linn. 66
Justicia procumbens Linn. 103
Kalanchoe lacinicate auct. non (Linn.) Pers. 60
K. schweinfurthii Penzig 60
Kingiodendron pinnatum (Roxb. ex DC.) Harms 55

186
Mammea suriga (Buch-Ham. ex Roxb.) Kosterm. 12
Mangifera indica Linn. 40
Manilkara hexandra (Roxb.) Hubbard 84
Marsdenia volubilis T. Cooke 93
Melia azadirachta Linn. 29
M. composita Willd. 30
M. dubia Cav. 30
Melothria heterophylla Cogn. 67
M. maderaspatana (Linn.) Cogn. 67
Memecylon angustifolium Wight 65
M. edule Roxb. 65
M. umbellatum Burm. f. 65
Menispernum cordifolium Willd. 5
Merrernia umbellata (Linn.) Hallier f. 98
Mesua ferrea auct. non Linn. 12
M. nagassarium (Burm. f.) Kosterm. 12
Michelia chempaca Linn. 1
M. nilagirica Zerk 2
Micracos paniculata Linn. 19
Micromera capitellata Benth. 109
Mimosa pudica Linn. 59
Mimusops elengi Linn. 84
M. hexandra Roxb. 84
Mitragyna parvifolia (Roxb.) Korth. 74
Mollugo pentaphylla Linn. 69
M. stricta Linn. 69
Monniera cunifolia Michx. 100
Morinda coreia Ham. 74
M. tinctoria Roxb. 74
M. umbellata Linn. 74
Moullava spicata (Dalz.) Nicholson 56
Mucuna monosperma DC ex Wight 49
M. purita Hook. f. 49
M. pruriens (Linn.) DC. 49
Murdannia nudiflora (Linn.) Brenan 144
Mukia maderaspata (Linn.) Roem. 57
*Murraya exotica* Linn. 26
M. koenigii (Linn.) Spreng. 25
M. paniculata (Linn.) Jack 26
*Mussaenda frondosa* Linn. var. *laxa*
Hook. f. 75
M. glabrata (Hook. f.) Hutch. ex Gamble 75
M. laxa (Hook. f.) Hutch. ex Gamble 75
Myristica malabarica Lamk. 115
*Myxopyrum serratum* A. W. Hill 87
M. smilacifolium Bl. 87
Naregamia alata Wight & Arn. 31
Neolitsea cassia (Linn.) Kosterm. 116
*N. Zeylanica* (Nees) Merr. 116
*Nephelium longana* Gamble 38
Nilgirianthus ciliatus (Nees) Bremk. 104
Notonia grandiflora DC. 79
Ochna obtusata DC. 28
*O. squarrosa* auct. non Linn. 28
*Ochrocarpus longifolius* (Wight) Benth. ex T. Anders. 12
*Odina wodier* Roxb. 40
Olea dioica Roxb. 87
O. glandulifera Wall. 87
Ophiirrhiza mungos Linn. 75
Opuntia dillenii (Ker: Gawler) Haworth 69
Oreocnide integrifolia (Gaud.) Miq. 133
Oroxylum indicum (Linn.) Vent. 101
Orthosiphon grandiflorus Boldingh. 109
O. stamineus Benth. 109
Osbeckia cupularis D. Don ex Wight &Arn. 66
O. parvifolia Arn. 66
*Ouratea angustifolia* Gilg. 28
Oxalis corniculata Linn. 23
*Oxystelma esculentum* R. Br. 92
O. secamone (Linn.) Krst. 92
Paramignya monophylla Wiyht 26
Paspalum scrobiculatum Linn. 148
Passiflora foetida Linn. 67
Pavetta indica Linn. 75
Pavonia odorata Willd. 14
Pergularia daemia (Forsk.) Chiov. 93
*P. extensa* N. E. Br. 93
Persea macrantha (Nees) Kosterm. 116
Phoenix pusilla Gaertn. 145
*Pholidota imbricata* Lindl. 136
P. pallida Lindl. 136
*Phyllanthus emblica* Linn. 122
P. fraternus Webster 126
P. niruri auct. non Linn. 126
Phyllodium pulchellum (Linn.) Desv. 49
Physalis peruviana Linn. 98
Piliostigma malabaricum (Roxb.) Benth. 56
Pimpinella heyneana Wall. 70
Pinanga dicksonii (Roxb.) Scheffer 145
Piper *attenuatum* Buch: Ham. 114
P. longum Linn. 113
P. nigrum Linn. 114
P. irioicum Roxb. 114
*Pithecellobium bigeminum* auct. non (Linn.) Mart. ex Benth. 57
*Pittosporum floribundam* Wight & Arn. 8
P. nepalensis (DC.) Rehder & Wilson 8
Plantago asiatica Linn. 110
*P. major* Hook. f. 110
*Platanthera susannae* (Linn.) Lindl. 136
Plumbago zeylanica Linn. 82
Polycarpea corymbosa (Linn.) Lamk. 9
Polygala arvensis Willd. 9
*P. chinensis* auct. non Linn. 9
P. sibirica 9
Polygonum glabrum Willd. 112

