



## *Acacia auriculiformis*

Latitude:17.54349N, Longitude:78.46196E



**Local Name** : Akashmoni,Australia tumma

**Family** : Mimosydeae

**Habit** : Medium, evergreen.

### Key Identification Characters :

- ❖ **Stem** : Grey-brown, smooth, fissured(later)
- ❖ **Leaves** : Modified appendages (phyllodes).
- ❖ **Flowers** : Yellow, fragrant, spike.
- ❖ **Fruit** : Pods, at first green then intricately coiled and almost woody when ripe.

**Economic Importance :** Fruits are edible, young leafs are used as leafy vegetable.





## Acacia nilotica

Latitude:17.54412N, Longitude:78.45395E



**Local Name** : Babul, Nallatumma

**Family** : Mimosoideae

**Habit** : Mediumsized evergreen tree.

### Key Identification Characters :

- ❖ **Stem** : Dark-black, fissured-dark, the tree has thin strait spine.
- ❖ **Leaves** : Bipinnate, rachis with a gland at the bottom of the last pairs of pinnulae.
- ❖ **Flowers** : Bright golden yellow colour, set up either axillary / whorly onpundcles.
- ❖ **Fruit** : Pods are strongly constricted, white-grey in colour. No of seeds are numerous.

**Economic Importance :** Good fuel wood, fodder, timber, medicinal purpose .





## *Acacia sandra.*

Latitude: 17.54703N, Longitude: 78.4356E



Fruit



Leaves & Flower

**Local Name** : Sandra, Red Ebony, Red Cutch Red Ebony.

**Family** : Fabales.

**Habit** : A large deciduous tree.

### Key Identification Characters :

- ❖ **Stem** : 8 m high; bark rusty brown; rough, peeling off in thin flakes; branchlets smooth, glabrous, pale purplishbrown.
- ❖ **Leaves** : Bipinnate, alternate, stipulate; stipular spines short, hooked to 8 mm; rachis 8-10 cm long, slender, grooved.
- ❖ **Flowers** : In axillary spikes; greenish-white.
- ❖ **Fruit** : A stipitate pod, flat, thin, strongly nerved, apically horned; seeds 6 ovoid. Fruiting September onwards.
- ❖ **Seed** : Ovoid, greenish-brown.

**Economical Importance :** Wood is used to make agricultural implements. Heart wood yields Kathna and cutch.





## *Adina cordifolia (Syn: Haldina cordifolia)*

Latitude: 17.54317N, Longitude: 78.45158E.



Leaves



Flower

**Local Name :** Bandaru, Haldu, Karma

**Family :** Rubiaceae

**Habit :** *Haldina cordifolia* is one of the largest tree of deciduous forest that can grow well over 20 metres high.. *H. cordifolia* usually blossoms during winter (dry season) months.

### Key Identification Characters:

- ❖ **Stem/Bark :** Grey, pale, scarred and pitted where pieces of bark have flaked off
- ❖ **Leaves :** Broadly oval, in opposite pairs, deeply heart shaped at base, pointy at apex; more or less smooth.
- ❖ **Flower :** Tiny, yellowish, clustered in round heads on long stalk.
- ❖ **Fruit :** Very numerous in round heads, like the flower form
- ❖ **Seed :** Round and shed between April and June

**Economic Importance :** This plant has Ayurvedic medicinal values, used for treatment of skin diseases, wounds, vomiting, intestinal worm, indigestion and diseases of the liver.





## *Aegle marmelos*

Latitude:17.54415N, Longitude:78.45398E



**Local Name** : Maredu, Bel.

**Family** : Rutaceae

**Habit** : Very slow growing, small to medium size and nearly evergreen tree.

### Key Identification Characters :

- ❖ **Stem** : Corky, pale brown with long straight spines.
- ❖ **Leaves** : Tri foliet, alternate, pointed at tip and rounded base.
- ❖ **Flowers** : Pale green and yellow colour, sweetly scented and bisexual and arranged in clustered.
- ❖ **Fruit** : It is globosed for pear-shaped, woody cell, smooth and green, yellow in ripe.

**Economic Importance :** Fruit is edible with medicinal properties .



## *Ailanthus excelsa*

Latitude: 17.54710N, Longitude: 78.4501E



Leaves



Flower

**Local Name** : Pedda manu, Indian Tree of Heaven, Coramandel ailanto

**Family** : Simaroubaceae (Quassia family)

**Habit** : Large deciduous tree.

### Key Identification Character :

- ❖ **Stem** : Trunk straight, 60-80 cm in diameter; bark light grey and smooth, becoming grey-brown and rough on large trees, aromatic, slightly bitter.
- ❖ **Leaves** : Alternate, pinnately compound, large, 30-60 cm or more in length; leaflets 8-14 or more pairs, long stalked, ovate or broadly lance shaped from very unequal base, 6-10 cm long,
- ❖ **Flowers** : Mostly male and female on different trees, short stalked, greenish-yellow. Five sepals, 5 narrow petals spreading 6 mm across.
- ❖ **Fruit** : 1-seeded samara, lance shaped, flat, pointed at ends, 5 cm long, 1 cm wide, copper red.
- ❖ **Seed** : Twisted at the base

**Economical Importance:** Bark used in India as a powerful fever-cure and tonic. Leaves and bark in good repute as a tonic after labor, and the juice of fresh bark employed by the Konkans.





## *Alangium salviifolium*

Latitude: 17.54679N, Longitude: 78.455E



Flower



Fruits

**Local Name** : Vuduga, sage-leaved alangium

**Family** : Cornaceae

**Habit** : found near sandy riverine tracts and road cuttings

### Key Identification Characters :

- ❖ **Stem** : Sage-leaved alangium is a small, bushy tree offering a dense canopy with a short trunk. It bears fragrant white flowers which have green buds.
- ❖ **Leaves** : simple, alternate, oblong-lanceolate
- ❖ **Flowers** : The petals of the flower typically curl backwards exposing the multiple stamens and a linear stigma distinctly sticking out.
- ❖ **Fruit** : Spherical berry like and red in color. The prominent remains of the calyx can be seen distinctly with a white color.
- ❖ **Seed** : Very small in size, brown colour

**Economical Importance** : Treatment of bites by rabbits, rats, and dogs. The root- used in traditional medicine for skin problems and as an antidote for snake bite, to expel parasitic worms (Platyhelminthes) and as an emetic and purgative as well.





## *Albizia lebbeck*

Latitude: 17.341N, Longitude: 78.421E.



Inflorescence and Pods



Pods and Leaves

**Local Name** : Dirisanam, Woman's tongue tree, Sirish

**Family** : Fabaceae

**Habitat** : Native to Indomalaya, New Guinea and Northern Australia and widely cultivated and naturalised in other tropical and subtropical regions.

### Key Identification Characters :

- ❖ **Stem** : Height of 18–30 m tall with a trunk 50 cm to 1 m in diameter.
- ❖ **Leaves** : Bipinnate, 7.5–15 cm long, with one to four pairs of pinnae, each pinna with 6–18 leaflets.
- ❖ **Flowers** : White, with numerous 2.5–3.8 cm long stamens, and very fragrant.
- ❖ **Fruit** : 15–30 cm long and 2.5-5.0 cm broad, containing six to twelve seeds.
- ❖ **Seeds** : Small and Brown in colour.

**Economical Importance :** Environmental management, forage. It is cultivated as a shade tree in North and South America. In India and Pakistan, the tree is used to produce timber.





## *Albizia odoratissima*

Latitude: 17.543638N, Longitude: 78.45703 E



Leaves ans Flowers

**Local name** : Chunduga, Black Sirish, Kali Sirish

**Family** : Fabaceae.

**Habit** : It is a fast-growing, deciduous tree reaching 15-25 cm height.

### Key Identification Characters :

- ❖ **Stem/Bark** : Has an attractive dark brown to black heartwood, often striped, durable and dense.
- ❖ **Leaves** : Leaves are bipinnately compound, downy, with three to nine pairs of pinnae and ten to thirty pairs of pinnules.
- ❖ **Flower** : The fragrant flowers are white withering to a pale orange, appearing in large terminal clusters.
- ❖ **Fruit** : Mature pods are reddish-brown, thin and flat, contain eight to twelve reddish-brown seedse.
- ❖ **Seed** : Seeds germinate readily with a high viability.

**Economic Importance :** Fodder, agricultural implements, furniture making, use in industry. One of the top nitrogen-fixing trees, best for agroforestry.





## *Alstonia scholaris*

Latitude: 17.54736N, Longitude: 78.45667E



Inflorescence



Fruits

**Local/ Common Name** : Devil tree, Edaakula paala, Chatim.

**Family** : Apocynaceae

**Habitat** : Found throughout India except Jammu and kasmir.

### Key Identification Characters :

- ❖ **Leaves** : The leathery, sessile, simple leaves are elliptical, ovate, linear or lanceolate
- ❖ **Roots** : Primary root and secondary roots.
- ❖ **Flower** : The inflorescence is terminal or axillary, consisting of cymes or compound umbels. The small, more or less fragrant flowers are white, yellow and pink.
- ❖ **Seeds** : That develop into deep blue pod like, schizocarp fruit.

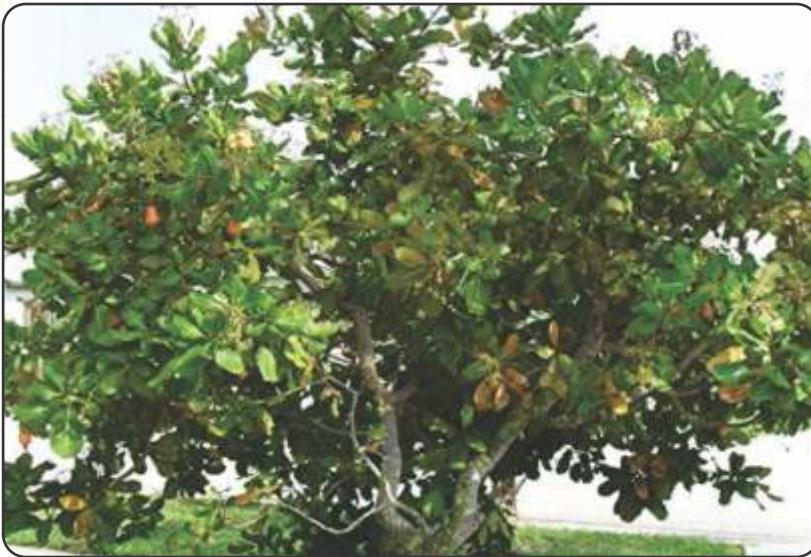
**Economic Importance :** Alstonia trees are used in traditional medicine. The bark of the Alstonia scholaris is a source of a remedy against malaria, toothache, rheumatism and snake bites. The latex is used in treating coughs, throat sores and fever.





## *Anarcardium occidentale*

Latitude: 17.54615N, Longitude: 78.45592E



Tree

**Local Name** : Casew

**Family** : Anacardiaceae

### Key Identification Characters :

- ❖ **Stem/Bark** : Bark is pale grey to brown in color, smooth with vertical striations.
- ❖ **Leaves** : Leaves are spirally arranged, leathery textured, elliptic to ovate.
- ❖ **Flower** : Inflorescence is Panicle or corymb small pale green in color.
- ❖ **Fruit** : Oval or pear shaped, hypocarpium developing from pedicle and receptacle of cashew flower
- ❖ **Seed** : Single, known as nut, surrounded by double cell containing an allergenic phenolic resin anacardic acid a potent skin irritant.

**Economic Importance :** Fruits are edible used in preparation of dishes and highly nutritious.





## *Annona squamosa*

Latitude: 17.54738N, Longitude: 78.45666E



Leaves, Flowers & Fruits

**Local Name** : Sugar apple, Seethaphal

**Family** : Annonaceae

### Key Identification Characters :

- ❖ **Stem/Bark** : Trunk is short, no buttressed at the base, Inner bark light yellow and slightly bitter, Oval rounded spot up to the stem or branch
- ❖ **Leaves** : Leaf scar is visible on trees, Leaf edges without teeth inconspicuously hairy when young.
- ❖ **Flower** : Flowers are solitary in short lateral clusters of 2-4 about 2.5cm long greenish yellow flower on a hairy slender 2cm long stalk, Flowering takes place in early summer.
- ❖ **Fruit** : Fruits are aggregate, soft fruit formed from the numerous and loosely united pistil of a flower which become enlarged and mature into fruits.
- ❖ **Seed** : Seeds are long oblong shiny and smooth, Dark brown to black in color, length ranges between 1.3cm -1.6cm.

