

Field Guide to Shrubs



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Introduction

This is a compilation of information collected about plant species that occur in the reserve forests lying on the fringes of the Kaundinya Wildlife Sanctuary in the Palamner range of the Eastern Ghats. This data has been acquired from different sources and serves to act as a vegetation guide to trees, shrubs and herbs for those involved in ecological field studies.

In this guide we have provided the scientific names of species as the primary reference, synonyms have also been provided as far as possible. The information of each of these species provides details of the family, habit, habitat and some salient features. Local names (predominantly Telugu) have also been included.

On the left hand corner of the title for each species is provided an index number. This is constituted of the first four alphabets of the family name followed by exclusive numbers for different species and a code for the habit of the plant (T for tree, S for shrubs and H for herbs), e.g.: Anac 1 T, is a plant belonging to family Anacardiaceae, numbered 1, which is a tree. This index number is consistent across the field guides, the herbarium and the seed collection in the germplasm bank in Kaigal hence can be used to refer to any of these with ease.

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Family: Anacardiaceae

Anac 3 S

Rhus mysorensis

Telugu: Sundaari

It is a thorny shrub, with hard reddish yellow wood.

Leaf: Leaves are compound, trifoliate, leaflets lobed, hairy, terminal leaflets are sessile and longer than the others.

Flower: The flowers are small occur in panicles with 4-6 petals. Flowering occurs in June-July.

Fruit: The fruit is a drupe. It is small and brown in colour.

Distribution: Found in hot dry places in Punjab, Haryana, Rajasthan, Gujarat, Karnataka Andhra Pradesh and the Western Peninsula. Also grow on stony regions.

Uses: The Stem bark contains 15 – 22 % of tannin and is used for tanning leather brown. Leaves are also used for tanning. The branches are used for fencing of fields. Fruits are edible.

Family: Apocynaceae

Apoc 2 S

Carissa paucinerva

Telugu: Chiti kalimi

A diffuse bushy shrub with many sharp spines.

Leaf: Leaves elliptic, ovate or lanceolate in shape, acute at both ends, up to 1.5 inches long and 0.5 inches broad, with 2-3 pairs of oblique and indistinct nerves.

Flower: Flowers are white or slightly pink coloured tubular flowers.

Fruit: Dark purple epsiloid berries that are small in size 0.3 inched in diameter.

Distribution: Distributed in the Deccan Peninsula region and Southern India. They are found up to an altitude of 4,000-6,000 feet

Family: Aristolochiaceae

Aris 1 S

Aristolochia indica

Telugu: Kullaya teege / Isolu veru



A glabrous, shrubby or herbaceous perennial arising from a woody root stock. Branches long, slender, grooved and glabrous.

Leaf: The leaves are variable, fiddle shaped to linear. They are 2 – 4 inches long, 3-5 nerved at the base. It is glabrous with a slightly undulate margin.



Flower: They occur in axillary racemes with few flowers. Bracts small. Perianth 1-1.5 inches long with a glabrous inflated, lobed base, which is suddenly narrowed, into a cylindrical tube about 0.5 inches long. It terminates in a funnel shaped mouth. The flower is pale green on the outer surface. The rim of the mouth is dark purple in colour. Flowers bloom between June and October.

Fruit: Fruit is a 6 valved dehiscent, ribbed capsule, 1.5 – 2 inches long. Seeds are flat triangular and winged all around. Fruits are produced between November and March.

Distribution: It is found to be distributed throughout the low hills and plains of India from Nepal to the south of Konkan. It is common in dry and deciduous forests

Uses: The root is nauseously bitter and is considered an antidote to snake bite. It is used locally to treat fevers, insect bites and to prepare a health tonic for infants.

Nursery notes: It is usually raised from seeds.

Family: Asclepiadaceae

Ascl 1 b S

Calotropis gigantea

English: Milkweed

Telugu: Jilledu

One of the most common shrubs it reaches tree size if allowed to grow. Trunk and branches yellowish-white, furrowed. Young branches covered with cottony pubescence. Plant is profusely milky.

Leaf: Opposite, sessile, elliptic-oblong, acute, thick, bluish green, with a cottony, pubescent underside. Profusely milky.



Flower: Has no odour, purplish-white, in flat-topped clusters, arises from a stout stalk. Each flower has a central crown. A white flowered variant is found but rather rare. The plant is almost always in flower.

Fruit: In paired boat-shaped capsules, about 8 – 10 cm in length. Dehisces when dry and exposes a large number of brown, flattened seeds with silky hair attached at one end. The arrangement of the seeds in a young fruit is similar to the arrangement of fish scales.

Distribution: Common all over the plains particularly on barren lands. Grows well on black cotton soil. Considered sacred by the Hindus.

Uses: Root bark is used to treat dysentery skin diseases and as an expectorant and emetic. Tincture of leaves

used to treat intermittent fever.

Powdered flowers is used to treat cold and asthma.

The bark gives a strong fibre used to make fishing nets and twine and the silky hair of the seeds are used to stuff pillows.

Family: Asclepiadaceae

Ascl 2 S

Decalepis hamiltonii

Telugu: Maradi gadda



A large climber with glabrous twining branches, branchlets with swollen winged nodes. Stem exudes latex, which is milky and sticky. Root is aromatic.

Leaf: The leaves are opposite, ovate, 2 inches long and longitudinally folded. The margin is entire to undulate with a sub acute to obtuse apex.

Flower: The flowers have cream or yellow petals with dark spots. Flowering occurs between April and

July.

Fruit: The fruit is woody with a horny pericarp that gets shrunk and persists with seeds. Seeds are egg shaped with white silky hairs. Fruiting occurs between August and November.

Distribution: This species is endemic to Peninsular India. It is found in dry and moist deciduous forests of Karnataka, Andhra Pradesh, Kerala and Tamil Nadu.



Uses: Both the root and leaves of this plant have medicinal properties. The roots are considered to be an appetizer and blood purifier. It is used to treat haemorrhage, gout, wounds, leprosy, and disorders of blood, anaemia and jaundice. The roots are also pickled and sometimes used as a spice and a condiment.

Nursery notes: It grows well in the hills, on the slopes and on the stream banks. It is propagated both by seeds as well as vegetative means.

Seed propagation: Invariably the fruits are harvested prematurely with the result availability of fully developed seeds are low. Mature fruits should be collected from the plant in March. The indication of maturity is the green pods turning yellow. The pods are then dried in shade or partial sun till they become brown and wrinkled. Seeds are collected from dehiscent pods and used for germination. Seeds are sown in the month of March in seed pans or trays. The seeds are small and seem to require a sustained high temperature and humidity for rapid germination and establishment. The humidity should be 60 to 70% and temperature 30 to 35° C. Seeds germinate better in green houses (50-60%) than open seed beds. Initial germination time is 5 days.

Vegetative propagation: Vegetative propagation is possible through cuttings as well as through root suckers.