*Pongamia glabra* Vent. 50

P. pinnata (Linn.) Pierre 50

Pothos scandens Linn. 146

*Pouzolzia indica* Gaud. 134

P. zeylanica (Linn.) Benn. 134

Premna herbacea Roxb. 106

P. tomentosa Willd. 107

Pseudarthria viscida (Linn.) Wight & Arn. 50

Pterocarpus marsupium Roxb. 50

Pterygota alata (Roxh.) R. Br. 18

Pueraria tuberosa (Roxb.) DC. 50

*Putranjiva roxburghii* Wall. 122

Qussia indica (Gaertn) Nooteb. 28

Radermachera xylocarpa (Roxb.) K.Schum. 101

*Randia dumatroum* Lamk. 72

*R. uliginosa* (Retr.) DC. 76

Rauvolfia serpentina (Linn.) Benth. ex Kurz 90

Remusatia vivipara (Roxb.) Schott. 146

Rhamnus wightii Wight & Arn. 33

*Rhinacanthus communis* Nees 104

R nasutus (Linn.) Kurz 104

Rhododendron arboreum Sm. 81

*R. nilagiricum* Zenk. 81

Rhodomyrtus tomentosa (Ait.) Hassk. 63

Rhynchostylis retusa (Linn.) Bl. 137

Rotula aquatica Lour. 99

Rourea minor (Gaertn.) Alston 42

*R. santaloides* (Vahl) Wight & Arn. 42

Rubia cordifolia Linn. 76

*Rubus moluccanus* auct. non Linn. 60

R. rugosus Sm. 60

*Ruellia prostrata* Poir. 103

Rumex nepalensis Spreng. 112

Rungia parviflora Nees 104

R. pectinata (Linn.) Nees 104

Sageraea dalzellii Bedd. 2

Salacia oblonga Wall. 33

Salix tetrasperma Roxb 134

*Salmalia malabarica* (DC.) Schot, & Endl. 17

*Samadera indica* Gaertn. 28

Santalum album Linn. 117

Sapindus laurifolius Vahl 39

*S. trifoliatus* auct. non Linn. 39

Saraca asoca (Roxb.) De Wilde 56

*S. Indica* auct. non Linn. 56

Sarcandra chloranthoides Gardn. 114

Sarcostigma kleinii Wight & Arn. 32

Satyrium nepalense D. Don 137

Saurops quadrangularis (Willd.) Muell. - Arg. 125

Schleichera oleosa (Lour.) Oken 39

*S. trijuga* Willd. 39

Scoparia dulcis Linn. 100

Securenega leucopyrus (Willd.) Muell. - Arg. 125

S. virosa (Roxb. ex Willd.) Baill. 126

Semecarpus anacardium Linn. f. 41

S. travancoricus Bedd. 41

Sida acuta Burm. f. 15

*S. althaeofolia* Swartz 15

S. cordata (Burm. f.) Borss. 15

S. cordifolia Linn. 15

S. herbacea Cav. 15

S. humilis Cav. 15

S. pilosa Retz. 15

S. rhombifolia Linn. ssp. retusa (Linn.) Borss. 16

*S. retusa* Linn. 16

*S. rotundifolia* Cav. 15

S. spinosa Linn. 16

*S. veronicaefolia* Lamk. 15

Siegesbeckia orientalis Linn. 79

Smilax aspera Linn. 143

S. zeylanica Linn. 143

Solanum ferox auct. non Linn. 99

S. indicum Linn. 98

S. stramoniifolium N. Jacq. 99

Solena heterophylla Lour. 67
Sopubia delphinifolia (Roxb.) G. Don 100
Spathalobus parviflorus (Roxb.) 0.Ktze. 51
S. roxburghii Benth. 51
Spathalobus parviflorus (Roxb.) 0.Ktze. 51
Spilanthes acmella auct. non (Linn.) Murr. 79
S. calva DC. 79
Spondias mangifera Wiild. 41
S. pinnata (Linn. f). Kurz 41
stachytarpheta indica Vahl 107
S. urticaefolia (Salisb.) Sirns. 107
Stellaria media (Linn.) Vill. 10
Stephegyne parvifolia Roxb. 74
Sterculia alata Roxb. 18
S. foetida Linn. 18
S. urens Roxb. 18
Stereospermum chelonoides auct. non (Linn. f.) DC. 102
S. chelonoides (Linn. f.) DC. 101
S. colais (Buch - Ham ex Dillw.) Mabberley 102
S. suaveolens DC. 101
S. tetragonum DC. 102
S. xylocarpum Benth. & Hook. f. 101
Streblus asper Lour. 133
Strobilanthes ciliatus Nees 104
Strychnos aenea A.W. Hill 94
s. bourdillonii Brandis 94
S. colubrina Linn. 94
S. nux-vornica Linn. 94
S. potatorum Linn. f. 95
Swertia affinis Cl. 95
S. angustifolia Buch.-Ham. var. pulchella Burkil 95
S. corymbosa (Griseb) Wight ex Cl. 96
Symplocos cochinchinensis (Lour.) S. Moore ssp. laurina (Retz.) Nooteb. 86
S spicata Roxb. 86
Syzygium caryophyllatum (Linn.) Alston 64
S. cumini (Linn.) Skeels 63
S. hemisphericum (Walp.) Alston 64
S. jambolanum DC. 63
Tabernaemontana heyneana Wall. ex A. DC. 90