**Economic Importance :** Fruit are edible and sweetly aromatic, Leaves are used in decoction to treat dysentery and to treat urinary infection, it is also used for treating wounds.





## *Anogeissus latifolia*

Latitude: 17.54146N, Longitude: 78.45754E



Leaves and Flowers

**Local Name** : Tirumanu, Axlewood

**Family** : Combretaceae

### Key Identification Characters :

- ❖ **Stem/Bark** : Smooth or with scales pale to dark grey
- ❖ **Leaves** : Alternate or opposite, Elliptic , ovate or acute.
- ❖ **Flower** : Small in globose head
- ❖ **Fruit** : The fruits are small, yellowish brown or reddish brown, glossy, beaks, wings, and a top seed.
- ❖ **Seed** : Its seed is wedge-shaped.

**Economic Importance** : Its leaves contain large amounts of gallotannins and are used in India for tanning. The tree is the source of Indian gum, also known as ghatti gum, which is used for calico printing among other uses. The leaves are also fed on by the *Anthraea paphia* moth which produces the tassar silk, a form of wild silk of commercial importance.





## *Anthocephalus kadamba*

Latitude: 17.54609N, Longitude: 78.45591E



Leaves and Flowers

**Local Name** : Kadam, Kadambamu

**Family** : Rubiaceae

### Key Identification Characters :

- ❖ **Stem/Bark** : Stem is small to medium size
- ❖ **Leaves** : Simple leaves which is 13–32 cm (5.1–12.6 in) long.
- ❖ **Flower** : Flowering usually begins when the tree is 4–5 years old. Kadam flowers are sweetly fragrant, red to orange in color, occurring in dense, globular heads of approximately 5.5 cm (2.2 in) diameter.
- ❖ **Fruit** : The fruit occurs in small, fleshy capsules packed closely together to form a fleshy yellow-orange infructescence containing approximately 8000 seeds
- ❖ **Seed** : Small and Light in weight

**Economic Importance :** It is an ornamental tree, flower used in making perfume, timber for paper making, medicinal value.





## *Araucaria cokii*

Latitude:17.54792N, Longitude:78.45797E



Tree



Seed

**Local Name** : Christmas tree, Araucaria

**Family** : Araucariaceae.

**Habit** : Cinical evergreen treefrom upto 60 feet.

### Key Identification Characters:

- ❖ **Steam/Bark** : The bark of the Cook pine peels off in thin paper-like sheets or strips and is rough, grey, and resinous.
- ❖ **Leaves** : Scale like 2-4mm long. Young Seedlings have needle lik leaves.
- ❖ **Flower** : Cones are 15-25 mm long green ripening brown in eight month.
- ❖ **Fruit** : Cones are formed.
- ❖ **Seed** : The female seed cones are scaly, egg-shaped, and 10–15 cm. long by 7–11 cm. wide. The smaller, more numerous male pollen cones are at the tips of the branchlets and are scaly, foxtail-shaped, and 2 inches long.

**Economic Importance** : Ornamental tree used in incense sticks, promotes hair growth by leaf extract.





## *Artocarpus heterophylus*

Latitude:17.54930N, Longitude:78.45770E



**Local Name** : Panasa, Jack fruit.

**Family** : Moraceae

**Habit** : Medium size and evergreen tree

### Key Identification :

- ❖ **Stem** : Thik and dark, cracked, flaky.
- ❖ **Leaves** : Broad, deep glossy, green.
- ❖ **Flowers** : Male female are separate on the same tree, clustered.
- ❖ **Fruit** : Multiple fruit, green, yellow in ripe.

**Economic Importance :** Fruits are edible, good fuel wood.





## Azadirachta indica

Latitude: 17.54835N, Longitude: 78.45828E



Tree



Fruit



Bark

**Local Name** : Neem, Vepa.

**Family** : Meliaceae

**Habit** : It is typically grown in tropical and semi-tropical regions.

### Key Identification Characters :

- ❖ **Bark** : Moderately thick, with small scattered tubercles rough and fissured.
- ❖ **Leaves** : Leaves alternate, crowded near the end of branches.
- ❖ **Flowers** : Bisexual or male on same tree, actinomorphic, small, pentamerous, white or pale.
- ❖ **Fruit** : Seeded drupe, ellipsoidal, 1-2 cm long, greenish, greenish-yellow to yellow or purple when ripe; exocarp thin, mesocarp pulpy endocarp cartilaginous.
- ❖ **Seed** : Ovoid or spherical; apex pointed; testa thin, composed of a shell and a kernel.

**Economic Importance :** Construction, Furniture, Fuel wood, Medicinal Uses, prevent insects eating the clothes. Neem leaves are dried and burnt in the tropical regions to keep away mosquitoes also use in cosmetics manufacturing. Honey: In parts of Asia neem honey commands premium prices, and people promote apiculture by planting neem trees. Against pox viruses: In India, people who are affected with pox viruses are generally made to lie in a bed made of neem leaves and branches. The belief is that it prevents the spreading of pox virus to others and has been in practice since early centuries.





## *Bauhinia purpurea*

Latitude: 17.546791N, Longitude: 78.45645E



Flower

**Local Name** : Kanchanam

**Family** : Caesalpiniaceae

**Habit** : *Bauhinia purpurea* is a middle-sized slender deciduous tree. It is a densely branched and foliaceous tree with a rounded crown attaining a height of 10 meters.

### Key Identification Characters :

- ❖ **Bark** : Bark grayish to dark brownish, thick, smooth.
- ❖ **Leaf** : Leaf blade suborbicular, 10-15 × 9-14 cm, stiffly papery, abaxially almost glabrous,
- ❖ **Flowers** : Inflorescence a raceme with few flowers axillary or terminal.
- ❖ **Seeds** : Seeds compressed, suborbicular, 12-15 mm in diameter.

**Economic Importance** : This plant has been known to possess antibacterial, antidiabetic, analgesic, anti-inflammatory, anti-diarrheal, anticancerous, nephroprotective and thyroid hormone regulating activity.





## *Bauhinia racemosa*

Latitude: 17.54048N, Longitude: 78.45615E



Leaves and Fruits

**Local Name** : Bidileaf tree, Katmuli in Hindi, Tellaarecettu in Telugu, Banraj in Bengali.

**Family** : Caesalpiniaceae

### Key Identification Characters :

- ❖ **Stem/Bark** : Bark brownish grey, with rectangular flakes.
- ❖ **Leaves** : Typical Bauhinia like, shaped like cow's hooves and small and bilobed,
- ❖ **Flowers** : Greenish white, narrow lance like, generally curved, rigid.  
Flowering - February-May.
- ❖ **Fruit** : Fruit curved, thick and woody.

**Economic Importance :** The various parts of the plant, viz., flower buds, flowers, stem, stem bark, leaves, seeds, and roots, are utilized in various indigenous systems of medicine, astringent, anti goitrogenic, Etc.





## *Bauhinia variegata*

Latitude: 17.54645N, Longitudes: 78.45693E



Leaves and Flowers

**Local Name** : Kanchanamu, Kachnar

**Family** : Fabaceae

### Key Identification Characters :

- ❖ **Stem/Bark** : It is a small to medium-sized
- ❖ **Leaves** : Cow's hoof shaped, long and broad, bilobed at the base and the apex.
- ❖ **Flower** : It is conspicuous, bright pink or white, 8-12cm diameter, with 5 petals
- ❖ **Fruit** : Fruit is pod 15-30cm long, with several seeds
- ❖ **Seed** : Seeds are brown in color

**Economic Importance :** It is ornamental tree, flowers are scented and used for cuisine.





## *Bombax ceiba*

Latitude: 17.541407N, Longitude: 78.457587E



Leaves and Fruits

**Local Name** : Silk cotton tree, Buruga, Simal.

**Family** : Bombacaceae

### Key Identification Characters :

- ❖ **Stem/Bark** : Tree has straight and tall trunk.
- ❖ **Leave** : The leaves are palmate with about 6 leaflets radiating from a central point and are deciduous in winter
- ❖ **Flowers** : Red flowers with 5 petals appear in the spring before the new foliage.
- ❖ **Fruit** : Brown in mature fruits. It produces a capsule which, when ripe, contains white fibers like cotton.
- ❖ **Seed** : Numerous, long, ovoid, black or gray in colour and packed in white colour.

**Economic Importance :** Packing cases, toys, medicinal, textile & cotton industry and flosses.





## ***Boswellia serrata***

**Latitude: 17.548513N, Longitude: 78.460062 E**



Leaves

**Local name** : Andugu, Salai gugul.

**Family** : Burseraceae

**Habit** : *Boswellia serrata* is a moderate-sized to large, deciduous tree

### **Key Identification Characters :**

- ❖ **Stem/Bark** : Usually has a short bole, sometimes longer if grown in a fully stocked forest. Bark is very thin, greyish-green, ashy or reddish
- ❖ **Leaves** : Leaves alternate, exstipulate, imparipinnate, basal pairs often smallest.
- ❖ **Flowers** : White, in stout racemes, shorter than the leaves, crowded towards the ends of branches, but not terminal. Calyx persistent,
- ❖ **Fruit** : Fruits 1.3 cm long, trigonous, with three valves and three heart-shaped, winged.
- ❖ **Seed** : Trigonal, with three valves and three heart shaped, 1-seeded pyrenes, winged

**Economic Importance :** Fuel, fiber, timber used in paper industry, making furniture, matches, plywood and veneers. Gum and resin used in medicine.





## *Brownnea ariza*

Latitude: 17.54366N, Longitude: 78.45817E



Leaves



Flower

**Local name**

: Brownea

**Family**

: Fabaceae

**Habit**

: It is a tropical species grows into a nice medium size tree 20-25 ft (smaller in containers), with dense umbrella-like canopy, spreading 15-20 ft wide.

### Key Identification Characters :

- ❖ **Stem/Bark** : Crown symmetrical, fan-shaped. Trunk woody-like with characteristic leaf scar rings, hidden underground in juvenile plants and emergent in mature
- ❖ **Leaves** : Young leaves a pale green to pinkish, almost white, sometimes with light variegation, and hangs down like a large handkerchief. Brownea ariza is evergreen. The paripinnate leaves are opposite. The elliptic leaflets are entire and petiolate.
- ❖ **Flower** : Flowering occurs on 3-4th year from seed, at the base of the branches. The flower lasts a few days, however the view is unforgettable.
- ❖ **Fruit** : Browneariza produces cymose corymbs of pendant, bordeaux tubular flowers.  
The trees produce legumes.
- ❖ **Seed** : Seeds numerous, black, thinly covered with glossy blue and hairy aril.

**Economic Importance :** Seed oil is reported to be antiseptic, ornamental, leaves used in packaging.



## *Buchanania lanzan*

Latitude: 17.543292N, Longitude: 78.45685E



Tree with Inflorescence



Leaves



Fruits

**Local name** : Chironji, Morli.

**Family** : Anacardiaceae.

### Key Identification Character :

- ❖ **Stem/Bark** : Bark 10-12 mm thick, surface black or dark brown, rough.
- ❖ **Leaves** : Leaves are simple, alternate, estipulate; petiole 12-22 mm, stout, glabrous.
- ❖ **Flower** : Small greenish-white flower. flowering and fruiting is from January-April.
- ❖ **Seed** : The charoli seed is lentil-sized, is slightly flattened and has an almond-like flavor.
- ❖ **Fruit** : Drups, black, hard, 2 valved. Fruiting in the month of February.

**Economic importance** : Fruit are edible and have medicinal value also used as a small timber. Leaves are used in the treatment of skin diseases. Fruit are used to treat for cough. They are commonly used in sweets in India. However, they are also ground into powders for thickening savory sauces and flavoring batters, and stewed into rich, meaty kormas.