Through cuttings: Soft green stems of length 15 – 20 cm with 2 nodes are used. The cut ends are treated with hormone for better rooting. The percent of successful rooting in stem cuttings is quite low, only about 20% even when they are planted in a greenhouse.

Through root suckers: Root suckers serve as an alternate method for vegetative propagation. The planting material consists of root suckers of size 0.3 x 15 to 20 cm, which are planted in February – May. They are planted in a greenhouse in partial shade. Shoot initiation commences after one month and establishment is about 90 –100%. These plants are hardened for 30 – 45 days before transplantation. Water logging should be prevented in the nursery stage as it can lead to fungal attack.

Transplanting and Aftercare: The hormone treated cuttings establish in the field within 6-8 weeks. In case of root suckers a very high success rate is seen in field establishment. Watering should be done one every alternate day.

Threat Status: The Red List Status of this species has been assessed as “Endangered (Globally)”

Family: Asclepiadaceae

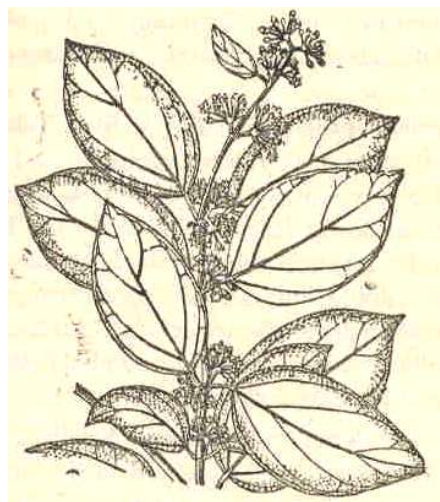
Ascl 3 S

Gymnema sylvestre

Telugu: Padapatri teege

A large woody climber bears small yellow flowers.

Leaf: Thin, ovate, elliptic and small, having an acute tip and a round base. They are 2.5 inches long and 1.5 inches broad and pubescent.



Flower: The flowers are very small 0.1 inches long yellow and occur in umbrella shaped inflorescences. They flower in April-May.

Fruit: The fruit are beaked follicles, up to 3 inches long having large seeds.

Uses: After chewing the leaves of this plant, the sweetness of sugar is not sensed in the mouth. It is known to stimulate the heart and increases urine secretion. It is good for the treatment of diabetes and glycosurea. The leaves possess active principles having blood sugar reducing properties. Dosages of 2-4 grams of dry leaf a day are recommended.

Family: Asclepiadaceae

Ascl 6 S

Secamone emetica

Telugu : Paal teege

A wiry much branched climbing or straggling shrub or under shrubs with minute flowers. Bark is brown, thick, corky and deeply cleft. The wood is white.

Leaf: The leaves are opposite, narrow and linear.

Flower: Small or minute in axillary sessile or shortly peduncled cymes. Calyx has five lobes. Corolla is small and 5 lobed.

Fruit: Smooth, slender follicles about 2 – 2.5 inches long. Seeds are oblong flattened but ridged ending in a long white silky hair.

Distribution: Deccan Peninsula and Southern India up to 4500 feet above sea level.

Family: Asclepiadaceae

Ascl 7 S

Tylophora asthamatica
(Syn.: *T. indica*)

Telugu: Mega mullada

A much branching climber with long fleshy roots. The climber is more or less pubescent.

Leaf: Leaves are variable in shape, usually pubescent sometimes nearly glabrous. They are ovate or elliptic in shape, the tip is acuminate the base is rounded or cordate. They are 4 inches long and 2.25 inches broad.

Flower: Greenish yellow or greenish purple flowers which are rather large occurring in umbellate or pedunculate cymes.

Fruit: Lanceolate, sharp pointed follicles, four inches long. The seeds are oval in shape.

Distribution: Found in all districts of the plains common in open forests up to about 3000 ft. in hilly country. Distributed in Assam, West Bengal, Orissa and Peninsular India.

Uses: The leaves and roots have been used as a substitute for "Ipecacuanha" as an emetic, diaphoretic and expectorant. It is also used for treating asthma, bronchitis, whooping cough, diarrhoea and dysentery.

Family: Boraginaceae

Bora 1 S

Carmona retusa
(Syn. *C. microphylla*; *Ehretia microphylla*; *E. buxifolia*; *Cordia retusa*)

Telugu: Nathagulla



It is an evergreen shrub reaching 3-4 ft in height.

Leaf: Leaves are 1.5-4 cm x .8-2.5 cm in size, coriaceous 3-5, lobed, obovate with acute to obtuse or rounded apex. When young, both surfaces have stiff white hairs when old upper surface densely covered with large glands each with a bristle.

Flower: Occur as unbranched or branched inflorescence with 3-12 flowers. Sepals 4 -5, lanceolate, 3-4 mm long. Corolla is white in colour, tubular, bell shaped.

Fruit: Globose drupe, 4-5 mm in diameter. Fruits are brownish orange to scarlet in colour with a thin pericarp when ripe.

Distribution: Common in dry scrub forests of Deccan Peninsula and Southern India.

Uses: The leaves are used medicinally to treat colic, cough, diarrhoea, and dysentery. *Carmona* can also be obtained in the form of tablets and tea bags. The leaf decoction is used for gastroenteritis, as gargle to prevent cavities and as a substitute for tea. It is also used for stomach ache, diarrhoea, dysentery and as antidote for plant-based poisoning. It stops bleeding from snakebites and is used as a body cleanser after childbirth.

Nursery notes: Propagated by seeds or softwood cuttings in spring or summer. Seedlings germinate near bases of trees and other plants and it is suspected that the seeds are most likely spread by fruit eating birds. Care should be taken while watering as it will drop leaves if under-watered. Over-watering results in yellow, sickly leaves. It is quite sensitive to sudden changes in temperature and lighting.

Family: Cappariaceae

Capp 0 S

Cadaba fruticosa

Family: Cappariaceae

Capp 1 S

Capparis sepium
(Syn: *C. incanescens*)

Telugu: Nalla uppili

A thorny, spreading, branched, or climbing shrub distributed in the dry regions of the country. It is pubescent and glabrous. It possesses recurved spines.



Leaves: The leaves are about 1.5 inches long, broadly ovate or elliptic and emarginated at the apex. They are hairy when young with a pair of hooked stipules.

Flowers: The flowers are white in colour. They occur in sessile or thorny peduncled umbrella shaped inflorescences. The inflorescence is terminal in position and has up to 30 flowers. The flowers have hairy petals. Flowers appear during February and May.

Fruit: The fruit is a small, globose, black berry, 0.8 cm in diameter and having one seed.

Distribution: It is common in interior scrub forests and occasionally along the coast.

Family: Capparidaceae

Capp 2 S

Capparis zeylanica
(Syn: *C. horrida*)

Telugu: Tottal teege

Common thorny climbing shrub. It has rusty grey hair hence pubescent which are shed later. It has got recurved spines.



Leaf: The leaves are elliptic-oblong, 7.5 x 3.5 cm in size. They have an obtuse tip and narrow base. They have stipular spines.