Taraxacum officinale Weber. 80
Tarennia asiatica (Linn.) 0. Ktze. ex Schurn. 76
Tectona grandis Linn. f. 107
Teramnus labialis (Linn.) Spreng. 51
T. parviflorus Spreng. 51
Terminalia bellirica (Gaertn.) Roxb. 61
T. chebula (Gaertn.) Retz. 62
T. crenulata Heyne ex Roth 62
T. paniculata Roth 63
Tetracera akara (Burrn. f.) Merr. 1
T. laevis auct. non Wall 1
Tetrameles nudiflora R. Br. 69
Thespesia lampas (Cav.) Dalz. & Gibbs. 16
Thottea siliquosa (Larnk.) Ding Hou 113
Tinospora cordifolia (Willd.) Miers ex Hook. f. &Thorns. 5
T. malabarica (Larnk.) Miers 5
T. sinensis (Lour.) Merr. 5
Toddalia aculeata Pers. 26
T. asiatica (Linn.) Lamk. 26
Toona ciliata Roem. 31
Torrenia asiatica (Linn.) Ktze. ex Schurn. 100
Tragia hispida Willd. 126
T. involucrata Linn. 126
Trema orientalis (Linn.) 127
Trewia nudiflora Linn. 126
Tribulus terrestris Linn. 22
Trichilia connaroides (Wight & Arn.) Bent. 31
Trichodesrna indicum (Linn.) Lehmann 97
Tricholepis glaberrirna DC. 80
Trichosanthes cucumerina Linn 68
T. palmata Roxb. 68
T. tricuspidata Lour 68.
Triumfetta rhomboidea N. Jacq. 20
Turraea villosa Benn. 31
Tylophora asthmarica Wight & Arn. 93
T. indica (Burm. f.) Merr. 93
T. tenuissima (Roxb. ex Schult.) Wight & Arn. 93
Uraria hamosa Wall. 52
U. lagopodioides (Linn.) Desv. 52
Urena lobata Linn. ssp. lobata 17
Uvaria narum (Dunal) Wall. ex Wight & Arn. 2
Valeriana arnottiana Wight 76
V. beddomei CI. 77
V. hookeriana Wight & Arn. 77
V. leschenaultii DC. 77
Vallaris solanacea (Roth) O. Ktze. 90
Vanda roxburghii R. Br. 137
V. spathulata Spreng. 137
V. tessellata (Roxb.) Hook.. ex G. Don 137
Vateria indica Linn. 13
Ventilago calyculata Tul. 33
V. denticulata Willd. 33
V. maderaspatna Gaertn. 33
Vepris bilocularis (Wight & Arn.) Engl. 26
Vernonia cinerea (Linn.) Less. 80
Vetiveria zizanioides (Linn.) Nash 148
Vigna trilobata (Linn.) Verd. 52
Villebrunea integrifolia Miq. 133
Viola betonicifolia J. E. Sm 6
V. patrinii auct. non Ging. 6
V. pilosa Bl. 7
V. serpens Wall. ex Roxb. 7
Viscum articulatum auct. non Burm.f. 117
V. nepalense Spreng. 117
Vitex leucoxylon Linn. f. 107
Vitis adenata (Roxb.) Wall. 36
V. carnosoides Wall. 36
V. indica Wight & Arn. 35
V. mollissima Wall. 36
V. pedata (Lam.) Wall. ex Wight 36
V. quadrangularis (Linn.) Wall. ex Wight 36
V. repens (Lam.) Wight & Arn. 36
V. tomentosa Heyne ex Roth 35
Wagataea spicata Dalz. 56
Walsura piscidia Roxb. 32
W. trifolia (A. Juss.) Harms 32
Waltheria indica Linn. 19
Wattakaka volubilis (Linn. f.) Stapf 93
Webera corymbosa Willd. 76
Wedeiiia calendulacea Less, 80
W. chinensis (Osb.) Merr. 80
Wrightia antidysentrica Grah. 89
W. tinctoria (Roxb.) R. Br. 90
Xeromphis spinosa (Thumb.) Keay 71
X. uliginosa (Retz.) J, K. Mahes. 76
Xyilia xylocarpa (Roxb.) Taub. 60
Zanonia indica Linn. 68
Zanthoxylum budrunga Wall. 27
Z. rhetsa (Roxb.) DC. 27
Zingiber casumunar (Roxb.) 139
Z. montanum (Koening) Link ex A. Dietrich 139
Z. zerumbet (Linn.) Rosc. ex Sm. 139
Ziziphus glabrata Heyne ex Roth 43
Z. jujuba (Linn.) Gaertn. 34
Z. mauritiana Lamk. 34
Z. oenoplia (Linn.) Mill. 34
Z. rugosa Lamk. 34
Z. trinervia Roxb. 34
Zornia diphylla (Linn.) Pers. 52
Index to Malayalam Names

Adakkapanel 47
Adakodien 92
Adapathiyan 92
Akasavalli 97
Akkaramkolli 9
Alakkucheru 41
Alpam 113
Amalpori 90
Amari 48
Amathali 127
Ambazham 41
Amrthu 5
Anachoriyanam 133
Anacchunta 99
Anachuvadi 78
Anakoova 138
Anamullu 45
Anappana 144
Anapparuva 146
Anathonti 18
Ankolam 70
Amakkara 28
Anjili 129
Appa 77
Appakudukka 7
Appupponthadi 89
Arampuli 66
Aranjili 127
Aratha 138
Arichural 144
Arippu 106
Ariveppu 29
Arya poriyan 117
Asokam 56
Athampuvalli 51
Athi 131
Attilippa 83