## *Butea monosperma*

Latitude: 17.55007N, Longitude: 78.45697E



Flower



Pods

**Local Name** : Moduga, Palas

**Family** : Leguminosae

**Habit** : *Butea monosperma* is a medium-sized and deciduous tree.

### Key Identification Characters :

- ❖ **Bark** : Bark is rough, fibrous and slate; grey to pale brown, blaze fibrous.
- ❖ **Leaves** : The leaves are pinnate, with an 8–16 cm petiole and three leaflets.
- ❖ **Flowers** : The flowers are long, bright orange-red, and produced in racemes up to 15 cm long.
- ❖ **Fruit** : The fruit is a pod 15–20 cm long and 4–5 cm broad.

**Economic Importance :** This tree is as a host of a lac insect for production of Rangini lac. It is used for timber, resin, fodder, medicine, paper printing and dye. Spoons/Ladles made of this tree are used in various Hindu rituals to pour Ghee (clarified butter) into the fire. Good charcoal can be obtained from it. The leaves were used by previous generations of people to serve food instead of plastics of today.





### ***Callistemon viminalis***

**Latitude: 17.54948N, Longitude: 78.45787E**



**Leaves and Flowers**

**Local name** : Bottle brush.

**Family** : Myrtaceae.

#### **Key Identification Characters:**

- ❖ **Stem/Bark** : Large furrowed bark, a number of trunks and usually pendulous branches.
- ❖ **Leaves** : Leaves are light green, linear to elliptical; one side straighter than the other.
- ❖ **Flower** : Flowers are large scarlet bottle brushes 4-10cm long.
- ❖ **Fruit** : Woody capsules.

**Economic Importances :** Extremely valuable in controlling erosion along our waterways. Planting of weeping bottlebrush along river and creek banks will provide resistance against strong water currents and can mitigate damage.





## *Calophyllum inophyllum:*

Latitude: 17.54486N, Longitude: 78.45798E



Leaves and Fruits

**Local name** : Ponna, Punnagamu  
**Family** : Calophyllaceae

### **Key Identification Character :**

- ❖ **Stem/Bark** : Outer bark often with characteristic diamond to boat-shaped fissures, soft, firm, fibrous and laminated, pink to red.
- ❖ **Leaves** : Leaves are elliptical, thick, smooth and polished, ovate, obovate or oblong,
- ❖ **Flower** : Flowers usually bisexual but sometimes functionally unisexual, sweetly scented, yellow,
- ❖ **Fruit** : Inflorescence axillary, racemose, usually unbranched, greyish-green in colour

**Economic Importance :** Wood for furniture, oil as illuminant and lubricant, leaves for fish poison and flowers are used for medicinal purpose.





## *Careya arborea*

Latitude : 17.54436N, Longitude : 78.45551E



Leaves and Fruits

**Local Name** : Wild Guava, Budda darmi.

**Family** : Lecythidaceae

**Habitat** : Deciduous tree up to 20 m tall. Common in semi open forest.

### Key Identification Characters :

- ❖ **Stem/Bark** : Bole straight in good sites, but often remaining stunted in poor sites. Bark fissured, flaking, greyish-brown.
- ❖ **Leaves** : Leaves simple, alternate, glabrous, broadly obovate, apex obtuse with short tip, base attenuate into short petiole, margin finely toothed. Midrib flat above, secondary veins obtuse, widely parallel, tertiary veins oblique (ladder like or percurrent) stipules absent.
- ❖ **Flower** : Flowers yellowish green with red purple stamens. Flowers arranged in 1-10-flowered inflorescence, terminal on leafless twigs, bisexual, sessile. Stamens numerous, twice as long as the petals, in three whorls, cream tinged purple-red at base.
- ❖ **Fruit** : Fruit capsule up to 6 cm, skin leathery, pulp fleshy, not splitting.
- ❖ **Seed** : Size 4 - 5 cm in dia, round thick crowned with the limb of the calyx. Seeds numerous, embedded in fleshy pulp, scattered.

**Economic Importance :** The wood can be used for general construction. The bark gives brown dye and the juice of the bark tree and the calices of the flowers are often used for curing coughs and colds. The pulped leaves are used as a poultice.





## *Carissa carandas*

Latitude : 17.549091N, Longitude : 78.459117E



Leaves, Fruits and Flowers

**Local name**

: Karanda, Peddakalavi

**Family**

: Apocynaceae.

**Habitat**

: Karanda is a climbing shrub or small tree usually growing 3 - 5 metres tall. Generally seen in sunny region in higher elevation.

### Key Identification Characters :

- ❖ **Stem/Bark** : Woody, rich in white, gummy latex. The branches, numerous and spreading, forming dense masses, are set with sharp thorns, simple or forked.
- ❖ **Leaves** : Leaves are broadly ovate to oblong in shape. Dark-green, leathery, glossy on the upper surface, lighter green and dull on the underside.
- ❖ **Flower** : The flowers are tubular with 5 hairy lobes which are twisted to the left in the bud instead of to the right as in other species. They are white, often tinged with pink.
- ❖ **Fruit** : The fruit, in clusters of 3 to 10, is oblong, broad-ovoid or round, fairly thin but tough, purplish-red skin turning dark-purple.
- ❖ **Seed** : 2 to 8 small, flat, brown seeds in one fruit.

**Economic Importance :** Use in Agro forestry, preparation of pickle, jam, jelly and puddings, making household furniture, medicine, etc.





## Cassia fistula

Latitude: 17.54936N, Longitude: 78.45806E



Inflorosence



Pods

**Local Name** : Rela, Amalthas

**Family** : Leguminosae

**Habit** : Slow growing, medium sized deciduous tree

### Key Identification Characters :

- ❖ **Leaves** : Deciduous leaves (15-60 c.m) long and pinnate with 3-8 pairs of leaflets each leaflet 7-21 c.m long and 4-9 c.m broad
- ❖ **Flower** : The flowers are in pendulous racemes 20-40 c.m long each flower 4-7 c.m diameter with five yellow petals of equal size and shape.
- ❖ **Fruit** : It is a legume 30-60 c.m long and 1.5-2.5 c.m broad with a pungent odour.

**Economic Importance :** Avenue tree, House posts, bridge posts and medicinal purposes, Timber. Flowers of the golden shower tree are sometimes eaten by people. The leaves have also been used to supplement the diets of cattle, sheep and goats fed with low quality forages.





## *Cassia siamea*

Latitude: 17.548381N, Longitude: 78.460161E



Flowers



Leaves



Pods

**Local Name** : Kassod tree or cassia tree.

**Family** : Fabaceae

**Habit** : Medium sized evergreen tree 15 to 20 m tall with branch high crown.

### Key Identification characters :

- ❖ **Stem / bark** : Light grey colour and smooth slightly fissured longitudinally.
- ❖ **Leaves** : Alternate, pinnately compound, with slender, green reddish, tinged axis and 6 to 12 pair of leaflets on short stalks rounded at both ends; leaflets are oblong rounded at the base and at the apex.
- ❖ **Flower** : Yellow flowers, up to 3.5 cm long, in dense raceme at the end of the shoots, and in their axils.
- ❖ **Fruit** : Pods are flat and 15 to 25 cm long, soft, green, ribbon-like when young and become grey at ripen.
- ❖ **Seed** : Indented between the seed, there are 20 to 30 seeds per pod; seeds are bean shaped shiny dark brown/8mm long.

**Economics Importance :** Shade tree for tea and coffee. It has medicinal (barakol) value. In Burma and Thailand use tender leaves and pods as vegetables. Use as fodder.





## *Casuarina equisetifolia*

Latitude: 17.54637N, Longitude: 78.45815E



Tree Leaves and Cones

**Local Name** : Beefwood, Sarugudu

**Family** : Casuarinaceae

### Key Identification Characters :

- ❖ **Stem/Bark** : Bark dark brown, flaking off to reveal rusty Under bark
- ❖ **Leaves** : Obscure, encircling each joint of the twig so small.
- ❖ **Flower** : Male and female usually on separate trees; Male flowers in spikes at the end of the twig female Flowers in axis with untidy red threads.
- ❖ **Fruit** : Woody 'Cones' 2 cm long
- ❖ **Seed** : Tiny winged seeds

**Economic Importance** : Pulpwood and scaffoldings, mostly used in shelterbelt plantation





## *Caryota urens*

Latitude: 17.546072 N, Longitude: 78.458023 E



Leaves

**Local Name :** Jeelugu, Fish tail palm.

**Family :** Arecaceae (Palm family).

**Habit :** palm is an Asian species that grows from India to Burma and on the island country of Sri Lanka.

### Key Identification Characters:

- ❖ **Stem :** Grey trunk (grows to about 30') that is covered by regularly spaced leaf scar rings.
- ❖ **Leaves :** The bipinnate leaves are triangular in shape, bright deep green, 3.5 m long, and held on 60 cm long petioles.
- ❖ **Flowers :** Long inflorescences emerge at each leave node, from top to bottam, producing pendent cluster of white, unisexual flowers.
- ❖ **Fruit :** Very small in size.
- ❖ **Seed :** Very small.

**Economic Importance:** Ornamental purpose. Kithul, a liquid jiggery is extract from inflorescence used as energy drink.





## *Chloroxylon swietenia*

Latitude: 17.54441N, Longitude: 78.45277E



Leaves

**Local Name** : Billudu.

**Family** : Flindersiacea

### Key Identification :

- ❖ **Stem/Bark** : Thick fissured, slightly corky bark
- ❖ **Leaves** : Alternately arranged leaves, pinnately divided into 10-20 pairs.
- ❖ **Flowers** : Flowers are small, creamy-white, produced in panicles.
- ❖ **Fruit** : Oblong, three segmented capsule with 1-4 seed in each capsule.
- ❖ **Seed** : The seed of *Chloroxylon swietenia* is flat, oblong and winged.

**Economic Importance** : Agricultural implement, cabinetwork, furniture, veneer in wooden furniture Carving and picture frames.





## *Chukrasia tabularis*

Latitude: 17.54671N, Longitude: 78.45355E



Leaves and Flowers

<b>Local name</b>	:	Godla yepa, Chikrasi, Chittagong wood, Indian Redwood.
<b>Family</b>	:	Meliaceae
<b>Habit</b>	:	Deciduous, Medium-sized, Sometimes fairly large tree upto 30m tall.

### Key Identification characters :

- ❖ **Stem/Bark** : Medium to tall tree upto 30-40m tall. Highly prized timber; barks possess commercial gums & tannins, astringent barks.
- ❖ **Leaves** : Pinnate leaves with smooth margins unlike neem; also contain tannins & gums.
- ❖ **Flower** : Cream coloured flowers in bunches; contains red & yellow dyes.
- ❖ **Fruit** : Ovoid, 3-5 valved capsule about 2.5-5cm long.

**Economic importance :** Valuable multipurpose tree, highly prized for cabinet works, doors, windows & light floorings, railway sleepers, ship & boat making, Packing boxes. Commercial gums & tannins obtained. Astringent from barks have medicinal values.





## *Citharexylum subserratum*

Latitude:17.54716N, Longitude:78.45755E



**Local Name** : Din Ki Raja.

**Family** : Verbenaceae

**Habit** : Large deciduous trees with drooping branches.

### **Key Identification :**

- ❖ **Stem/ bark** : Grey with vertical lines, peeling off thin flakes.
- ❖ **Leaves** : Simple, elliptical-oblong.
- ❖ **Flowers** : White, recemes..
- ❖ **Fruit** : Red to black subglobose drupes, orange in colour when rip.

**Economic Importance :** wood is used as furniture making.





## *Cochlospermum religiosum*

Latitude:17.54454N, Longitude:78.46213E



Tree with Inflorescence



Leaves



Fruits

**Local Name** : Konda gogu, Butter cup tree, Silk Cotton tree

**Family** : Fabaceae

**Habit** : Deciduous tree with straight stem. 5-15 mts. Ht.

### Key Identification Characters :

- ❖ **Stem** : Smooth, deeply furrowed, ashy grey, red inside
- ❖ **Leaves** : Simple, 3-5 lobed; lobes with finely wavy margins and acute apex, 7.5-20 cm long petiole
- ❖ **Flowers** : They are most conspicuous part of the tree. They are large, growing upto about 10 cm, buttercup shaped and bright yellow. The stamens are orange.  
Flowering time: February to April
- ❖ **Fruits** : Fruit is capsule. Brown and oval shaped, made up of five segments. The capsule splits open to release the seeds which are embedded in the silky cotton present inside.
- ❖ **Fruiting time** : May to July.