Flower: The flowers are white in colour, changing to pink. Flowering is between November and April. Often flowers appear before leaves in supra-axillary rows. The stamens are pink or white.

Fruit: The fruit is a globose red berry, ellipsoid in shape and 5 x 4 cm in size.

Uses: Root bark is sedative, stomachic and also used in cholera. The leaves are a counter irritant applied to boils, swellings and piles. Mucilage, an alkaloid and a phyto-sterol occur in the bark. Fruits are pickled and sometimes used in curries.

Family: Capparidaceae

Capp 3 S

Maerua oblongifolia
(Syn: *Capparis oblongifolia*, *Niebuhrria arenaria*, *Maerua ovalifolia*, *Maerua arenaria*)

Telugu: Madana charka teege

It is a large woody climbing shrub.

Leaf: Leaves are simple, variable in size and shape and have an entire margin; they sometimes have small stipules.

Flower: Flowers are greenish yellow in colour, they occur in terminal clusters. It has 4 sepals and 4 petals.

Fruit: Fruit is an elongated berry; and is fleshy.

Distribution: It is found in the Gangetic Plain, Western India and in the Deccan Peninsula.

Uses: It is used as tonic and stimulant. Unripe fruits are edible

Family: Celastraceae

Cela 1 S

Celastrus paniculata

Telugu: Ganga teege

A straggling, twining, unarmed shrub with thin brown bark, branchlets lenticellate.

Leaf: Alternate, entire, ovate to obovate, base round, apex acuminate.



Flower: Has small white flowers, in a long inflorescence. Flowers may be unisexual or bisexual occurring on the same or different plants.

Fruit: The fruits are globose, yellow capsules. They dehisce by three valves showing brown seeds covered by a scarlet aril. Seeds are 1-6 in number, ellipsoid or ovoid in shape

Distribution: It is widely distributed predominantly in deciduous forests. It occurs in Andhra Pradesh,

Karnataka, Goa, Maharashtra, Gujarat, Madhya Pradesh, Uttar Pradesh, Arunachal Pradesh, Punjab and Himachal Pradesh.

Uses: The bark, leaves, and seeds are used for medicinal purposes. The bark is reported to be abortifacient, depurative and a brain tonic.

Leaf sap is considered a good antidote for opium poisoning.

Seeds are reported to be used in abdominal disorders, leprosy, pruritis, paralysis, asthma, leucoderma, inflammation, nephropathy, amenorrhoea, dysmenorrhoea and fever. They are also used for stimulating the intellect and sharpening the memory. Oil from seeds is used in treating Beri Beri and sores, is considered a powerful stimulant.

Nursery notes: The soil should have sufficient aeration and drainage. It can be propagated both by seeds as well as vegetative means.

Seed propagation: Fruit ripens after December and seeds can be collected in January. Fruit ripening time however may differ from region to region. For propagation seeds must be removed from berries and the planted. Ripe fruits collected are placed in polythene bags and then dried in the sun for 3 – 4 days. Fruits in drying dehisce and liberate the seeds. These should be collected and sown on raised beds by dibbling to shallow depths. Time for initial germination is 45 days and 30 – 40% seeds are known to germinate. The seedlings are maintained in a nursery for one month.

Vegetative propagation: Through cuttings: 8 – 15 cm long cuttings with at least 3–4 nodes are used. Softwood cuttings in mid summer or hardwood cuttings in winter from plants of both sexes are taken. Semi-hardwood cuttings root well when treated with 8000 ppm Indol Butyric Acid. Cuttings are planted in small pits, covered with soil leaving one node above the ground.

Transplanting: One month old seedlings or well rooted cuttings can be transplanted to the field, preferably in pits near trees in order to provide support for the plant in climbing or else standards can be provided for the same.

Threat Status: The IUCN Red List Status for this species has been assessed as “Vulnerable” for Kerala and “Lower Risk-near threatened” for Karnataka and Tamil Nadu.

Family: Combretaceae

Comb 1 S

Combretum ovalifolium

Telugu: Yaada teege

A large climbing shrub, usually straggling or climbing showing irregular branching.

Leaf: The leaves are entire, opposite, sometimes alternate and petiolate. Ovate to lanceolate in shape, they are variable in size. They are pale and thin when dry.



Flower: Flowers small occur on dense spikes. Calyx is tubular and bell shaped having 4 lobes. Corolla also has four lobes.

Fruit: The fruit has four papery wings, nearly globose in outline, 0.75 inches in diameter.

Distribution: Found in the Deccan peninsula, and Southern India in deciduous forests up to 2000 ft.

Uses: The branches are used for making cattle ropes.

Family: Convolvulaceae

Conv 1 S

Rivea hypocratiformis

Common name: Clove scented creeper

Telugu: Baddi teege

Erect and straggling shrubs, with a thin, grey bark. The wood is very soft.

Leaf: Leaves are cordate, silky pubescent beneath. They occur on a long petiole. Leaves are 2-3 inches long.

Flower: Flowers are large white occur in axillary peduncles. Calyx 5 in number and ovate. Corolla large white salver shaped with a narrow cylindrical tube. Flowers open at sunset and close at sunrise and are very fragrant.

Fruit: Fruits are sub-globose in shape. They are dry and indehiscent.

Distribution: Fairly distributed through India. Occurs in the dry open forests and in hedges.

Uses: The leave and young shoots are edible.

Family: Euphorbiaceae

Euph 2 S

Breynia rhamnoides
(*Syn: Melanthesa rhamnoides*)

Telugu: Thella pooli

A large shrub, reaching up to 10 ft. in height.

Leaf: The leaves are alternate, entire and petiolate. They are membranous, elliptic or ovate in up to 2 inches long and nearly 1 inch broad.

Flower: Flowers are minute and unisexual, with both male and female flowers occurring on the same plant.

Fruit: Globose, red and 0.25 – 5 inches in diameter.

Distribution: Found in Southern India, Deccan peninsula. Common in deciduous forests, chiefly in open places. It is less common in the Western Ghats and Malabar.

Family: Euphorbiaceae

Euph 6 S

Fluggea leucopyrus
(*Syn: Securinega leucopyrus, Phyllanthus Leucopyrus*)

Telugu: Phool chettu

A large stiff straggling shrub with angular branches. Branchlets leafy and terminating in sharp spines. Wood is hard.

Leaf: Small 0.5 – 1 inch long, obovate or circular in shape sometimes emarginate.

Flower: The flowers are unisexual. Male and female flowers are known to occur on different plants. Male flowers occur in axillary clusters while female flowers are normally solitary. Flowers in April- May.

Fruit: The fruit is dry, white and globose. It is 0.25 inches in diameter.

Distribution: It is found widely distributed, from Punjab southwards to Peninsular India. It commonly occurs in open areas. Found on the coast as well as on elevated regions upto an altitude of 3,000 ft.

Uses: Fruits are edible. Paste of leaves combined with tobacco is used to destroy worms in open sores. Slender branches are used to make wicker baskets and for thatching.