Attukanila 65
Attunoachi 107
Attupala 134
Atrupezu 64
Attuthekku 71
Attuvanchi 56, 71
Aval 127
Avilpori 76
Avukkaram 41
Ayani 129
Azhinjil 70
Basala 111
Belippuvu 111
Bhuthiyunarthi 127
Brahmi 100
Chadachi 19
Chadayan 67
Chakkarakolli 91
Champakam 1
Chandanam 117
Changalamparanta 36
Channakoova 138
Chathurakalli 123
Chathuramulla 87
Chathuravalli 87
Chattukakalli 69
Cheeni 98
Cheevakka 57
Chemmaram 28
Chemmaru 66
Chemparavalli 35
Chempunna 38
Chenkolli 126
Cheri 40
Cheruchural 144
Cheruchunta 98
Cherukadali 66
<table>
<thead>
<tr>
<th>Location</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cherukadaladi 111</td>
<td>Irinjil 70</td>
</tr>
<tr>
<td>Cherukanjiravalli 94</td>
<td>Irippa 55.</td>
</tr>
<tr>
<td>Cherukolpanachi 120</td>
<td>Irul 60</td>
</tr>
<tr>
<td>Cherula 111</td>
<td>Irumparappi 71</td>
</tr>
<tr>
<td>Chorumulchedi 88</td>
<td>Irumpiathali 97</td>
</tr>
<tr>
<td>Cherumullu 45</td>
<td>Iswaramooli 113</td>
</tr>
<tr>
<td>Cheruparuva 15</td>
<td>Iswaramulla 113</td>
</tr>
<tr>
<td>Cherupullati 46, 48</td>
<td>Ithi 132</td>
</tr>
<tr>
<td>Cherupunna 10</td>
<td>Ithil 117</td>
</tr>
<tr>
<td>Cheruthakara 54</td>
<td>Jeerakappullu 95</td>
</tr>
<tr>
<td>Cheruthekku 105</td>
<td>Jelavaka 59</td>
</tr>
<tr>
<td>Cheruthutali 34</td>
<td>Kaasavu 65</td>
</tr>
<tr>
<td>Cheruveetti 44</td>
<td>Kachapatta 8</td>
</tr>
<tr>
<td>Cheruviri 96</td>
<td>Kadapananth 107</td>
</tr>
<tr>
<td>Chethi 73</td>
<td>Kadaladi 110</td>
</tr>
<tr>
<td>Chithrappala 123</td>
<td>Kadali 65</td>
</tr>
<tr>
<td>Chittamrthu 5</td>
<td>Kadampu 71</td>
</tr>
<tr>
<td>Chittaratha 138</td>
<td>Kadaplavu 128</td>
</tr>
<tr>
<td>Chitteenthal 145</td>
<td>Kadukka 62</td>
</tr>
<tr>
<td>Chorivalli 35</td>
<td>Kaippan-padavalam 68</td>
</tr>
<tr>
<td>Choriyanam 41, 126</td>
<td>Kakkapoovu 100</td>
</tr>
<tr>
<td>Choontappana 144</td>
<td>Kakkathonti 68</td>
</tr>
<tr>
<td>Churuli 12</td>
<td>Kakkathurali 26</td>
</tr>
<tr>
<td>Chuvanna akil 30</td>
<td>Kalampetti 65</td>
</tr>
<tr>
<td>Chuvanna-polathali 142</td>
<td>Kalasu 40</td>
</tr>
<tr>
<td>Edana 87</td>
<td>Kallakaruva 115</td>
</tr>
<tr>
<td>Eetti 44</td>
<td>Kallal 130</td>
</tr>
<tr>
<td>Elam 139</td>
<td>Kallarayal 129</td>
</tr>
<tr>
<td>Elavu 17</td>
<td>Kallurukki 134</td>
</tr>
<tr>
<td>Erichanna 139</td>
<td>Kallithi 131. 132</td>
</tr>
<tr>
<td>Erikku 31</td>
<td>Kal-mula 148</td>
</tr>
<tr>
<td>Eruamanakku 131</td>
<td>Kaloorvanchi 96, 124</td>
</tr>
<tr>
<td>Ezhilampala 88</td>
<td>Kalppakku 57</td>
</tr>
<tr>
<td>Ganapathi narakam 24</td>
<td>Kalpayin 13</td>
</tr>
<tr>
<td>Garudakodi 113</td>
<td>Kalthamara 6</td>
</tr>
<tr>
<td>Idampiri valampiri 18</td>
<td>Kamalu 48</td>
</tr>
<tr>
<td>Ilanji 84</td>
<td>Kammatti 45</td>
</tr>
<tr>
<td>Ilantha 34</td>
<td>Kampilii 25</td>
</tr>
<tr>
<td>Ilavangam 115</td>
<td>Kanaksitha 2</td>
</tr>
<tr>
<td>Incha 57</td>
<td>Kanakkamuku 145</td>
</tr>
<tr>
<td>Inchipullu 147</td>
<td>Kanala 25</td>
</tr>
<tr>
<td>Intha 134</td>
<td>Kanikkonna 53</td>
</tr>
<tr>
<td>Inthalappana 134</td>
<td>Kanjikottam 120</td>
</tr>
<tr>
<td>Irattani 37</td>
<td>Kanjiram 94</td>
</tr>
</tbody>
</table>
Kurnizhu 105
Kundalappala 90
Kunkumapoovu maram 125