**Economic Importance** : Bark, flowers and gum are used in traditional system of medicine. This silky cotton is said to induce sleep when stuffed into pillows





## *Cordia macleodii*

Latitude: 17.543641N, Longitude: 78.45699E



Leaves and Fruits

- Local name** : Pedda batava, Dahipalas,  
**Family** : Boraginaceae.  
**Habit** : Dry deciduous tree.

### Key identification characters :

- ❖ **Bark/Stem** : Bark shows microscopic characters like cork, cortex, medullary rays, sclerenchyma fibres, phloem, cambium and crystals, smooth, dark grey, branches clothed with white pubescence.
- ❖ **Leaves** : Alternate 12 cm by 10 cm upper surface, glabrous dark green. Lower surface, Faint green very finely tomentose. Shape orbicular ovate.
- ❖ **Flower** : Tree produces both bisexual and male flowers and the male flowers exhibit prominent stamens. Cymes in a terminal panicle. Calyx campanulate or tubular.
- ❖ **Fruit** : Oblong-ovoid; sharply beaked; 1.4 cm long; 0.7 cm wide.
- ❖ **Seed** : Pale brown, Stony, glabrous.

**Economical Importance** : Contains various bioactive compounds including Phenols, Terpenoids, Saponins, Volatile oils, Flavonoids, Glycosides etc. These bioactive compounds made this plant as a valuable potent herbal drug. This review presents the pharmacological property, phytochemical constituents, traditional uses and biological activities of the plant.





## *Couroupita guinensis*

Latitude:17.54634N, Longitude:78.45855E



**Local Name** : Cannon ball tree, Nagalingam.

**Family** : Lecythidaceae

**Habit** : Tall deciduous tree.

### Key Identification :

- ❖ **Stem** : Dark greenish brown.
- ❖ **Leaves** : Simple, crowded at the ends of the branches, obovate.
- ❖ **Flowers** : Clustered main trunk and branches, large, showy, fragrant, pinkish red in colour.
- ❖ **Fruit** : Drupes, large globose.

**Economic Importance :** Ornamental and sacred tree.





## *Cycas circinalis*

Latitude: 17.54623N, Longitude: 78.45809E



Tree

**Local name** : Cycas

**Family Name** : Cycadaceae

**Habit** : Medium sized, 3 - 5 metres tall, palm-like appearance

### Key Identification Characters :

- ❖ **Stem** : One or more, unbranched stems topped with a crown
- ❖ **Leaves** : Large, bright green, glossy leaves 150 - 250cm long.
- ❖ **Flowers** : Non-flowering plant. Instead of flowers, musky-scented cones grow at the tips of the tree trunk.
- ❖ **Fruits** : Narrowly ovoid-cylindrical, orange-brown.
- ❖ **Seed** : Seeds are found on the margins of the mega sporophylls.

**Economic Importance :** Resin and seeds are applied to sores and malignant ulcers. It is also used for ornamental purpose.





## Dalbergia latifolia

Latitude: 17.54979N, Longitude: 78.45737E



Leaves and Pods

**Common Name** : Jitrgu, Rosewood

**Family** : Leguminosae

**Habit** : Slow Growing, Large deciduous tree

### Key Identification Characters :

❖ **Leaves** : Pinnately compound leaves

❖ **Stem** : Grey bark that peels in long fibres

❖ **Flower** : Small white flowers

**Economic Importance :** The tree produces a hard, durable, heavy wood that, when properly cured, is durable and resistant to rot and insects. It is grown as a plantation wood in. Wood from the tree is used in premium furniture making and cabinetry, in guitar bodies, as furniture, exotic veneer, carvings, boats, skis and for reforestation.





## Dalbergia paniculata

Latitude:17.546343N, Longitude:78.45855E



**Local Name** : Soppera, Jalari in Telagu

**Family** : Leguminosae

**Habit** : Deciduous tree.

### Key Identification Characters :

- ❖ **Stem** : Dark grayish.
- ❖ **Leaves** : Pinnately compound, leaf late oblong.
- ❖ **Flowers** : Dull white, axillary panicles, showy, fragrant.
- ❖ **Fruit** : Pod, narrowed at both ends.

**Economic Importance :** Stem and branches used as fuel.





## Dalbergia sissoo

Latitude: 17.549011N, Longitude: 78.459028E



Leaves and Pods

**Common Name** : Shisham or Sissoo

**Family** : Leguminosae

**Habitat** : Fast growing large deciduous tree. It is primarily found growing along river banks below 900 m. elevation, but can range naturally up to 1,300 m. The temperature in its native range averages 10–40 °C. Soils range from pure sand and gravel to rich alluvium of river banks.

### Kye Identification characters :

- ❖ **Stem** : *D. Sissoo* is a medium to large deciduous tree with a light crown which reproduces by seeds and suckers. Trunks often crooked when grown in the open.
- ❖ **Leaves** : Leaves are leathery alternate pinnately compound and about 15 cm long Roots-primary root and secondary roots
- ❖ **Flower** : Flowers are whitish to pink, fragrant, nearly sessile, up to 1.5 cm (0.59 in) long and in dense clusters 5–10 cm (2.0–3.9 in) in length.
- ❖ **Seed** : Pods are oblong, flat, thin, strap-like 4–8 cm (1.6–3.1 in) long, 1 cm (0.39 in) wide and light brown. They contain 1–5 flat bean-shaped seeds 8–10 mm (0.31–0.39 in)

**Economic Importance :** Shisham is the best known economic timber species of the rosewood genus sold internationally, but it is also used as fuel wood and for shade and shelter. After teak, it is the most important cultivated timber tree. Sheesham is usually dried before being used in furniture manufacturing, a process commonly known as seasoning. Sheesham is among the finest cabinet and veneer timbers.





## *Delonix regia*

Latitude: 17.5493N, Longitude: 78.45816 E



Flowers



Fruits

**Local Name** : Gulmohar

**Family** : Fabaceae

### Key Identification Characters :

- ❖ **Leaves** : Compound, feathery appearance and characteristic bright green.
- ❖ **Flowers** : Flowers of *Delonix regia* are large, with four spreading scarlet or orange-red petals.
- ❖ **Stems** : A moderate sized tree with smooth dark gray bark,

**Economic Importance :** Garden and avenue plant, ornamental plant.





## *Dendrocalamus strictus*

Latitude: 17.54646N, Longitude: 78.45377E



Leaves



Clump

**Local Name :** Sadanam veduru, Solid bamboo.

**Family :** Poaceae.

**Habit :** It is tall green colored bamboo species which reaches upto height of 6-18m

### Key Identification Characters:

- ❖ **Stem :** Culms are green when young and brown on dying. Culms are straight. Branching occurs from the base of mid-culm.
- ❖ **Flowers :** Gregarious flowering cycle varies from 25-40 years; sporadic flowering is seen almost every year from November to February
- ❖ **Fruit :** February to April

**Economic Importance :** Material in paper mills. For Scaffolding, agriculture implements, basket, rafts.





## *Diospyros chloroxylon*

Latitude: 17.54655N, Longitude: 78.45855E



Leaves



Fruits



Barks

**Common Name :** Ullinda, Green Ebony Persimmon

**Family :** Ebenaceae

**Habit :** It is a small tree with bark dark brown, peeling off in small scales, branchlets wooly.

### Key Identification characters :

- ❖ **Leaves** : They are leathery and velvet hairy on both sides, leaves have 5-6mm long leaf stalk.
- ❖ **Flower** : The flowers are small and white. Flowering occurs in May-June months.
- ❖ **Fruit** : Fruiting happens in October November months. It is very palatable.

**Economic importance :** Leaf paste applied to treat surface burns, crushed leaf with Ankole (*Alangium salvifolium*) mixed with mud applied to relieve rheumatic pain in cattle.





## *Diospyros melanoxylon*

Latitude:17.543744N, Longitude:78.456996E



Leaves and Flowers

**Local Name** : Tuniki, beedi leaf.

**Family** : Ebenaceae

**Habit** : Terrestrial tropical medium sized tree, mainly in coastal area.

### Key identification :

- ❖ **Stem/Bark** : Pelican colored, bark peeling in rectangular scales.
- ❖ **Leaves** : Elliptic-oblong leaves can be opposite or alternate, leathery, velvety on both sides.
- ❖ **Flower** : Male flowers are mauve in colour. Female flowers are alsmauve, mostly extra opposite each other,
- ❖ **Fruit** : Olive green, yellow pulp, soft & sweet.
- ❖ **Seed** : Compressed, oblong, shiny, often banded.

**Economic importance :** Leaves wrapped around tobacco to create Indian beedi; Leaves contain valuable flavones; triterpenes of leaves possess antimicrobial properties; barks show anti-hyperglycemic activity.





## *Dolichodrone crista*

Latitude: 17.54612N, Longitude: 78.45884E



Fruits, Branches, Stem, Bark & Flowers

**Local Name** : Neeruddi, Wavy Trumpet flower.

**Family** : Bignoniaceae

**Habit** : Dry deciduous tree, an associate with Red Sanders .

### Key Identification Characters :

- ❖ **Stem** : Dark –brown, raogh.
- ❖ **Leaves** : 8-12 long, broadly elliptic.
- ❖ **Flowers** : Corymbs, white, tube cylindric.
- ❖ **Fruit** : Capsule, slightly compressed and woody.

**Economic Importance :** Good fuel wood and fodder, Small timber.





## *Emblica officinalis*

Latitude :17.547296N, Longitude :78.458617E



Leaves and Flowers

**Local Name** : Indian Gooseberry, Malacca tree, Amla or Amlaki.

**Family** : Phyllanthaceae.

**Habit** : Small to medium sized deciduous tree mainly known for its edible fruits.

### Key Identification Characters :

- ❖ **Stem/Bark** : Branchlets not glabrous or finely pubescent, long, usually deciduous.
- ❖ **Leaves** : Simple, Sub-sessile & closely set along branchlets, light green.
- ❖ **Flower** : Greenish yellow in colour.
- ❖ **Fruit** : Spherical, light green berry, contains high percentage of ascorbic acid.

**Economic importance :** Used in making inks, shampoos, hair oils; as mordant for fixing dyes in fabrics, ayurvedic & Unani medicine, tree is considered sacred among Hindus & worshipped on Amlaka-Ekadashi.





## *Eucalyptus tereticornis*

Latitude: 17.5446N, Longitude: 78.45855E



Leaves



Fruit



Bark



Bark

**Local Name**

: Nilagiri

**Family**

: Myrtaceae

**Habit**

: Tree, ht. 20-50m, trunk is usually straight up to half of its total height, branching starts above that (exotic)

### Key Identification characteristics :

- ❖ **Stem/ bark** : The bark is shed in irregular sheets, resulting in a smooth trunk surface coloured in patches of white, grey and blue.
- ❖ **Leaves** : Lanceolate.
- ❖ **Flower** : Bisexual, white, Inflorescence of 7 to 11 flowers.
- ❖ **Fruit** : Capsule, pedicellate, truncate-globular, disc ascending.
- ❖ **Seed** : Many.

**Economic Importance :** Pulpwood, heartwood is used for railway sleepers, eucalyptus oil is extracted from leaves, shelterbelt.