Euph 8 S

Family: Euphorbiaceae

Jatropha curcas

Telugu: Veriamidam



An exotic shrub. Bark greenish white, smooth, peeling off in thin flakes. It exudes latex that is acrid. The wood is white and very soft.

Leaf: The leaves are alternate, broadly cordate, glabrous. They are entire or 3-4 lobed and can be up to 6 inches in diameter.

Flower: The flowers are unisexual yellowish green occurring in terminal cymes. Flowers are found on the same plants.

Fruit: The fruits are ovoid, 3 lobed, capsules, subglobose or ellipsoid in shape and about 1 inch long. They wrinkle up on

drying. The seeds are dull brownish black in colour.

Distribution: It is an exotic naturally occurring in the American sub continent. It has been planted and cultivated throughout India hence has naturalised.



Uses: The latex dries to a bright reddish-brown, brittle substance used in marking ink. The latex is effective against wounds and ulcers

Bark yields a blue dye used for dying cloth.

The leaves are reported to be used against foul ulcers, tumours and scabies.

Seeds are reportedly used to treat haemorrhoids, wounds and skin diseases. Oil from the seeds is used externally for rheumatism and paralytic affections. Seeds yield oil used for manufacturing candles, soaps and varnishes and in wool

industry. The yellow oil from the roots has a strong anthelmintic action.

Nursery notes: This plant is suited for warmer regions of tropics and sub-tropics. It grows on gravelly, sandy or saline soils and also on the poorest stony soils and rock crevices. Its water requirement is extremely low and withstands long periods of drought by shedding most of its leaves to reduce transpiration loss. It can be propagated both by seeds as well as vegetative means.

Seed propagation: Seeds are collected in May-June. Large and heavy seeds are soaked overnight and sown at the onset of monsoon. Seeds are sown in polybags or in raised beds at the depth of 6 cm. Seeds can also be dibbled at the rate of two seeds for each spot at a depth of 2-3 cm. Seed germination is 95% and takes 10 – 15 days. Nursery duration is 1 month.

Vegetative propagation: Vegetative propagation is through cuttings. Semi-hardwood cuttings of 30-40 cm length and 3-4 cm thickness from the base of the stem with short internodes are planted in polybags. Root initiation takes place in 15 to 20 days and about 80% of the cuttings root.

Transplanting and Aftercare: Seedlings and cuttings are planted in pits of dimension 30 x 30 x 30 cm spaced at 1 – 3 m. The pits are filled with soil and 400g of compost or organic manure per pit along with a basal dressing of fertilizers. The field should be kept free of weeds all the time. Light harrowing is also beneficial.

Family: Euphorbiaceae

Euph 9 S

Jatropha gossipifolia

Telugu: Erra chitti amudham

These are small dark coloured shrubs often glandular; the wood is soft.

Leaf: Leaves are alternate, entire or palmately lobed. The margins have a close row of viscid glands. The lobes are obovate and have an acute apex.



Flower: Flowers are crimson or purplish in colour.

Fruit: Fruit is a capsule 0.4 inches long.

Distribution: It is quite naturalised and found as a weed in all parts of the country.

Uses: An ether extract from the shoots of this plant is reported to have antibiotic activity against *Escherichia coli*. It is grown as an ornamental plant

Family: Euphorbiaceae

Euph 10 S

Kirganelia reticulata

(Syn. *K.lineata*, *Phyllanthus reticulates* *Anisonema multiflorum*)

Telugu: Yerra pooli chettu

A large diffuse or straggling shrub or climber. It has slender branches and there is no latex. The bark is brown and thin, the wood is reddish white and hard.

Leaf: The leaves are alternate, small, oblong or elliptic and thin.

Flower: They flower throughout the year. They are axillary and unisexual and both male and female flowers occur in mixed clusters; sometime that may occur separately but on the same plant.

Fruit: The fruit is a berry, purple, fleshy, globose and 0.2 inches in diameter.

Distribution: It is found commonly distributed throughout India.

Uses: .The decoction of root is given to children for cough and catarrh.

The small twigs are used for brushing teeth. The roots are a source of red dye. The leaves are used in medicines as a diuretic. It also has cooling properties. The juice of leaves mixed with camphor is used for bleeding gums and for diarrhoea in infants

Family: Euphorbiaceae

Euph 12 S

Suregada lanceolata
(Syn: *Gelonium lanceolatum*)

Telugu: Pesalu

These are large evergreen shrubs.

Leaf: Leaves are shiny, pale, coriaceous and alternate. They are obovate or oblanceolate; apex is obtuse. They can be up to 4 inches long.

Flower: Small flowers occur in few numbers in closed clusters. They are unisexual with male and female flowers occurring on different plants.

Fruit: Fruits are smooth capsules, which are deeply lobed.

Distribution: Occurs in dry hilly regions of the Deccan plateau and at the low level regions of the Western Ghats.

Family: Leguminosae

Sub family: Papilionaceae

Legu 1 S

Abrus precatorius

Telugu: Guriginjalu

These plants are woody climbing shrubs. It is a rather conspicuous wiry climber with pink flowers and usually scarlet seeds with a black end.

Leaf: Leaf is compound, abruptly pinnate with many pairs of leaflets. Leaflets are large and oblong and have ligules. They are up to 0.75 inches long, 0.25 inches broad, with the rachis ending in a bristle.

Flower: Minute, pink flowers occur in clusters on dense racemes. Bracts are small and deciduous. Corolla is papilionaceous.

Fruit: Pods are thick, hard wrinkled and oblong, 1 – 1.5 in long and 0.5 in broad. Seeds are rounded, hard, scarlet or white with a black spot and a white basal aril.

Distribution: Found in deciduous forests in most parts of the country also found in open lands.

Uses: Seeds are used as a purgative, emetic, aphrodisiac and to treat nervous disorders. Seeds are very hard, used by jewellers as weights, and for various ornamental purposes.

Family: Leguminosae

Sub-family: Mimosaceae

Legu 2 S

Acacia caesia

(Syn: *Acacia intsia*, *Mimosa caesia*, *Acacia columnaris*)

Telugu: Karadi seege

A climbing shrub armed with rather large prickles and few rather large leaflets. The young branches are tomentose.

Leaf: Leaves are 10 cm long; pinne 5-6 pairs; leaflets glabrous 10-12 pairs 0.2 inches apart, oblong. Glands present near the base of the petiole.

Flower: Flowers are sessile; calyx is pubescent, the corolla is white in colour, a little longer than the calyx.

Fruit: Fruits are pods flat, strap shaped, with an acute apex and dehisces on both sutures.

Distribution: Occurs in the Deccan Plateau and in the Southern part of the Western Ghats.

Uses: It serves as a host for lac insect. Bark is used as a substitute for soap to wash hair.