Kunnan pala 90
Kunni 42
Kunnivaka 58
Kuppamanjal 79
Kuppameni 118
Kurangu rnanjal 125
Kuriel 42
Kurumulakukodi 114
Kurunthotti 16
Lantha 34
Madagiri vernbu 31
Madhavi 22
Mala-atakka 145
Mala-inchikoova 137
Malarnanchadi 59
Mala mavu 39
Malarnpavatta 7
Malankalli 73
Malankara 72. 104
Malankurnbil 126
Malankummati 8
Malanthalli 49
Malanthutali 34
Malathangi 3
Malaveppu 30
Malayakathi 85
Manali 48
Manchatti 76
Mandaram 52
Manimiruthu 66
Maniperanti 37
Manjakadambu 73
Manjakurinji 80
Manjakurumozhi 86
Manjanjara 2
Manjanathi 74
Mavu 40
Maramanjal 4
Marappuli 11
Mara-uri 128
Maravara chempu 146
Maravazha 137
Marotti 8
Maruthu 63
Matti 27
Mayirmanikkam 16
Mazhukkanjiram 61
Meenankanni 100
Mentonni 142
Moodillathali 97
Moongapezhu 39
Moovila 50. 52
Mothirakkanni 21
Mrthi 45
Mukkalpeermam 67
Mukkananpezu 37
Mukkutti 22
Mula 146
Mulkurinji 102
Mullenkaini 120
Mullanvenga 120
Mulli 34, 88
Mullilam 27
Mullilavu 17
Mural 39
Muthakku 66
Muthassari 26
Muthil 69
Muttanari 23
Muyalr hevi 79
Nagadanthi 119
Nagamulla 69. 104
Nagapoovumaram 12
Naikorana 49
Naithekku 107
Nallakdra 20
Nanchu 117
Nanchuvalli 3
Nangu 12
Nanku 117
Nannari 92
Naranampuli 14
Narumonal 2
Narunanti 92
Nasakam 25
<table>
<thead>
<tr>
<th>Location</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nathramthakara</td>
<td>54</td>
</tr>
<tr>
<td>Nattahividayam</td>
<td>146</td>
</tr>
<tr>
<td>Nattilippa</td>
<td>83</td>
</tr>
<tr>
<td>Navathi</td>
<td>21</td>
</tr>
<tr>
<td>Ncechankadampu</td>
<td>73</td>
</tr>
<tr>
<td>Neela amani</td>
<td>48</td>
</tr>
<tr>
<td>Neerkadambu</td>
<td>74</td>
</tr>
<tr>
<td>Neermathalam</td>
<td>6</td>
</tr>
<tr>
<td>Neervetti</td>
<td>124</td>
</tr>
<tr>
<td>Nelli</td>
<td>122</td>
</tr>
<tr>
<td>Nellivaka</td>
<td>58</td>
</tr>
<tr>
<td>Nenmenivaka</td>
<td>58</td>
</tr>
<tr>
<td>Nen nelvalli</td>
<td>1</td>
</tr>
<tr>
<td>Nevunni</td>
<td>67</td>
</tr>
<tr>
<td>Nikida kodi</td>
<td>1</td>
</tr>
<tr>
<td>Nilamparanta</td>
<td>46</td>
</tr>
<tr>
<td>Nilanarakam</td>
<td>31</td>
</tr>
<tr>
<td>Nilappala</td>
<td>90, 123</td>
</tr>
<tr>
<td>Nilappana</td>
<td>142</td>
</tr>
<tr>
<td>Nilathuvara</td>
<td>46</td>
</tr>
<tr>
<td>Nilaveppu</td>
<td>102</td>
</tr>
<tr>
<td>Nirpezhu</td>
<td>64</td>
</tr>
<tr>
<td>Njallu</td>
<td>37</td>
</tr>
<tr>
<td>Njara</td>
<td>63, 64</td>
</tr>
<tr>
<td>Njaval</td>
<td>63</td>
</tr>
<tr>
<td>Njerinjampuli</td>
<td>67</td>
</tr>
<tr>
<td>Njerinjil</td>
<td>22</td>
</tr>
<tr>
<td>Njotta</td>
<td>28</td>
</tr>
<tr>
<td>Njottanjodien</td>
<td>98</td>
</tr>
<tr>
<td>Nurankizhangu</td>
<td>140</td>
</tr>
<tr>
<td>Odal</td>
<td>32</td>
</tr>
<tr>
<td>Odiyamadantha</td>
<td>103</td>
</tr>
<tr>
<td>Oduku</td>
<td>121</td>
</tr>
<tr>
<td>Olattippana</td>
<td>144</td>
</tr>
<tr>
<td>Orila</td>
<td>45, 47, 52</td>
</tr>
<tr>
<td>Orilathamara</td>
<td>6</td>
</tr>
<tr>
<td>Pachapuli</td>
<td>14</td>
</tr>
<tr>
<td>Pachotti</td>
<td>86</td>
</tr>
<tr>
<td>Padakizhangu</td>
<td>4</td>
</tr>
<tr>
<td>Padathali</td>
<td>4</td>
</tr>
<tr>
<td>Padukurkka</td>
<td>108</td>
</tr>
<tr>
<td>Pala</td>
<td>88</td>
</tr>
<tr>
<td>Palakapaiyani</td>
<td>108</td>
</tr>
<tr>
<td>Palvalli</td>
<td>89</td>
</tr>
<tr>
<td>Pambarakumbii</td>