## *Filicium decipiens*

Latitude: 17.54373N, Longitude: 78.45742E



Flowers & Leaves

**Local Name** : Fern Tree, soapberry

**Family Name** : Sapindaceae

**Habit** : Small to medium-sized up to 20m in height, with a dense crown

### Key Identification character :

- ❖ **Stem** : Bark brownish, irregularly flaky; blaze pinkish
- ❖ **Leaves** : The upper surface of the leaves is shiny, while the undersides are not.
- ❖ **Flowers** : Tree is dioecious, male and female flowers on the same plant.
- ❖ **Fruits** : Are small, shiny and reddish-purple in colour, oval shaped
- ❖ **Seed** : Drupe, purple, shining, apiculate, 1.3 cm across, 1-seeded

**Economic Importance :** It is used for construction.





## *Ficus benghalensis*

Latitude: 17.548381N, Longitude: 78.460161E



Fruit



Leaves

**Local/Common Name** : Banyan tree, Marri.

**Family** : Moraceae

**Habit** : Large, semi evergreen tree with wide canopy and aerial roots

### Key Identification characters :

- ❖ **Stem/ bark** : Stem deeply fluted
- ❖ **Leaves** : The leaves are leathery, entire, ovate or elliptic, 20-40 cm long with prominent lateral veins.
- ❖ **Flower** : Male, female and gall flowers enclosed in an axillary, sessile, depressed globose figs; red when ripe. Flowering throughout the year.
- ❖ **Fruit** : Globose-ellipsoid achene, dark brown. Fruiting throughout the year.
- ❖ **Seed** : Many

**Economic importance :** The plant has Medicinal, timber, fibre and aesthetic value.





## *Ficus carica*

Latitude :17.54381N, Longitude :78.45811E



Leaves and Fruits

**Local name** : Atti chettu, Common fig

**Family** : Moraceae

### Key Identifying Characters :

- ❖ **Bark** : Ficus carica is a gynodioecious (functionally dioecious), deciduous tree or large shrub, growing to a height of 7–10 metres (23–33 ft), with smooth white bark.
- ❖ **Leaves** : Its fragrant leaves are 12–25 centimetres (4.7–9.8 in) long and 10–18 centimetres (3.9–7.1 in) across, and deeply lobed with three or five lobes.
- ❖ **Flowers** : The complex inflorescence consists of a hollow fleshy structure called the syconium, which is lined with numerous unisexual flowers. The flowers themselves are not visible from outside the syconium, as they bloom inside the infructescence.
- ❖ **Fruits** : False fruit or multiple fruit, in which the flowers and seeds are borne. The small orifice (ostiole) visible on the middle of the fruit is a narrow passage, which allows the specialized fig wasp Blastophaga psenes to enter the fruit and pollinate the flower, whereafter the fruit grows seeds.

**Economic Importance** : Phytochemicals, Folk Medicine.



## *Ficus racemosa*

Latitude: 17.546347 N, Longitude: 78.458015 E



Leaves



Fruits

**Local Name** : Medi, Cluster fig tree. Gular tree

**Family** : Moraceae.

**Habit** : Large sized evergreen tree.

### Key Identification characters :

- ❖ **Stem / bark** : Reddish brown or yellowish brown, smooth, coarsely flakey, latex milky
- ❖ **Leaves** : Simple, Alternate, stipules 12-18 mm long, lanceolate, base acute, margin entire, membranous, glabrus, pinnate, reticulate.
- ❖ **Flower** : unisexual, inflorescence syconia. lobed or lacinate-denticulate in the female flowers, entire in the male. Male flowers produced around the ostiole. Bracts at the based on the three, persistent in ripe fruits. Lateral bracts not present on the outside of the fig body.
- ❖ **Fruit** : Figs produced on special shoots from the trunk and main branches. Figs pedunculate, globular or depressed pyriform, about 30-35 x 35-40 mm. Orifice closed by interlocking and inflexed bracts.
- ❖ **Seed** : Very small Cotyledons orbicular, about 2 mm diam.

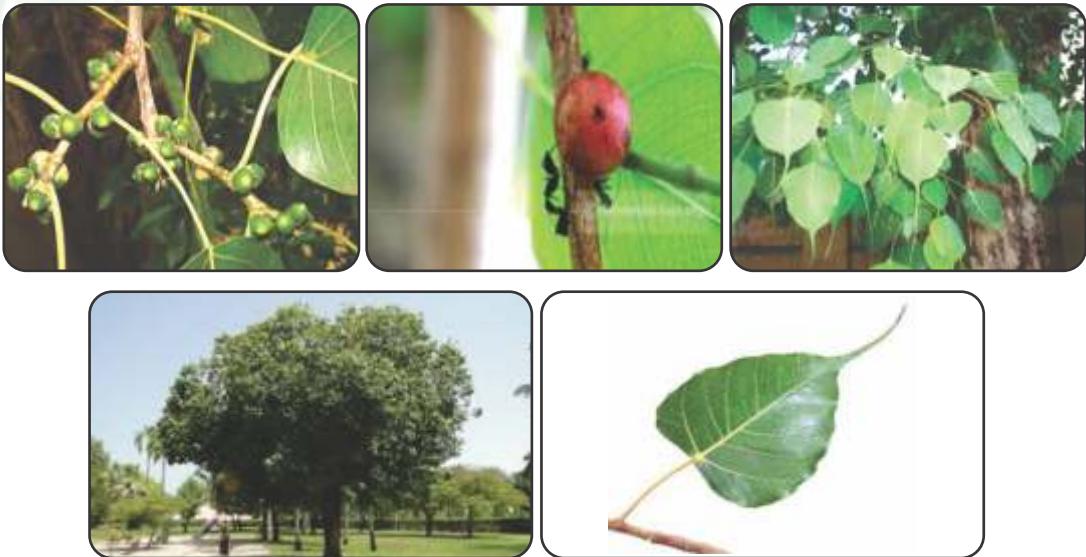
**Economic Importance :** Fruits are edible. It has medicinal value in bark for sensitive skin to insect bites. Use as fodder.





## *Ficus religiosa*

Latitude: N17.547362, Longitude: E 78.458571



Fruits, Branches, Stem, Bark & Flowers

<b>Local Name</b>	:	Raavi.
<b>Family</b>	:	Moraceae
<b>Habit</b>	:	Large deciduous tree, wide canopy.

### Key identification characteristics :

- ❖ **Stem/bark** : Bark grey, smooth
- ❖ **Leaves** : Simple, alternate, spiral; new leaves pink, lateral, ovate lanceolate, pinnate, slender,
- ❖ **Flower** : Flowers unisexual; inflorescence a syconia, sessile, axillary, in pairs, reddish;
- ❖ **Fruit** : Syconium 4-8 mm across, ripening pink, purple or black, achenes smooth.

**Economic importance :** The plant has Medicinal and aesthetic value.





## Gardenia latifolia

Latitude: 17.54397N, Longitude: 78.45813E



Leaves

<b>Common Name</b>	:	Ceylonboxwood, Peddabikki
<b>Family</b>	:	Pedda Bikki, Rubiaceae
<b>Habitat</b>	:	Common in open forest and rocky hills even placed as ornamental.

### Key Identification characters :

- ❖ **Bark** : Greenish gray, peeling and leaving smooth rounded depressions.
- ❖ **Leaf arrangement:** Oppositely arranged. Whorl leaf have very short stalk. Leaf-Oval, smooth, small hairy gland in axils of veins. 3inch broad, 6-8 inch long.
- ❖ **Flower** : Appears singly at the end of branch. Colour-Pale lemon yellow, orange while fading.

**Economic Importance :** The fleshy, purplish-coloured pulp of the fruit is eaten by forest dwellers. The seeds and roots are used for folk medicine as herbal remedies for stomach ailments and fevers. The leaves used for flexible moulds to bake chapattis in, with their raised veins leaving a beautiful impress on the soft dough, especially in forest fringe village. The wood is durable and used for making carved combs, turnery articles, light furniture, toys, mathematical instruments, wooden utensils, etc. Fruit-eating birds and herbivore animals consume the fruit in large quantity.





## *Gliricidia sepium*

1. Latitude: 17.54622N, Longitude: 78.45898E



Leaves



Leaves & Flowers

**Local Name** : Glyricidia, Quickstick

**Family Name** : Fabaceae

**Habit** : Medium-sized tree that grows 10 to 12 meters high.

### Key Identification characters :

- ❖ **Stem** : Smooth, and whitish gray to deep red-brown
- ❖ **Leaves** : It has composite leaves that can be 30 cm long.
- ❖ **Flowers** : Flowers have a bright pink color that is tinged with white
- ❖ **Fruits** : Fruit is a pod about 10 to 15 cm long. It is green when unripe and becomes yellow-brown when it reaches maturity.
- ❖ **Seed** : Seeds 4-10, yellow-brown to brown, nearly round.

**Economic Importance :** Timber and fuel wood





## *Gmelina arborea*

Latitude: 17.548761N, Longitude: 78.459521E



Leaves and Fruits



Leaves, Fruits and Flowers

**Local Name** : Gummadi teku, Gamhar.

**Family** : Verbenaceae (Verbena family).

**Habit** : Occurring naturally throughout greater part of India up to 1500 m. It is a fast growing tree, which though grows on different localities

### Key Identification Characters :

- ❖ **Stem** : The tree attains moderate to large height up to 30 m with girth of 1.2 to 4.5 m with a clear bole of 9-15 m.
- ❖ **Leaves** : small in size
- ❖ **Flowers** : Flowering takes place during February to April when the tree is more or less leafless
- ❖ **Fruit** : Fruiting starts from May onwards up to June.
- ❖ **Seed** : Distributed by birds.

**Economic Importance :** The root and bark of *Gmelina arborea* are used in medicine, astringent, furniture, fuel wood, etc.





## *Grewia asiatica*

Latitude: 17.54092N, Longitude: 78.45697E



Fruits and flowers



Leaves



Bark

**Local Name** : Falsa

**Family** : Tiliaceae (Phalsa family)

**Habit** : Phalsa is a shrub or small tree which can grow upto 12 feet hight.

### Key Identification Characters:

- ❖ **Stem** : Its bark is greyish-white or greyish-brown.
- ❖ **Leaves** : With serrated margins vary from broadly heart-shaped to obliquely ovate.
- ❖ **Flowers** : Yellow about 2 centimeters in length, and borne in densely crowded (rarely solitary) axillary cymes.
- ❖ **Fruit** : Rounded, small dark blue to almost black when ripe, sweetish and somewhat acid, with a fairly good flavor and each drupe contains a rather large seed.
- ❖ **Seed** : Large and brown in colour.

**Economic Importance :** The fruit is supposed to possess astringent, cooling and stomachic properties. A spirit is distilled and a pleasant sherbet is made from it. The Leaves are used as an application to pustular eruptions. The Santals prescribe the root-bark for rheumatism. In Sind an infusion of the bark is used as a demulcent.





## Grewia tiliifolia

Latitude : 17.54673N, Longitude : 78.457184E



Leaves ans Flowers

<b>Local Name</b>	: Tada chettu, Dhamani,
<b>Family</b>	: Tiliaceae (Phalsa family)
<b>Habit</b>	: Moderate sized tree

### Key Identification character :

- ❖ **Stem/Bark** : Bark dark brown or greyish brown, rough, vertically striated; Branchlets stellate-tomentose.
- ❖ **Leaves** : Leaves simple, alternate; stipules 7-10mm, lateral, auricled, broadly ovate or obliquely ovate to round, apex acute, margin double serrate or crenate-serrate.
- ❖ **Flower** : Bisexual, yellow, in axillary umbels; sepals 5, pubescent; petals 5, Yellow, half the length of sepals, entire or notched, densely tomentose outside; stamens many, free, on a granular torus; ovary superior. Flowering April.
- ❖ **Fruits** : A drupe, globose two-lobed, slightly hairy, red when ripe.
- ❖ **Seed** : Seeds 1-2, fruiting throughout the year.

**Economic importance :** Fruits edible, also eaten by sambar and spotted deer. Elephant feed on the whole plant. Bark fibre is used to wash hair and helps to cool the body.





## *Gymnosporia montana*

Latitude : 17.54868N, Longitude : 78.456566E



Leaves

<b>Local Name</b>	:	Mountain spike thorn; Danti.
<b>Family</b>	:	Celastraceae (Spike-thorn family)
<b>Habit</b>	:	In deciduous woodland, thickets, scrub and wooded grassland and also on riverbanks and swamp margins.