Family: Leguminosae

Sub family: Caesalpineaceae

Legu 13 S

Caesalpinea bonduc

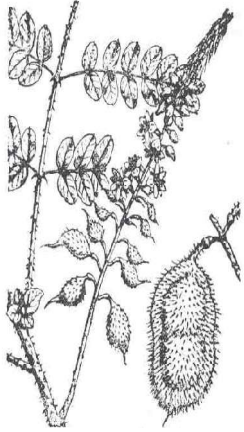
(Syn: *Guilandina bonduc*)

Telugu: Gasakkai

A prickly, rambling shrub with its branches more or less covered with soft hair and armed with stout, sharp, straight or recurved prickles.

Leaf: The leaves are compound, 12-18 inches long, bipinnate. The rachis is stout and covered with short brown hair and bears sharp recurved prickles. There are 6-10 pairs of leaflets borne on each leaf. The stipules are large, foliaceous and often lobed.

Flower: The flowers occur as axillary or terminal racemes. It has 5 petals and is golden yellow in colour. Flowering occurs in August-September.



rheumatism.

Fruit: The fruit is a pod. It is broadly elliptic in shape, beaked, coriaceous, 2-3 inches long and covered all over with sharp, wiry prickles. Fruiting occurs in the cold season.

Distribution: widely distributed it is frequently seen on coastal as well as interior regions of the country.

Uses: This plant is known to possess great medicinal properties. The seeds possess a substance known as “bonducin” which is extremely bitter and is absent in the roots of the plant. The seeds as well as the leaves are used to relieve colic, fever, hydrocoel, diarrhoea and

Nursery notes: It can be propagated easily from seed.

Family: Leguminosae

Sub family: Papilionaceae

Legu 14 S

Canavalia ensiformis

Telugu: Aduvi tamma

These plants are climbers

Leaf: leaflets are elliptic-ovate, glabrous above and sparsely pubescent beneath; the apex is acute.

Flower: Flowers are pink or white in colour, showy; occur in racemes 15 – 25 cm long. The calyx is pubescent and corolla is large.

Fruit: Fruits occur in pods that are slightly compressed, dehiscent, 8-10 seeded. The fruit may be 6 – 12 inches long.

Distribution: common in dry deciduous forests.

Uses: The fruits are consumed as a vegetable, cultivated for forage and green manure.

Family: Leguminosae
Sub family: Caesalpineaceae

Legu 15 S

Cassia auriculata

Telugu: Thengedi

A much branched perennial shrub, which grows to about 30 – 60 cm. in height. It has a round, hard and strong stem which is brown in colour.

Leaf: The leaves are compound, paripinnate with 8 -12 pairs of leaflets each. Each pair of leaflet has an erect linear gland between them. Large leafy stipules are present.



Flower: The flowers are large, yellow and showy. The plant flowers in summer.

Fruit: The fruit is a pod. The pods are flat, thin and papery. They are oblong in shape. The pods are seen to be depressed between the seeds. There are 7 – 10 seeds in each pod. Pods ripen in March-April.

Distribution: It is found in northwestern, western, central and southern India. Often gregarious in distribution on dry stony regions

Uses: The leaves, flowers and seeds are used for medicinal purposes. A fine powder of the leaves is sprinkled on burns, which help to reduce to burning sensation.

The juice from the flower and pods is given for headache and bedwetting.

The seeds are used in ophthalmia.

The bark is useful in tanning leather.

Nursery notes: Pods are collected from the tree when they are ripe in March-April. They are beaten to harvest the seeds. Seeds can be stored in bags for 1 - 2 years. Direct sowing is recommended since this species does not withstand transplantation well. The season for planting is August – November.

Family: Leguminosae
Sub family: Caesalpineaceae

Legu 17 S

Cassia montana

Telugu: Pagudu thengedi

A handsome shrub having glabrous branchlets.

Leaf: Leaves are 12 – 15 cm long without glands on the petiole or between the leaflets. Leaflets occur in 8-10 pairs. They are oblong in shape; the apex is obtuse, tipped with a conspicuous bristle.

Flower: Flowers are yellow in colour. They occur on short receptacles in axillary inflorescence.

Fruits: They are pods that are longer than 3 inches, broad and flat.

Distribution: They are found in the Deccan Peninsula area and up to an altitude of 3000 ft in hilly regions.

Family: Leguminosae
Sub family: Caesalpineaceae

Legu 18 S

Cassia spp.

Telugu: Nela thengedi

Family: Leguminosae
Sub family: Papilionaceae

Legu 19 S

Crotolaria juncea

An erect shining, silky brown hairy, shrub. The stem and branches are furrowed.

Leaf: The leaves are oblong or lanceolate. They are 10 x 2 cm in size. They have silky hair on them.

Flower: Inflorescence is big with bright yellow papilionaceous flowers. Flowering occurs during the months of September-October.

Fruit: The fruit is a pod 2.5 cm long covered with silky hairs. It is sessile and turgid. It contains 10-15 seeds.

Distribution: It is commonly distributed throughout India. It is often cultivated.

Uses: The fibre from this plant is called as “Sunn Hemp” which is used for making gunny and cordage. It is also grown as a green manure crop.

Family: Leguminosae
Sub family: Papilionaceae

Legu 23 S

Derris scandens
(Syn: *D. timoriensis* *Dalbergia scandens*)

Telugu: Chinta Yelapa



Woody climber, without tendrils. Found climbing or creeping. Grows up to 15-20 m long, bark black-grey in colour.

Leaf: Leaves are alternate, compound, imparipinnate, stipulate and 10 – 17 cm. long. Leaflets opposite, 3-5 pairs, ovate, entire, 2-5 cm by 1-3 cm, apex acute, lower pairs are smaller than upper pairs.

Flower: The flowers occur in a axillary racemose inflorescence 20 – 35 cm long. Flowers are bisexual, papilionaceous and white in colour.

Fruit: Fruits are pods, glabrous, flat, oblong, winged along one structure, 9 x 1.2 cm. in size, 1 – 4 seeded. Seed round flat, 3 x 4 mm. in size

Distribution: It is found to occur in the forests of Assam, Bengal, Uttar Pradesh and southern India.

Family: Leguminosae
Sub family: Papilionaceae

Legu 24 S

Derris spp.

Family: Leguminosae
Sub family: Caesalpineaceae

Legu 29 S

Pterolobium hexapetalum
(Syn. *P. indicum* *P. lacerans* *Reichardia hexapetala*, *Caesalpineia lancerans*)

Telugu: Erra cheeki



A very thorny, woody often climbing or straggling shrub.

Leaf: The leaves are bipinnate. Rachis is 12-18 cm long and pickly, has 6 – 9 pairs of pinnae. leaflets are small and occur in 4 – 7 pairs.

Flower: The flowers occur in terminal or axillary inflorescences. Calyx is pink in

coloured. Corolla is yellowish white.

Fruit: The fruit is a pod with a terminal wing. It is indehiscent and one-seeded. The pod is pinkish-red in colour.

Distribution: It is commonly found in scrub jungles. It grows well in open places and often grows over bushes and small trees.

Uses: The flowers are a good source of nectar, hence form a good source for honey bees to forage and collect honey.

Family: Liliaceae

Lili 1 S

Asparagus racemosus

Telugu: Neer gaade

Climbing shrubs with a stout root stock sometimes bears tubers.