<td>126</td>
</tr>
<tr>
<td>Panachi</td>
<td>85</td>
</tr>
<tr>
<td>Panal</td>
<td>25</td>
</tr>
<tr>
<td>Pannikkata</td>
<td>76</td>
</tr>
<tr>
<td>Pannikizhangu</td>
<td>51</td>
</tr>
<tr>
<td>Parakam</td>
<td>131</td>
</tr>
<tr>
<td>Paranta</td>
<td>59</td>
</tr>
<tr>
<td>Parpadakappolu</td>
<td>69</td>
</tr>
<tr>
<td>Paruva</td>
<td>133</td>
</tr>
<tr>
<td>Paruvakodi</td>
<td>146</td>
</tr>
<tr>
<td>Pasakkotta</td>
<td>39</td>
</tr>
<tr>
<td>Pathalagarudakkodi</td>
<td>3</td>
</tr>
<tr>
<td>Pathiri</td>
<td>102</td>
</tr>
<tr>
<td>Pavatta</td>
<td>75</td>
</tr>
<tr>
<td>Pazhamunpala</td>
<td>84</td>
</tr>
<tr>
<td>Pemaruthi</td>
<td>108</td>
</tr>
<tr>
<td>Peral</td>
<td>129</td>
</tr>
<tr>
<td>Perillappacha</td>
<td>32</td>
</tr>
<tr>
<td>Perintholi</td>
<td>73</td>
</tr>
<tr>
<td>Perinjara</td>
<td>63</td>
</tr>
<tr>
<td>Peruku</td>
<td>105</td>
</tr>
<tr>
<td>Perumaram</td>
<td>27</td>
</tr>
<tr>
<td>Perumklavu</td>
<td>125, 126</td>
</tr>
<tr>
<td>Peruvelam</td>
<td>105</td>
</tr>
<tr>
<td>Peyamrthu</td>
<td>5</td>
</tr>
<tr>
<td>Peyathi</td>
<td>131</td>
</tr>
<tr>
<td>Pezhu</td>
<td>64</td>
</tr>
<tr>
<td>Pinampuli</td>
<td>11</td>
</tr>
<tr>
<td>Pinarpuli</td>
<td>11</td>
</tr>
<tr>
<td>Plasu</td>
<td>43</td>
</tr>
<tr>
<td>Plavu</td>
<td>128</td>
</tr>
<tr>
<td>Polla</td>
<td>3</td>
</tr>
<tr>
<td>Pongu</td>
<td>60</td>
</tr>
<tr>
<td>Pongiliyam</td>
<td>27</td>
</tr>
<tr>
<td>Ponkoranti</td>
<td>33</td>
</tr>
<tr>
<td>Ponnampoon-maravazha</td>
<td>137</td>
</tr>
<tr>
<td>Ponnamthakara</td>
<td>55</td>
</tr>
<tr>
<td>Ponnaveeram</td>
<td>54</td>
</tr>
<tr>
<td>Ponvetti</td>
<td>119</td>
</tr>
<tr>
<td>Poochakkurumaram</td>
<td>127</td>
</tr>
<tr>
<td>Poochappazham</td>
<td>67</td>
</tr>
<tr>
<td>Poochedi</td>
<td>106</td>
</tr>
<tr>
<td>Poola</td>
<td>17</td>
</tr>
<tr>
<td>Pooppathiri</td>
<td>101</td>
</tr>
<tr>
<td>Poothilanji</td>
<td>122</td>
</tr>
</tbody>
</table>
Poovam 39
Poovamkarunthal 80
Porippuvam 38
Pootakavalam 18
Pottamrthu 5
Pottavaka 58
Pulichuvadi 98
Pulivaka 58
Puliyarila 23
Pulla maruthu 63
Pullani 61
Punamkara 76
Punyava 29
Putharichunta 98
Puzhavanchi 124
Ramachain 148
Ramanamappacha 46
Sarpagandhi 90
Sathavari 141
Seemapanjimaram 7
Shoorampunna 12
Sivavalli 67
Syalitha 1
Thakara 55
Thankabhamachedi 60
Thanni 61
Tharuthaval 71
Thavizhama 110
Thazhuthama 110
Thechi 73
Theepala 88
Theetiplavu 128
Thekku 107
Thernpavu 62
Thenkotta 41
Therakam 130
Thettamaram 95
Thettamparal 95
Thetti 73
Thintanazhi 22
Thippali 113
Thirunithripacha 78
Thirukkalli 124
Thontappala 90
Thonli 18
Thiontitherakani 105
Thottavadi 59
Thozhukanni 46
Thuniyangam 105
Thutali 26, 34
Udi 40
Ula 134
Ungu 50
Unnam 19
Urakam 14
Uravu 116
Urvanchi 39
Uttiraram 17
Uzhinja 38
Vairappuli 12
Vaka 58
Valamkadikkaya 42
Valermani 28
Vaiiaithikanni 117
Valiakara 20
Valiakattuvellari 68
Valia kuppameni 118
Valia kurumthotti 15
Valia maravazha 135
Valiabharn 61
Vallichoriyanam 36
Vallikanjiram 94
Vallukkrumthotti 15
Vallippala 93
Vanchi 134
Varachi 57
Varaku 148
Varangu 61
Varicheera 116
Varimaran 24
Vathamvoatti 99
Vatoli 4
Vatta 124
Vatrikkakka kodi 93
Vatturam 17
Vattuvalli 91
Vayampu 145
Vayana 15
# Index to Sanskrit Names