### Key Identification character :

- ❖ **Stem/Bark** : Small axillary branches, glabrous, without latex; branches unlined, reddish purple to reddish brown.
- ❖ **Leaves** : Leaves are grey, leathery, hairless, very variable, obovate, oblanceolate, blunt, entire or toothed, narrowing into the base.
- ❖ **Flower** : Flowers are small in axillary, dichotomous or fasciculate cymes on short branchlets. Flower-stalks are threadlike, bracts small, lance shaped, pointed. Sepals are broadly elliptic-oblong, ciliate. Petals are oblong. Ovary is hairless, circular; capsules are globose. Flowering October-December.
- ❖ **Fruits** : Small, sour, cool and sweet.
- ❖ **Seed** : Seeds 1-2, dark reddish-brown, glossy, with a fleshy smooth rose-pink aril obliquely covering.

**Economic importance :** It increase digestion power and purifies the blood. It checks the bile disorders, jaundice, burning sensation, swelling, wounds and piles.





## *Hardwickia binata*

Latitude : 17.54356N, Longitude : 78.45186E



Tree and Leaves

**Local Name**

: Narepi.

**Family**

: Caesalpiniaceae

**Habitat**

: A medium sized deciduous tree upto 15 m.

### Key Identification character :

- ❖ **Stem/Bark** : Drooping slender branches, Bark of saplings almost silvery white and smooth, gradually changing as the tree gets dark grey and rough with irregular vertical cracks.
- ❖ **Leaves** : Small, 2-6 cm long by 2-3 cm wide, alternate, pinnate, almost kidney shaped and greyish-green.
- ❖ **Flower** : Small, bisexual, pale yellowish-green in axillary and terminal lax panicled racemes, bracts minute, calyx tube scarcely any; petals 0; stamens 10, alternately longer and shorter; filaments filiform; anthers versatile; ovary half inferior, sessile, free, ovules 2.
- ❖ **Fruit** : A strap-shaped pod, compressed, pendulous, with clear longitudinal veins, fruiting September onwards.
- ❖ **Seed** : Seed at the apex where the pod dehisces, seed pendulous, obovate, compressed, 2furrowed.

**Economic importance :** Fodder, fuel, timber use as making charcoal, bridge construction, agricultural implements, carts and wheel work.





## *Holorrhena pubescens*

Latitude: N17.547372, Longitude: E 78.458581



Fruits, Branches, Stem, Bark & Flowers

**Local Name** : Kolamuka, Pala

**Family** : Apocynaceae

**Habit** : Deciduous small tree with milky latex.

### **Key Identification Characters :**

- ❖ **Stem** : Greenish, smooth, lenticellate, peels off in irregular flakes in old trees .
- ❖ **Leaves** : Simple, ovate/lanceolate, narrowed at apex.
- ❖ **Flowers** : Auxillary and terminal cymes, white, fragrant.
- ❖ **Fruit** : Follicles, cylindric.

**Economic Importance :** Bark used as traditional medicine.





## *Holoptelia integrifolia*

Latitude:17.54458N, Longitude:78.46201E



**Local Name** : Nemali nara, Indian elm

**Family** : Ulmaceae

**Habit** : Deciduous tree, 10-25 mt height

### Key Identification Characters :

- ❖ **Stem** : Grayish smooth, peels off in corky scales in older trees
- ❖ **Leaves** : Simple, Alternately arranged leaves are elliptic-ovate, smooth, with entire margins, and a pointed tip.
- ❖ **Flowers** : Flowers are small, greenish-yellow to brownish, pubescent, borne in short racemes or fascicles at the scars of fallen leaves.  
Flowering time: January – February.
- ❖ **Fruits** : Circular samara, 2.5 cm in diameter, with membranous, net-veined wings, and flat seed.  
Fruiting time: March - April.

**Economic Importance :** Bark is used in traditional system of medicine. Planted for shade.





## *Hymenodictyon excelsum*

Latitude:17.54453N, Longitude:78.45847E



Tree, Stem, Bark, Leaves and Inflorescence

**Local Name** : Raktha Kandela

**Family** : Rubiaceae

**Habit** : Dry deciduous tree, an associate with Red Sanders.

### Key Identification Characters :

- ❖ **Stem** : Dark –brown, rough.
- ❖ **Leaves** : 8-12 long, broadly elliptic.
- ❖ **Flowers** : Corymbs, white, tube cylindric.
- ❖ **Fruit** : Capsule, slightly compressed and woody.

**Economic Importance :** Good fuel wood and fodder, Bark is having medicinal value particularly for Bone fractures.





## Jacaranda mimosifolia

Latitude: 17.54436N, Longitude: 78.45551E



Flower and Leaves



Fruit

**Local name** : Jacaranda, blue jacaranda, black poui, neeligulmohar

**Family** : Bignoniaceae.

**Habit** : Moderate sized deciduous tree, ornamental tree

### Key identification

- ❖ **Stem/bark** : Bark thin and grey-brown, smooth when the tree is young eventually becomes finely scaly. Twigs slender and slightly zigzag, light reddish brown in colour.
- ❖ **Leaves** : Twice feathered, finely cut, Fern like
- ❖ **Flower** : Bell shaped, the flowers are up to 5 cm.long, grouped in 30 cm panicles. Flowering in spring and early summer
- ❖ **Fruit** : Flat woody capsule, seed pods, about 3-6 cm diameter with numerous seed
- ❖ **Seed** : Flat winged seed.

**Economic Importance :** Antimicrobial extract, used in bowl carving.





## *Lagerstroemia parviflora*

Latitude: 17.54679 N, Longitude: 78.45801 E



**Pods & Leaves**

**Local Name** : Chennangi, Dhaura in Hindi.

**Family** : Lythraceae

**Habit** : Medium Sized Deciduous Tree.

### **Key Identification character :**

- ❖ **Leaves** : Leaves are oblong to ovate-pointed, pale on the underside.
- ❖ **Flower** : Small white flowers are borne in 2-6 flowers clusters in leaf axils and at the end of branches.
- ❖ **Fruit** : Fruit is a leathery capsule surrounded below by a persistent sepal-cup, oblong,
- ❖ **Seed** : Seeds are winged

**Economic Importance :** The tree yields a useful timber called Ben-teak.





## Lagerstroemia speciosa

Latitude: 17.54353N, Longitude: 78.45186E



Flowers



Fruits

**Local Name** : Jarul, Pride of India. .

**Family** : Lythraceae

**Habit** : Small to medium-sized deciduous tree upto 20m tall

### Key identification :

- ❖ **Stem/bark** : Pale brown, smooth or flaky bark
- ❖ **Leaves** : Leaves large, smooth, stout stalks, tapering at both ends, oval to elliptic, 8–15 cm long and 3–7 cm broad, with an acute apex
- ❖ **Flower** : Flowers in erect panicles 20–40 cm long, each flower with six white to purple petals. Flowering once in a year at the peak summer season.
- ❖ **Fruit** : Fruit a large woody capsule on the persistent calyx. Fruit shape: oval; round.
- ❖ **Seed** : Seed with an apical wing.

**Economic Importance :** Consumed as vegetables, old leaves and mature fruit are used in traditional medicine; leaves are prescribed for abdominal pain.





## *Lannea coromandelica*

Latitude: 17.54678N, Longitude: 78.45782E



Leaf



Seed

**Local name** : Gumpena, Indian ash tree, Mohin.

**Family** : Anacardiaceae

**Habit** : Deciduous tree, growing up to 14 m tall. Medium to Large tree. Lowland and hill forests at elevations of 100 - 1,800 m.

### Key Identification characters :

- ❖ **Stem/bark** : Branchlets are minutely covered with starry hairs.
- ❖ **Leaves** : Alternately arranged leaves are pinnate, with a single terminal leaflet (pinnae) at the end laterals opposite, ovate, base rounded, densely velvet-hairy when young.
- ❖ **Flower** : Flowers are unisexual, greenish, the male in compound and female in simple racemes. Flowering: January– March.
- ❖ **Fruit** : Fruit is ovoid, compressed, in panicles, at the end. Fruit a drupe, 12 mm long, ovoid, red; stone hard.
- ❖ **Seed** : seed compressed.

### Economic Importance :

- Young leaves and sprouts - raw or cooked, eaten as a vegetable Eaten as a lalab (a vegetable salad served with sambal) with rice.
- The gum obtained from the trunk is often used in confectionery; the powdered bark is used as flavouring agent.
- The bark contains tannins. It is used for the impregnation of fishnets.
- A soluble resin, called 'Jingan gum' is obtained from the stems.





## *Leucaena leucocephala*

Latitude: 17.54651 N, Longitude: 78.45822 E



**Pods & Leaves**

**Local Name** : Wild tamarind, White Babool, Leucaena, Subabul

**Family** : Mimosaceae

**Habitat** : Wild Tamarind is a low scrubby tree of tropical and subtropical India.

### **Key Identification character :**

- ❖ **Leaves** : Leaves are like that of tamarind. The leaves are bipinnate with an elliptic convex extra floral nectary on the petiole
- ❖ **Flower** : The flowers occur in 12-21mm diameter heads, are cream-white, with ten free stamens per flower and hairy anthers.
- ❖ **Fruit** : The pods occur in crowded clusters of 5-20 per flower head and are 11-19cm long and 15-21mm wide pendulous, flattened and papery.

**Economic Importance :** The wood part of the Subabul tree is used for making pulp in the paper industry.





## *Limonia acidissima*

Latitude: 17.54397N, Longitude: 78.45717E



Leaf



Fruit

**Common Name :** Velaga, Curd Fruit, Elephant apple.

**Habit :** Medium Sized Tree. Deciduous trees upto 20 m high.

### Key Identification characters:

- ❖ **Bark :** Brown with vertical fissures and rectangular flakes. Spines sharp, straight, paler. Deeply cracked longitudinally; thorns straight, to 2.5 cm, axillary.
- ❖ **Leaves :** Imparipinnate, alternate, 1-3 in a cluster, stipulate, rachis 60-80 mm long, stout, glabrous.
- ❖ **Flower :** In axillary or terminal racemes, fragrant, cream. Flowering from January-March.
- ❖ **Fruit :** A berry, 5-7.6 cm across, globose, whitish-brown, rind hard and woody; seeds many.

**Economic Importance :** Fruit pulp made into juice. Acidic pulp mixed with jaggery and ghee is tasty and ceremonially eaten during the Ganesha festival. Fruit is woody and corky outside when mature, pulp edible and has medicinal value. Goats and elephants eat the leaves. The tree is found only in certain patches in the forest.





## *Madhuca indica*

Latitude: 17.54563N, Longitude: 78.45536E.



Flowers



Fruits

<b>Local name</b>	:	Indian Butter Tree, Mohwa, Ippa
<b>Family</b>	:	Sapotaceae
<b>Habit</b>	:	Madhuacalagifolia is an Indian tropical tree found largely in the central and north Indian plains and forests. It is adaptable to arid environments, being a prominent tree in tropical mixed deciduous forests in India in the states of West Bengal, Chhattisgarh, Jharkhand, Uttar Pradesh, Bihar, Maharashtra, Telangana, Madhya Pradesh, Kerala, Gujarat, Orissa and Tamil Nadu.

### Key Identification :

- ❖ **Stem/bark** : Hard, flaky woody, bark grey brown with a hint of yellow
- ❖ **Leaves** : Crowded at the end of the branches, 19 cm long, slender, narrowed at both ends.
- ❖ **Flower** : Flowers fleshy, succulent. The flowers are up to 5 cm long, grouped in 30cm panicles. Flowering in spring and early summer
- ❖ **Fruit** : Woody seeds, about 5 cm long, variable in shape.

**Economic Importance :** Treating skin diseases, nerve disorders, cough, burning sensation and diarrhoea and used as liquor and seeds used for essential oils.





## *Mangifera indica*

Latitude:17.54710N, Longitude:78.45778E



<b>Local Name</b>	:	Mango, Mamidi
<b>Family</b>	:	Anacardiaceae
<b>Habit</b>	:	Small to medium size tree , semi evergreen tree.

### Key Identification Characters :

- ❖ **Stem** : Grey-brown, rough, with shallow cracks.
- ❖ **Leaves** : Slender with long tapering apex.
- ❖ **Flowers** : Branch cluster, yellow green, terminal panicles.
- ❖ **Fruit** : Smooth skin ,waxy, drups, green yellow, single seeded.