Leaf: Leaves are reduced to minute, often spinescent scales. Tufts, more or less leaf like flattened cladodes are present on the axil.

Flower: Flowers occur in racemes. They may be solitary or fascicled, 1 – 3 inches long. They occur on slender pedicels jointed at the middle.

Distribution: Very common throughout India from sea level to an altitude of 4,500 ft above mean sea level

Uses: It is consumed as vegetable. Root is used as demulcent, aphrodisiac, diuretic, anti-dysenteric, and as demulcent in veterinary medicine. Locally used as a thirst quencher.

Family: Malphagiaceae

Malp 1 S

Hiptage benghalensis

(Syn: *H.madablota*, *Gartneraracemosa*, *Banisteria benghalensis*)

Telugu: Mudu mangala



A large evergreen, straggling shrub. It has rough reddish wood.

Leaf: The leaves are opposite, coriaceous, entire and 4 – 9 inches long.

Flower: It bears white and yellow fragrant flowers that occur as racemes. They are 0.7 – 1 inch in size with 4 white and one coloured petal.

Fruit: Fruit is a samara 1-3 or 2-3 winged. Seeds globose; cotyledons unequal.

Distribution: It is distributed mainly in ravines and hill forests up to an altitude of 6,000 ft. it is cultivated for its ornamental flowers. Commonly found everywhere.

Family: Meliaceae

Meli 3 S

Cipadessa baccifera
(Syn: *C. fruticosa*)

Telugu: Googati

A bushy shrub or small tree, having red wood.

Leaf: leaves are alternate or sub-opposite and compound. Leaflets opposite or nearly so and entire.

Flower: Small in size, bisexual and occur in axillary peduncled panicles.

Fruit: Fruit is a drupe, which is ribbed and is 5-celled. Each cell has 1-2 seeds, which have a fleshy albumen.

Distribution: Common in dry forests of the Deccan peninsula chiefly and in hilly areas up to 4000 - 5000 ft.

Family: Menispermaceae

Meni 2 S

Tinospora cordifolia
(Syn: *Menispermum cordifolium*, *Cocculus cordifolius*)

Telugu: Teppa teege

These are climbing glabrous shrubs with a corky bark; young bark is papery.

Leaf: The leaves are glabrous, cordate in shape, with an acute apex, margin is entire. They are up to 7 x 8 cm in size.

Flower: Inflorescence is a raceme occurring at the nodes of old wood. Flowers are unisexual, yellow in colour; petals are fleshy. Male flowers occur in clusters; female flowers are usually solitary

Fruits: Fruits are drupelets measuring up to 7 mm diameter; they turn red with age.

Distribution: Frequent in scrub and dry deciduous forests in most of India.

Uses: Dry stems constitute a drug, which is used as a tonic and in diarrhoea and chronic dysentery.

Family: Oleaceae

Olea 1S

Jasminum spp

Telugu: Aduvimalli



Family: Rhamnaceae

Rham 1 S

Scutia myrtina

Telugu: Gorati

A straggling, glabrous shrub with many sharp thorns.

Leaf: Simple, alternate, small, usually leathery and shining. They are obovate or circular in shape.



Flower: Flowers are small, bisexual in axillary clusters or in umbrella shaped inflorescence. Calyx is tubular; petals 5 in number.

Fruit: fruit is blackish in colour dry or slightly fleshy, obovoid or sub globose in shape with a persistent calyx.

Distribution: Distributed in the dry deciduous and scrub forests in the country and in parts of the Western Ghats.

Uses: Fruit is edible and consumed by the people.

Family: Rhamnaceae

Ventilago madraspatana

Telugu: Sorala teege



A climbing slender shrub, branchlets slender usually pale.

Leaf: The leaves are ovate or lanceolate, entire and 1.5 – 3.5 inches long by 1 – 1.5 inches broad. They have an obtuse or acute tip.

Flower: Small Greyish flowers occurring in terminal panicles, they have an offensive odour.

Fruit: The fruit is a nut, which is light grey in colour with a flat wing that is about 2 inches long.

Distribution: Found in Western and Southern India.

Uses: Root bark is a source of the red dye “Ventilagin” which is used for colouring cotton and tussar silk. Root bark is stomachic, tonic, and stimulant. Leaves and seeds are edible. Seed oil is used for cooking and seeds are edible.

Family: Rhamnaceae

Rham 4 S

Zizyphus oenoplia

It is a very thorny large climber or straggling shrub.

Leaf: arranged in two vertical rows. They are ovate, hairy on both sides with an acute leaf tip. They are 1-2 inches long and have a very oblique base. It has one hooked stipular spine.

Flower: Flowers are small, greenish or yellowish and occurring in axillary clusters. Flowering is in September.

Fruit: Is a drupe, small 0.25 inches in diameter and globose. They are black in colour and are pleasant to eat.

Distribution: It is found in Peninsular and North India. Normally occurs in dry and open forests.

Uses: The fruits are edible and the bark is used as tan.

Rubi 3 S

Family: Rubiaceae

Canthium parviflorum
(Syn: *Plectronia parviflora*)

Telugu: Gaara



It is a thorny shrub which is gregarious in its distribution. Bark is grey, wood is grey and hard.

Leaf: Leaves are small, variable in shape and size. They get modified into thorns in very dry places. And can be larger leaves up to 2 inches long and 1.5 inches broad.

Flower: Flowers are small, white, occurring in many flowered axillary cymes.

Fruit: Fruit is fleshy 0.5 inches in diameter, orange when young and turning brown when ripe.

Distribution: It is commonly found in upland thorn and scrub forests in the Peninsula as well as coastal India.

Uses: The wood is very hard and durable. Stem yields a useful fibre. The fruits and leaves are edible. Both raw and ripe fruits are eaten. The raw fruits are 'thuarpu' and the ripe ones are sweet. Leaves can be cooked and eaten. They also have medicinal properties.

Rubi 5 S

Family: Rubiaceae

Chomelia asiatica
(Syn: *Webra corymbosa*, *Stylocoryne webra*)

Telugu: Kommi

A large, evergreen shrub with shining leaves. The young parts are often resinous. The wood is light brown and hard.

Leaf: Triangular or ovate in shape. They are petiolate with inter-petiole stipules. The leaves are shiny and turns black on drying

Flower: Tubular and white in colour, occurring in terminal clusters.

Fruit: Is a small, globose, berry. Seeds plano-convex in shape.

Distribution: Dry forests in all plains, common in all scrub forests.

Uses: The seeds are small, spherical and black and believed to be used as a pepper adulterant.

Rubi 8 S

Family: Rubiaceae

Ixora spp.

Telugu: Avu goruvi

Rubi 12 S

Family: Rubiaceae

Randia dumentorum
(Syn: *Garenia dumentorum*)

Telugu: Manga

Large shrubs armed with spines. Spines occur in pairs, axillary, and opposite in position.



Leaf: The leaves are obovate with inter petiolar stipules. They are 1.5 inches long and 0.75 inches broad.