<table>
<thead>
<tr>
<th>Sanskrit Name</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abhiru</td>
<td>141</td>
</tr>
<tr>
<td>Alukabheda</td>
<td>140</td>
</tr>
<tr>
<td>Amalaki</td>
<td>122</td>
</tr>
<tr>
<td>Ambashtha</td>
<td>41</td>
</tr>
<tr>
<td>Amlavethasa</td>
<td>67</td>
</tr>
<tr>
<td>Amra</td>
<td>40</td>
</tr>
<tr>
<td>Amrtha</td>
<td>5</td>
</tr>
<tr>
<td>Anjalikari</td>
<td>22</td>
</tr>
<tr>
<td>Ankola</td>
<td>70</td>
</tr>
<tr>
<td>Apamarga</td>
<td>110</td>
</tr>
<tr>
<td>Aragwadha</td>
<td>54</td>
</tr>
<tr>
<td>Arka</td>
<td>91</td>
</tr>
<tr>
<td>Asana</td>
<td>50</td>
</tr>
<tr>
<td>Asrnabheda</td>
<td>124</td>
</tr>
<tr>
<td>Asphota</td>
<td>86</td>
</tr>
<tr>
<td>Asthisamhara</td>
<td>36</td>
</tr>
<tr>
<td>Athibala</td>
<td>14</td>
</tr>
<tr>
<td>Athimukthaka</td>
<td>85</td>
</tr>
<tr>
<td>Athmaguptha</td>
<td>49</td>
</tr>
<tr>
<td>Bakula</td>
<td>84</td>
</tr>
<tr>
<td>Bala</td>
<td>16</td>
</tr>
<tr>
<td>Balika</td>
<td>18</td>
</tr>
<tr>
<td>Bhadra</td>
<td>111</td>
</tr>
<tr>
<td>Bharngi</td>
<td>105</td>
</tr>
<tr>
<td>Bhulavanga</td>
<td>66</td>
</tr>
<tr>
<td>Bhunimba</td>
<td>102</td>
</tr>
<tr>
<td>Bhuthagandhi</td>
<td>7</td>
</tr>
<tr>
<td>Brahmaparni</td>
<td>52</td>
</tr>
<tr>
<td>Brahrni</td>
<td>100</td>
</tr>
<tr>
<td>Chakramarda</td>
<td>55</td>
</tr>
<tr>
<td>Champaka</td>
<td>1</td>
</tr>
<tr>
<td>Chandana</td>
<td>117</td>
</tr>
<tr>
<td>Charmasahua</td>
<td>57</td>
</tr>
<tr>
<td>Charnger</td>
<td>23</td>
</tr>
<tr>
<td>Chathurangi</td>
<td>106</td>
</tr>
<tr>
<td>Chagakarna</td>
<td>62</td>
</tr>
<tr>
<td>Chithraparni</td>
<td>52</td>
</tr>
<tr>
<td>Danthi</td>
<td>119</td>
</tr>
<tr>
<td>Daruhareedra</td>
<td>4</td>
</tr>
<tr>
<td>Dathipushpika</td>
<td>49</td>
</tr>
<tr>
<td>Dharakadamba</td>
<td>73</td>
</tr>
<tr>
<td>Dhatrhi</td>
<td>122</td>
</tr>
<tr>
<td>Dhava</td>
<td>61</td>
</tr>
<tr>
<td>Dinesavalli</td>
<td>33</td>
</tr>
<tr>
<td>Dunduka</td>
<td>101</td>
</tr>
<tr>
<td>Durva</td>
<td>147</td>
</tr>
<tr>
<td>Ela</td>
<td>139</td>
</tr>
<tr>
<td>Garjanam</td>
<td>13</td>
</tr>
<tr>
<td>Gathasoka</td>
<td>56</td>
</tr>
<tr>
<td>Girisanrnmalika</td>
<td>7</td>
</tr>
<tr>
<td>Gokshura</td>
<td>22</td>
</tr>
<tr>
<td>Gulochi</td>
<td>5</td>
</tr>
<tr>
<td>Gunja</td>
<td>42</td>
</tr>
<tr>
<td>Hareththaki</td>
<td>62</td>
</tr>
<tr>
<td>Harithamanjari</td>
<td>119</td>
</tr>
<tr>
<td>Hemapushpika</td>
<td>86</td>
</tr>
<tr>
<td>Hrsvajambu</td>
<td>64</td>
</tr>
<tr>
<td>Iswari</td>
<td>113</td>
</tr>
<tr>
<td>Jeevanti</td>
<td>92</td>
</tr>
<tr>
<td>Kadabhee</td>
<td>64</td>
</tr>
<tr>
<td>Kadaka</td>
<td>95</td>
</tr>
<tr>
<td>Kalasakah</td>
<td>25</td>
</tr>
<tr>
<td>Kamsamara</td>
<td>21</td>
</tr>
<tr>
<td>Kandukari</td>
<td>49</td>
</tr>
<tr>
<td>Karanjah</td>
<td>50</td>
</tr>
<tr>
<td>Karaskara</td>
<td>94</td>
</tr>
<tr>
<td>Karkka</td>
<td>34</td>
</tr>
<tr>
<td>Karkkandhu</td>
<td>34</td>
</tr>
<tr>
<td>Kasmari</td>
<td>105</td>
</tr>
<tr>
<td>Katvenga</td>
<td>27</td>
</tr>
<tr>
<td>Kochura</td>
<td>126</td>
</tr>
<tr>
<td>Kodrava</td>
<td>148</td>
</tr>
<tr>
<td>Kolah</td>