**Economic Importance :** Ripe and unripe fruits are edible, wood used as various purpose.





## Manilkara zapota

Latitude :17.54769N, Longitude :78.45693E



Leaves and Fruits

<b>Local Name</b>	: Sapota, sapodilla, chikoo
<b>Family</b>	: Sapotaceae
<b>Habit</b>	: Evergreen, slow-growing tree. The trees can only survive in warm, typically tropical environments.

### Key Identification characters

- ❖ **Stem/bark** : Larger trees have red-brown bark with a flaky appearance. A milky latex, known as chicle, exudes from all tree parts .
- ❖ **Leaves** : The ornamental leaves are medium green and glossy. They are alternate, elliptic to ovate.
- ❖ **Flower** : White, bell-like, flowering may continue year round.
- ❖ **Fruit** : The fruit is a large berry. Inside, its flesh ranges from a pale yellow to an earthy brown color with a grainy texture akin to that of a well-ripened pear. The fruit has an exceptionally sweet, malty flavour.
- ❖ **Seed** : Shiny, black seeds.

**Economic importance :** The unripe fruit is hard to the touch and contains high amounts of saponin, which has astringent properties similar to tannin, drying out the mouth.





## *Melia dubia*

Latitude :17.546711N, Longitude :78.45669E



Tree

<b>Local Name</b>	:	Malabar Neem, Malabar vepa
<b>Family</b>	:	Meliaceae.
<b>Habitat</b>	:	Fast growing large deciduous trees, up to 20 m high, dark brown, rough,

### Key identification characters are :

- ❖ **Stem/Bark** : Bark dark brown, flakes large rectangular in shape.
- ❖ **Leaves** : Pinnate, imparipinnate, attenuate, round, slender, velvet-hairy when young.
- ❖ **Flower** : Flowers are greenish white, fragrant, silky puberulous on both surfaces.
- ❖ **Fruit** : Yellow when ripe.
- ❖ **Seed** : Drupe, ovoid or ellipsoid with longitudinal ridges, pulpy, yellowish seed.

**Economic importance :** The species is in high demand by the plywood industries. The wood is used as dual purpose which has a medicinal value and also used for fodder. It plays a vital role in multi farming of sheep, goat and dairy farming. It has been tested positive for plywood and recorded a pulp yield of 50%.





## *Michelia champaca*

Latitude:17.54713N, Longitude:78.45752E



Fruits, Branches, Stem, Bark & Flowers

**Local Name** : Chettu Sampenga.

**Family** : Magnoliaceae

**Habit** : Medium size, semi evergreen.

### Key Identification Characters :

- ❖ **Stem** : Ashy grey, shallowly fissured, prominent lenticels.
- ❖ **Leaves** : Tapering to a point at apex, edge wavy.
- ❖ **Flowers** : Solitary in leaf axils, segment of flower cup and petal similar, creamy white and deep yellow to orange, highly fragrant .
- ❖ **Fruit** : Cluster, waxy, grape like dark brown in mature.

**Economic Importance :** Bark, leaves, flowers and roots used for various medicinal uses and ornamental tree.





## *Millingtonia hortensis*

Latitude:17.54723N, Longitude:78.45785E



Tree, Stem, Bark, Leaves, Flowers and Fruit

**Local Name** : Akashneem. Akasa Malle.

**Family** : Bignoniaceae.

**Habit** : Medium size tree, deciduous tree.

### Key Identification :

- ❖ **Stem** : Thick, corky, yellowish ,grey, cracked and furrowed.
- ❖ **Leaves** : Smooth, Pointy, pinnately compound, elliptic ovate leaflets.
- ❖ **Flowers** : Axillary and terminal, panicals, white fragrant.
- ❖ **Fruit** : Capsule, elongated compressed with winged seed.

**Economic Importance :** Avenue and ornamental tree.





## *Mimusops elengi*

Latitude :17.548212N, Longitude :78.45793E



Leaves and Flowers

**Local name**

: Pogada.

**Family**

: Sapotaceae.

**Habitat**

: *Mimusops elengi* is a medium-sized evergreen tree found in tropical forests.

**Key Identification characters :**

- ❖ **Stem/bark** : Dark grey, cracked or fissured longitudinally, exudation white, young branches brown pubescent.
- ❖ **Leaves** : The leaves are thick, oblong, simple, and spirally arranged,
- ❖ **Flower** : The flowers are very small, creamy-white, star-shaped, and borne in small clusters on the leaf axils. The flowers open at twilight and gradually become very fragrant through the night,
- ❖ **Fruit** : The edible fruit is softly hairy becoming smooth, oval, bright red-orange when ripe, edible yellow flesh.
- ❖ **Seed** : Dark brown or black, oblong, ellipsoid, laterally compressed.

**Economic importance :** The bark, flowers, fruits, and seeds of Bakula are used in Ayurvedic medicine, astringent, cooling, anthelmintic, religious value also.





## *Mitragyna parvifolia(Roxb.)Korth*

Latitude: 17.547342 N, Longitude: 78.45665E



Leaves



Leaves



Fruits

**Local Name**

: Battaganamu

**Family**

: Rubiaceae

**Habit**

: Medium sized to large deciduous tree with rounded crown.  
It reaches heights of 50 feet with a branch spread over 15 feet.

### Key Identification Characters :

- ❖ **Stem/Bark** : The stem is erect and branched.
- ❖ **Leaves** : Leaves are simple dark green in color, smooth, rounded in shape, decussate and opposite in growth pattern. Petioles are 1-4cm.long. Peduncle supported by a pair of bract like oblong leaves.
- ❖ **Flower** : Flowers are in terminal heads, fragrant, creamy white - yellow and grow in bell-shaped clusters.
- ❖ **Fruit** : Fruits are capsules arranged in globose heads, 2-3mm. long, ribbed.
- ❖ **Seed** : Seeds are many, small and 10-ribbed.

### Economic Importance :

- a. Timber is used for making furniture.
- b. Leaf juice is used for jaundice, bark and roots are used for fever colic, gynecologic problem, muscular pain, cough and edema. Fruit juice is breast milk enhancer.





## *Morinda tinctoria (Roxb.)*

Latitude: 17.543638 N, Longitude: 78.45703E



Leaves



Fruits



Barks

**Local Name :** Togaru mogali

**Family :** Rubiaceae

**Habit :** Indian Mulberry is an ever green small tree growing to 5-10 m. tall.

### Key Identification Characters :

- ❖ **Stem/Bark :** Stem is short and crooked, with rough bark with deep longitudinal cuts.
- ❖ **Leaves :** Oppositely arranged leaves are 15-25 cm. long, oblong to lanceolate.
- ❖ **Flower :** Flowers occur in spherical heads, on a stalk 2-3 cm. long. Near the stalk of the flower head there is one small linear leaf. The flowers are tubular, white, scented about 2 cm. long, 3-7 in number. Stamens are many as petals.
- ❖ **Fruit :** The fruit is a green syncarp, 2-2.5 cm. in diameter.

**Economic Importance :** The plant is extensively cultivated in India in order to make the morindone dye to sold under the trade name "Suranji". Morindone is used for dying for cotton, silk and wool in shades of red, chocolate or purple. The colouring matter is found principally in the root bark and is collected when the plants reach 3-4 years age.





## *Moringa oleifera*

Latitude: 17.54409 N, Longitude: 78.4587E.



Flowers and Pods



Leaves

**Local Name** : Munaga, Drumstick tree, Horse radish tree.

**Family** : Moringaceae

**Habit** : Moringa is a fast-growing, deciduous tree that can reach height of 10-12m and trunk diameter are 45 cm.

### Key Identification Characters :

- ❖ **Stem/Bark** : The bark has whitish grey colour and is surrounded by thick cork. Young shoots have purplish or green-white, hairy bark.
- ❖ **Leaves** : The tree has an open crown of drooping, fragile branches and the leaves build up feathery foliage of tri-pinnate leaves.
- ❖ **Flower** : The flowers are fragrant and asexual, surrounded by five yellowish white petals, flowering only occurs once a year between April and June
- ❖ **Fruits** : The fruit is hanging, three sided brown capsule of 20-40 cm. size which holds dark brown , globular seeds with a diameter around 1 cm.
- ❖ **Seed** : The seeds have three whitish papery wings and are dispersed by wind and water.

### Economic Importance :

- a. The bark, sap, roots, leaves, seeds and flowers are used in traditional medicine.
- b. Moringa leaf powder is effective as soap for hand washing as it has anti-septic and detergent properties.





## *Muntingia calabura*

Latitude: 17.54833N, Longitude: 78.45756E



Leaves



Flowers and Fruits

**Local/Common Name :** Singapore cherry, Jamaica cherry, cotton candy berry

**Family :** Muntingiaceae

**Habit :** Shrub or small tree

### Key Identification characters :

- ❖ **Stem/ bark** : Bark Thin grey bark with fine vertical fissures,
- ❖ **Leaves** : Alternate, distichous, oblong or lanceolate, 4–15 cm long and 1–6 cm wide, with toothed margin and covered in short hairs.
- ❖ **Flower** : Small (up to 3 cm wide), solitary or in inflorescences of 2-3 flowers; with 5 lanceolate sepals, hairy; 5 obovate white petals; many stamens with yellow anthers and a smooth ovoid ovary
- ❖ **Fruit** : Edible berry, red at maturity, about 1.5 cm wide
- ❖ **Seed** : Hundreds, tiny.

**Economic importance :** The plant is used as a source of timber and fuel. Its soft wood used for rural construction, while the bark is fibrous and used for making ropes.





## *Murraya koenigii*

Latitude:17.4119 N, Longitudes: 78.5816 E



Leaves & Fruits

**Local Name** : Curry leaf, Karivepaaku.

**Family** : Rutaceae.

**Habit** : It is a tropical to sub-tropical tree.

### Key Identification characters :

- ❖ **Stem/Bark** : It is a small tree, growing 4–6 m (13–20 feet) tall with a trunk up to 40cm. diameter.
- ❖ **Leaves** : The aromatic leaves are pinnate with 11–21 leaflets, each leaflet 2–4 cm. long and broad.
- ❖ **Flowers** : The plant produces small white flowers which can self-pollinate.
- ❖ **Fruit** : Small shiny-black berries.
- ❖ **Seed** : Single, large viable seed. Though the berry pulp is edible with a sweet but medicinal flavour in general, neither the pulp nor seed is used for culinary purposes.

**Economical importance :** The leaves are valued in seasoning and cooking. Leaves also have anti-diabetic properties.





## *Nyctanthes arbor-tristis*

Latitude:17.54678N, Longitude:78.45790E



**Local Name** : Parijatham

**Family** : Oleaceae

**Habit** : Small tree with quadrangular branches.

### Key Identification Character :

- ❖ **Stem** : Bark greyish brown, smooth, peeling in linear threads.
- ❖ **Leaves** : Simple elliptic ovate, rough textured.
- ❖ **Flowers** : Axillary terminal, trichotomous cymes, white with orange tube, fragrant.
- ❖ **Fruit** : Capsule.

**Economic Importance :** Use as sacred purpose and gardening.





## *Parkia biglandulosa*

Latitude:17.54741N, Longitude:78.45685E



Tree, Stem, Bark, Leaf-lets, Flowers and Fruit

**Local Name** : Tennis ball tree.

**Family** : Leguminosae

**Habit** : Large deciduous tree.

### Key Identification Characters :

- ❖ **Stem** : Greyish-brown, peeling in small rectangular scles.
- ❖ **Leaves** : Pinnately compound, glands above the base.
- ❖ **Flowers** : Pale yellow, globose heads.
- ❖ **Fruit** : Pods.

**Economic Importance :** Use as Road sides plantation, garden





## Peltophorum ferrugineum

Latitude: 17.54671N, Longitude: 78.45663E.