Flower: Flowers are, white in colour turning yellow with age. Sometimes flowers are single or in fascicles of 1-3.

Fruit: Fruits are globose, smooth or slightly ribbed, about 0.75 inches in diameter and yellow in colour. Seeds are smooth.

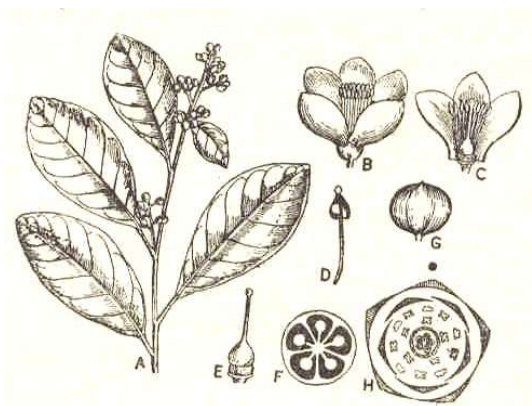
Distribution: Found widely distributed in dry evergreen forests across India.

Uses: Fruits are edible pulp of fruit is given to treat dysentery. The fruit is used as a fish poison. Locally the root and fruit is used to treat dandruff.

Family: Rutaceae

Ruta 5 S

Glycosmis pentaphylla
(Syn. *G. arborea*, *G. cochinchinensis*, *G. triphylla*, *Limonea pentaphylla*)



Usually a shrub occasionally grows into a small tree. It is unarmed.

Leaf: Compound, imparipinnate with 1, 3 or 5 leaflets. Leaflets are sub-sessile, alternate, oblong – lanceolate, slightly serrate and variable in size.

Flower: They are small, white occurring in clusters, which are axillary in position. Flower during September- October. The flowers do not completely open.

Fruit: The fruit are dry or pulpy berries, globose in shape, pinkish - white in colour.

Uses: The fruits are edible.

Juice extracted from leaves is used in indigenous medicine for fever, liver complaints, and as vermifuge. A paste made of leaves and ginger is said to cure eczema and skin affections. Small twigs are used as tooth brushes hence also called toothbrush plant.

Family: Rutaceae

Ruta 6 S

Murraya paniculata
(Syn: *M. exotica*, *Chalcas paniculata*)

Large shrubs that is unarmed.

Leaf: Leaves are pinnate, leaflets alternate, up to 3-7 in number.

Flower: Flowers are few, fragrant, large, occur in axillary position; petals up to 0.5 inches long.

Fruit: Fruits are red coloured berries, oblong in shape.

Distribution: It is found in almost all hilly regions. It is common in underwood and especially in ravines.

Uses: Fruits are edible.

Family: Rutaceae

Ruta 7 S

Naringi crenulata
(Syn: *Limonia crenulata*)

Telugu: Vai kanna



A large shrub, or a small tree with numerous thorns. The wood is yellowish white and hard.

Leaf: Compound leaves imparipinnate, greenish yellow in colour. Leaflets 2-4 pairs, sessile, crenulate, rachis broadly winged. Leaf is dotted with glands.

Flower: White flowers are produced between April to June. They are arranged in racemes that are 1 inch

long.

Fruit: Fruits are globose berries under 0.5 inches in diameter. Fruits appear in November / December.

Distribution: Commonly found in scrub and dry forests, not seen on plains.



Uses: The bark of the tree is used for inhalation for migraine and sinusitis and for treating chest pain.

Ruta 8 S

Family: Rutaceae

Toddalia asiatica
(Syn: *T. aculeate*)

Telugu: Nerapu gandaruru



A slender very prickly climbing shrubs. Known as wild orange.

Leaf: Leaves are alternate, compound, trifoliate. Leaflets obovate, narrow, 1-2 inches long and 0.5-0.75 inches broad. They are sessile and dotted with glands.

Flower: Flowers are small unisexual occurring in axillary or terminal elongate panicles.

Fruit: Fruits are small, sub globose, lobed, orange in colour and fleshy having 4-6 seeds.

Distribution: A shrub occurring throughout the country

Uses: *Toddalia asiatica* contains the alkaloids barbering, toddaline, and toddalinine. Fresh leaves are eaten for pain in bowels. Research is being conducted to see the effectiveness of this plant for HIV and malaria treatment.

An infusion of fresh root bark is used as a stimulating tonic, carminative and in diarrhoea. Roots chewed and the juice gulped for instant relief from stomachache. Root bark yields a yellow dye.

Fruits are used as a substitute for chillies. Ripe berries are pickled.

Family: Sapindaceae

Sapi 1 S

Allophylus cobbe
(Syn: *A. serratus*, *Orintrophe serrata*, *Schmidelia serrata*)

Telugu:

It is a small shrub, which is not highly branched. Bark of branchlets is whitish in colour.

Leaf: Leaves are alternate, compound and trifoliate. Leaflets about 2-5 inches long with a serrate, crenate or dentate margin usually hairy, tomentose beneath.

Flower: Flowers are small, irregular and unisexual with male and female flowers, found on the same or different plants. They are pediceled and occur in spindle shaped clusters.

Fruit: Fruit is a small drupe, which is indehiscent and 1-2 lobed. The lobes are sub globose

Distribution: Found distributed in the peninsular region.

Family: Sapindaceae

Sapi 2 S

Dodonea vericosa
(Syn: *D. burmanniana*)

Telugu:Banderi



These are stiff shrubs, the bark is thin and grey and the wood is dark brown, very hard and heavy.

Leaf: Leaves are shiny, alternate, simple and oblanceolate with an obtuse apex.

Flower: Flowers are small, and occur on axillary racemes. The flowers can be bisexual or unisexual occurring on the same or different plants.

Fruits: Fruits are 2-3 membranous winged capsules that are 4-6 valved.

Distribution: It is a common often gregarious shrub distributed in the Deccan Plateau; found in the sholas of the Western Ghats up to a height of 8,000 feet and often then a small tree.

Uses: They are used to make tool handles and walking sticks.

Family: Solanaceae

Sola 1 S

Solanum indica

Telugu: Sundaikaaya

A branching very prickly undershrub, it reaches up to a height 5 feet. Prickles are many, stout, curved on stem and leaves.

Leaf: It is very variable in pubescence, size and shape of the leaf.. It is deeply lobed. It measures up to 6 inches long and 2 inches broad.

Flower: Flowers occur in racemes with lot of flowers.

Fruit: The fruit is a yellow coloured berry

Distribution: The plant is wide spread throughout the country.

Uses: Glyco-alkaloids including solasonine and solanine and diosgenin have been reported to be present in fruits, stems and leaves. These alkaloids can be a good source material for cortisone and sex hormone preparations.

Roots are used in medicine for treating cough, catarrhal affections, colic and nasal ulcers.

Fruits are edible. Half ripe fruits are used in curries and chutnies.