<td>34</td>
</tr>
<tr>
<td>Krimighna</td>
<td>82</td>
</tr>
<tr>
<td>Krishnamlika</td>
<td>28</td>
</tr>
<tr>
<td>Krishnasara</td>
<td>44</td>
</tr>
<tr>
<td>Kshudrabrhati</td>
<td>99</td>
</tr>
<tr>
<td>Kshudrajambu</td>
<td>64</td>
</tr>
<tr>
<td>Kuberaaksi</td>
<td>53</td>
</tr>
<tr>
<td>Kudaja</td>
<td>89</td>
</tr>
<tr>
<td>Kukkiradru</td>
<td>78</td>
</tr>
<tr>
<td>Kulsi-hanga</td>
<td>71</td>
</tr>
<tr>
<td>Kupilu</td>
<td>25</td>
</tr>
<tr>
<td>Kurudaka</td>
<td>93</td>
</tr>
<tr>
<td>Lajja'u</td>
<td>59</td>
</tr>
<tr>
<td>Lamgali</td>
<td>142</td>
</tr>
<tr>
<td>Lathakaranja</td>
<td>53</td>
</tr>
<tr>
<td>Lodhra</td>
<td>86</td>
</tr>
</tbody>
</table>
Madana  72
Madhavi  22
Madhukam  83
Madhusasini  91
Mahajambu  63
Mghamoolam  3
Mahanimba  30
Mandookaparni  69
Manjishta  76
Mareecha valli  114
Mathujamga  24
Meshasringi  91
Mulgaparni  52
Mukulaka  39
Musali  142
Nagapushpa  12
Nakulashta  113
Nandivriksha  31
Neela  48
Neelalalli  2
Neelashachara  103
Neelika  48
Nikumbha  119
Nikunjika  57
Nimba  29
Nyangrodha  129
Pada  4
Padala  101
Padala  101.102
Padalee  102
Padola  68
Palasa  43
Panasa  128
paphana  19
Paranti  73
Parisa  17
Pathalagarudi  3
Pippali  113
Pishamushti  77
Peethabringaraja  80
Peethathaila  32
Plaksha  131
Poothi-karanja  127
Parkirya  50
Priyala  39
Prsniparni  45
Punamava  110
Raktabinduchada  123
Rasna  138
Rohithaka  29
Rujakara  41
Sadaphala  131
Sahadevi  80
Saka  107
Sakam  107
Sakralatha  38
Samudraphala  64
Sanapushpi  43
Sanmali  17
Saptachada  88
Sariba  92
Sarpagandha  90
Sasasruthi  79
Sahavari  141
Sinsapa  44
Sirisa  58
Sreeparni  75
Sushami  61
Sweta chithhraka  82
Syamalatha  89
Syodaka  101
Thamalakee  125
Thapasavriksha  43
Thikshnaksha  26
Thriputa  37
Thwaku  115
Tripadi  46
Udakirya  147
Udumbara  131
Upodaka  111
Upopika  111
Usiram  148
Vacha  145
Vajrakantaka  123
Valkala vriksha  128
Vamsa  146
Vanamalliaka  86
Vanapunnaga  11
Varana  6
Vibheethaka  61
Vidula  64
Vilva  23
Vipareetha lajjalu  22
Virala  85
Visalya  142
Vishnukrantha  97
Vrikshadani  117
Vyaghranakki  98
<table>
<thead>
<tr>
<th>Page No</th>
<th>Line No.</th>
<th>For</th>
<th>Read</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>5</td>
<td>Syn, <em>religiosa</em></td>
<td>Syn. <em>C. religiosa</em></td>
</tr>
<tr>
<td>22</td>
<td>31</td>
<td>Tribulus terrestris</td>
<td>Tribulus terrestris</td>
</tr>
<tr>
<td>34</td>
<td>24</td>
<td>Syn. <em>jujuba</em></td>
<td>Syn. <em>Z. jujuba</em></td>
</tr>
<tr>
<td>71</td>
<td>22</td>
<td>Canthium dicocum</td>
<td>Canthium dicoccum</td>
</tr>
<tr>
<td>112</td>
<td>22</td>
<td>Chenopodium ambrosioides</td>
<td>Chenopodium ambrosioides</td>
</tr>
<tr>
<td>114</td>
<td>22</td>
<td>Mareedha-valli</td>
<td>Mareecha-valli</td>
</tr>
<tr>
<td>184</td>
<td>37</td>
<td>Diploclicia glaucesens</td>
<td>Diploclisia glaucesens</td>
</tr>
<tr>
<td>187</td>
<td>19</td>
<td>Mesua ferra</td>
<td>Mesua ferrea</td>
</tr>
<tr>
<td>189</td>
<td>14</td>
<td>Qussia indica</td>
<td>Quassia indica</td>
</tr>
<tr>
<td>189</td>
<td>15</td>
<td>Randia dumatroum</td>
<td>Randia dumatorum</td>
</tr>
</tbody>
</table>