Family: Tiliaceae

Tili 1 S

Grewia bracteata

(Syn: *G. obtusa*)

Telugu: Gerige

It is a scandent shrub

Leaf: The leaves are ribbed, elliptic-ovate and measures up to 4 inches long. The leaves are glandular near the petiole.

Flower: The flowers occur on terminal cymes, they are white or yellow in colour. The sepals are up to 1.8 cm. in length

Fruit: Fruit is a grooved drupe measuring up to 1 inch in diameter. It is flattened at the apex when mature.

Distribution: Occurs in the southern regions of India and it is found up to an altitude of 4,000 feet. It is also recorded at ant altitude of 5000 feet from the mean sea level in the Niligiris.

Family: Tiliaceae

Tili 2 S

Grewia hirsuta

They are tomentose shrubs with narrow leaves.

Leaf: Leaf blade is obliquely elliptic-ovate, acute, doubly serrate, with scattered hairs above and densely tomentose beneath. Leaves are ribbed.

Flower: Flowers are polygamous occurring on axillary cymes. The petals are white in colour and oblong measuring up to 2.5 mm long with a rounded or emarginate apex

Fruit: Fruits are fleshy drupes. They measure up to 1 cm in diameter.

Distribution: They are fairly distributed in the deciduous forests of India.

Family: Verbenaceae

Verb 0 S

Clerodendron inerme
(Syn: *Volkameria inermis*)

Telugu: Vishamdari

A climbing shrub that is commonly found and grown.

Leaf: Leaves are opposite, obovate; apex is obtuse or emarginate, measures up to 2 inches long, and 1.5 inches broad

Flower: Flowers are white in colour, occur on axillary panicles. The corolla is irregularly shaped like a salver. The corolla tube is usually 1-1.5 inches long

Fruit: Fruits are a drupe. It is fleshy turning dry and brown in colour.

Distribution: Commonly found on the sea coasts and in the tidal forests.

Uses: It is commonly grown as a hedge plant.

Family: Verbenaceae

Verb 1 S

Gmelina asiatica
(Syn: *G. parvifolia*)

Telugu: Aduvi gummadi

A large straggling shrub sometimes climbing armed with axillary spines (abortive branchlets) occurring on poor land, it often has with very small leaves. Bark brownish white and thin, wood is hard and grey.

Leaf: The leaves are opposite, small, ovate irregularly lobed and smooth. They are 1.5 inches long and 1 inch broad, with a short petiole and the under surface has minute glands.

Flower: Large, bright yellow, tubular flowers. It flowers right through the year.

Fruit: Fruit is a yellow, succulent drupe, obovoid in shape. It has a bony endocarp.

Distribution: Found in the scrub forest.

Uses: The leaf is used locally to bring down the body heat while the fruit is used in a preparation to cure dandruff.

Family: Verbenaceae

Verb 4 S

Vitex negundo

Telugu: Vabili

A large shrub, with bluish – purple flowers and narrow, long leaflets. Bark thin, grey. Wood is greyish white and hard.

Leaf: The leaves are opposite, compound and 3-5 foliate. The leaflets are lanceolate, with an acuminate tip, all with petioles, the middle one long.

Flower: Flowers are bluish purple in colour and small occurring in terminal panicles. Panicles up to 12 inches long.

Fruit: Fruit is a globose ovoid drupe with an enlarged persistent calyx. It has a fleshy mesocarp and is 4 seeded.

Distribution: Commonly found around the country in a wide variety of habitats. It is also seen in the dry regions in hills up to an altitude of 5,000 feet above mean sea level it is also found on the banks of streams.

Uses: The plant is used in medicine. It is used to preserve grains and as a pesticide. Leaves are considered tonic and also smoked to give relief from headaches. They are applied to rheumatic swellings of joints. It is used in several ayurvedic preparations.

Family: Verbenaceae

Verb 5 S

Vitex trifolia

These are normally small shrubs, rarely growing to be large in size.

Leaf: The leaf is opposite compound and 1-3 foliolate. Leaflets are sessile, oblong or ovate, membranous, white or grey pubescent beneath, having an entire or toothed margin.

Flower: The flowers are small pale purple in colour. Found on terminal panicles which are 1.5 inches broad, calyx 1-5 inches long.



Distribution: It is distributed along the coastal districts of India, now also naturalised inland, hence common throughout the country.

Uses: the leaves are used for sprains and rheumatism. They are also reported to possess anti cancer properties and also used against tuberculosis.

Family: Verbenaceae

Verb 6 S

Vitex spp.

Telugu: Aduvi jonna

Family: Vitaceae

Vita 1 S

Cissus pallida
(Syn: *Vitis pallida*)

Telugu: Pedda gummadi

Erect shrub with large leaves and woody stem, bark is grey; occasionally tendril bearing and somewhat scandent.

Leaf: Leaves are lobed, large, cordate, with shallow incurved serratures.

Flower: Flowers occur in cymose umbels. The calyx is cup shaped.

Fruit: Fruits are fleshy berries occurring on thick pedicels; berries are globose and bear smooth seeds.

Distribution: Common in the dry deciduous forests and waste lands.

Uses: The tuber along with leaves and fruits are used as fodder for livestock.

Glossary

Aril: An appendage more or less enveloping the seed.

Axillary: Situated in an axil which is the angle between the leaf and its point of attachment on the main stem.

Bipinnate: Used to refer to compound leaves where the mid rib bears pinnae which in turn bear leaflets. Leaflets arranged on an axis, and many such arrangements are arranged on a common rachis like in a feather.

Blaze: The colour of the wood as seen when the tree is cut.

Bole: The main stalk or trunk of the tree.

Capsule: A dry dehiscent fruit.

Coriaceous: Leathery texture.

Drupe: A fruit with a more or less succulent flesh enclosing the stone.

Glabrous: Without any kind of hair.

Hispid: With rough or bristly hairs.

Imparipinnate: Pinnate with an odd terminal member.

Inflorescence: The flower cluster as a whole

Lenticellate: Corky spots shaped like a bi-convex lens seen on young barks.

Ligule: A narrow transverse appendage at the inner side of the base of the leaf.

Panicle: A repeatedly branched inflorescence.

Papilionaceous corolla: Five petals having one standard, two keel and two winged petals, typical of sub-family Papilionaceae in family Leguminosae.

Paripinnate: Pinnate with an equal number of members on each side of the axis and no odd terminal leaflet.

Peduncule: The common stalk of two or many flowers or of a complete inflorescence.

Pinnate: Leaflets arranged on each side of a common axis as in a feather.

Pubescent: Clothed with soft, rather short hair or down.

Pyrenes: A nut-let; often seen as one of the small stones of a drupe or similar fruit.

Retuse: A shallow notch in a rounded apex.

Salver: Shaped like a platter.

Samara: An indehiscent winged fruit or winged parts of a dehiscing fruit.

Sessile: Without a stalk.

Stone: A hard endocarp enclosing a seed.

Tomentose: Densely matted with woolly hair.

Umbel: An inflorescence in which a cluster of pedicels springs from the same point. It appears like an open umbrella.

Viscid: Sticky or clammy owing to an exudation.

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