Flowers and Leaves



Pods

**Local Name** : Pacha sunkesula, Copper Pod Tree, PivlaGulmohar, PeeliGulmohur.

**Family** : Fabaceae.

**Habit** : It is a deciduous tree growing to 15–25 m (rarely up to 50 m) tall, with a trunk diameter of up to 1 m.

### Key Identification Characters:

- ❖ **Stem/Bark** : Silvery grey, studded with raised dots.
- ❖ **Leaves** : The leaves are bipinnate, 30–60 cm long, with 16-20 pinnae, each pinna with 20-40 oval leaflets 8–25 mm long and 4–10 mm broad.
- ❖ **Flower** : The flowers are yellow, 2.5–4 cm diameter, produced in large compound raceme up to 20 cm long.
- ❖ **Fruit** : The fruit is a pod 5–10 cm long and 2.5 cm broad, red at first, ripening black, and containing one to four seeds.
- ❖ **Seed** : Hard, yellowish seeds.

**Economic Importance** : Used as decorating flower in Telangana State's Batukamma festival. The trees have been planted alternately in India as a common scheme for avenue trees in India alternately with *Delonix regia* (Poinciana) to give a striking yellow and red effect in summer, as has been done on Hughes road in Mumbai.





## *Pithecellobium dulce*

Latitude:17.54348N, Longitude:78.46195E



Leaves and Fruits

**Local Name** : Seema Chinta

**Family** : Mimosaceae

**Habit** : A large medium sized evergreen tree armed with straight stipulary thorns

### Key Identification Characters :

- ❖ **Stem** : Grey with white lenticels which can run both horizontally and vertically
- ❖ **Leaves** : Bipinnate
- ❖ **Flowers** : White, capitate, bisexual, pentamerous.
- ❖ **Fruits** : Legumes, linear, turgid, twisted, glabrous and smooth, embedded in a firm pulp

**Economic Importance** : The leaves can relieve convulsions, for indigestion, bark for diarrhoea and dysentery. Fruit fall for to stop blood flow in case of haemoptysis.





## Plumeria alba

Latitude: 17.54966N, Longitude: 78.45773E.



Leaves



Flowers and Leaves

- Local Name** : Safed champa, Khaairchampa, Temple tree, Lily of the coast, Bogagulanchi.
- Family** : Apocynaceae
- Habit** : A small near evergreen frangipani bearing cluster of fragment flowers with narrow pure white petals and a deep yellow throat in the centre.

### Key Identification Characters :

- ❖ **Stem/Bark** : Brown or Grey, with thin outer skin. Conspicuously warty from the scars of fallen branches. A milky sap wells up from the cuts of the bark
- ❖ **Leaves** : Up to 35 cm long, dark green with soft shine on top and paler without gloss below. The edges of the leaf have a tendency to roll under.
- ❖ **Flower** : In large, terminal cluster from a long common stalk.
- ❖ **Fruit** : A pair of pods joined in the centre, up to 23 cm long, dark shiny green on the outside, studded with raised brown dots.

**Economic Importance :** Used in ornamental purpose. There is a myth that the blunt ended brunches are introduced into uterus to procure abortion.





## *Polyalthia longifolia*

Latitude-17.54826N, Longitude-78.45742E



Flowers



Fruits

**Local name** : False ashoka,

**Family** : Annonaceae

### Key Identification Characters :

- ❖ **Leaves** : Leaves lanceolate, tapering to a fine point, margins undulate, glossy above.
- ❖ **Flower** : Usually pendant.
- ❖ **Stem** : Evergreen tree, upto 13 m tall. Young branches pilose, becoming glabrous.

**Economic Importance :** The leaves are used for ornamental decoration during festivals. The tree is a main attraction in gardens throughout India. The tree can be cut into various shapes and maintained in required sizes. The tree is mostly used for manufacturing small articles such as pencils, boxes, matchsticks etc.





## Pongamia pinnata

Latitude: 17.5467N, Longitude: 78.45816E



Leaves



Pods



Flowers

**Local Name** : Kanuga, Karanj

**Family** : Fabaceae

**Habit** : Legume tree, grows about 15-25m in height, Canopy large spreading wide, Deciduous for short period

### Key Identification Characters :

- ❖ **Stem/Bark** : Grey brown bark, Smooth or vertically fissured
- ❖ **Leaves** : Imparipinnate leaves, alternate and short stalked, glossy deep green with prominent veins underneath
- ❖ **Flower** : Flower small cluster of white, purple and pink blossoming throughout the year, Racemose inflorescence
- ❖ **Fruit** : Pod
- ❖ **Seed** : Indehiscent brown seed pods, seed 1.5-2.5cm long with brittle oily coat and are unpalatable to herbivore

**Economic Importance :** Bark used to make twine or rope, Biodiesel production, Used for controlling soil erosion and binding sand dunes.





## *Prosopis cineraria (L.) Druce*

Latitude: 17.54604N, Longitude: 78.45412E



Tree



Leaves



Pods

**Local Name** : Jammi, Shami

**Family** : Fabaceae

**Habit** : Small tree ranging in height from 3-5m

### Key Identification Characters :

- ❖ **Stem/Bark** : Ashy, deeply fissured.
- ❖ **Leaves** : Leaves bipinnate, 7-14 leaflets on each of 1-3 pinnae
- ❖ **Flower** : Flowers small and creamy yellow
- ❖ **Fruit** : Pod
- ❖ **Seed** : Seed in pods

**Economic Importance :** Shelter belt trees, combat desertification and stabilization of sand dunes, indicative of deep water table.





## *Prosopis juliflora (Sw.) DC.*

Latitude: 17.547311N, Longitude: 78.459192E



Leaves



Bark



**Local Name** : Thumma, Mesquite, Sarkaribabhu, Vilayati Keekar

**Family** : Fabaceae

**Habit** : Tree grows up to height of 12m and has a trunk with a dia. up to 1.2m

### Key Identification Characters :

- ❖ **Stem/Bark** : Thin brown color bark
- ❖ **Leaves** : Deciduous, bi pinnate, light green, compounded with 12-20 leaflets
- ❖ **Flower** : Flowers 5-10cm long, green yellow, cylindrical spikes, occurs in cluster of 2-5 at the end of branches
- ❖ **Fruit** : Fruit a non-dehiscent pod, straight, linear, falcate to annular, with a coraceous mesocarp in 1 segment or divided into several segments.
- ❖ **Seed** : Seeds compressed, ovoid, hard, darkbrown with mucilaginous endosperm surrounding the embryo; cotyledons flat, rounded, epigenous whegerminating

**Economic Importance :** Used as forage, wood and environmental management, Presence of flavanol mesquitol in its hardwood.





## *Pterocarpus marsupium*

Latitude: 17.547681N, Longitude: 78.458841E



Flowers



Pods



Leaves

**Local Name :** Yegisa, Vijayasar.

**Family :** Leguminosae-Faboideae

**Habit :** Slow growing, large deciduous tree.

### **Key Identification Characters :**

- ❖ **Stem/Bark :** Bark 10-15 mm, surface are or greyish-black, rough, deeply vertically cracked
- ❖ **Leaves :** Leaves are compound, alternate, stipules small, lateral, falling off, slender, hairless.
- ❖ **Flower :** Flower is bisexual, yellow at branch end and protruding.
- ❖ **Fruit :** Fruit is a pod, 2.5- 5 cm across round –kidney-shaped, broadly winged.
- ❖ **Seed :** Seed one, somewhat kidney-shaped

**Economic Importance :** Timber is used in construction, furniture. Heartwood, leaves, flowers have medicinal properties useful in diabetes treatment.





## *Pterocarpus santalinus*

Latitude: N 17.547681N, Longitude: E78.458841E



Barks



Pods



Leaves

**Local Name** : Yerrachandanam, Red sanders

**Family** : Leguminosae-Papilionoideae

**Habit** : Small to moderate sized deciduous tree with an erect clean bole and dense rounded crown

### Key Identification Characters :

- ❖ **Stem/Bark** : The blackish brown bark is fissured and resembles crocodile skin. The inner bark, when injured or cut oozes red coloured santolin dye.
- ❖ **Leaves** : The leaves are alternate, 3-9 cm long, trifoliate with three leaflets
- ❖ **Flower** : The flowers of the species are yellow, densely arranged in simple or sparingly branched racemes.
- ❖ **Fruit** : The fruit is a pod 6-9 cm long containing one or two seeds.
- ❖ **Seed** : Leaf like shape, variable brown

**Economic Importance :** Timber used for manufacture of special musical instruments, carving into idols, turnery and toys.





## *Samanea saman*

Latitude: 17.54317N, Longitude: 78.45149E



Flower



Leaves

**Local Name**

: Nidra Ganneru, Rain Tree, Saman, Monkey pod

**Family**

: Fabaceae

**Habit**

: It is frequently planted in groups or as an avenue. It often reaches a height of 27 m. and the strong, spreading branches may be nearly as long.

**Key Identification Characters :**

- ❖ **Stem/Bark** : Stems erect or ascending, Stems solid, Stems or young twigs sparsely to densely hairy
- ❖ **Leaves** : Twice pinnate and each pinna, bears three to seven pairs of leaflets. These are oval and have no stalks, becoming larger and more curved towards the end.
- ❖ **Flower** : The flowers appear like round, silken tufts, up to twenty in number. Each has a tube-shaped calyx and a tiny, yellow-lobed, crimson trumpet; bunches of long stamens, half pink and half white, protrude from each.
- ❖ **Fruit** : The fruit is a fleshy pod, sweet to the taste.
- ❖ **Seed** : Seeds embedded in spongy pulp, Seed surface smooth, olive, brown, or black in colour

**Economic Importance :** The pods contain a sweet edible pulp that supplies nutritious food for animals. Children also chew on the pods, which have a licorice like flavor. This tree is commonly used as a shade tree.





## *Santalum album*

Latitude: 17.548511 N, Longitude: 78.460061 E



**Pods & Leaves**

- Local Name** : Srigandam, Sandalwood, Indian sandalwood, Fragrant sandalwood, White Sandalwood.
- Family** : Santalaceae
- Habit** : Sandalwood is an evergreen tree, growing up to 4-9 m tall. The trees have a long life and may live up to one hundred years of age.

### **Key Identification character :**

- ❖ **Stem/Bark** : The reddish or brown bark can be almost black and is smooth in young trees becoming cracked with a red reveal. The heart wood is pale green to white as the common name indicates.
- ❖ **Leaves** : The oval leaves are thin, oppositely arranged. Smooth surface is shiny and bright green with a glaucous pale underside.
- ❖ **Fruit** : Fruit is produced after three years, viable seeds after five.

**Economic Importance** : Sandalwood oil was used traditionally to treat skin diseases, acne, dysentery, gonorrhea, and a number of other conditions. sandalwood oil is considered an excellent sedating agent.





## *Sapindus emarginatus*

Latitude:17.54697N, Longitude:78.45647E



Leaves & Fruits

<b>Common Name</b>	: Soap berry, soapnut.
<b>Family</b>	: Sapindaceae
<b>Habit</b>	: <i>Sapindus trifoliatus</i> is an evergreen tree with a dense, broad crown; it can grow up to 25 metres tall. Height 20.00 mm

### Key Identification characters :

- ❖ **Stem/bark** : Branchlets are minutely covered with starry hairs.
- ❖ **Leaves** : Leaves are compound. Leaflets are nearly stalkless, broad, elliptic-lanceshapedand smooth, terminal pair longest.
- ❖ **Flower** : Greenish-white, in terminal, slightly velvety panicles. Flower stalks are 3 mm long, velvety. Flowering: November-January.
- ❖ **Fruit** : Fruit is 2-3 lobed, velvety when young, hard and smooth when mature

**Economic Importance :** The fruit is rich in saponins. It is used as a substitute for soap in washing clothes, particularly delicate and natural fabrics. It is also used for removing the tarnish from, and restoring, silver objects. The wood is hard. It is used for making various small articles. The root, bark and fruit are used in native medicine.





## Saraca asoca

Latitude: 17.54826N, Longitude: 78.45742E



Flower



Pods

**Local Name**

: Asoca.

**Family**

: Caesalpiniaceae

**Habitat**

: It is grown all over India. It occurs up to the altitude 600 meters. It is also cultivated in many gardens because of its decorative orange red flowers.

**Habit**

: Trees or large shrub.

**Key Identification Characters :**

- ❖ **Leaf** : Leaves abruptly pinnate, with few pairs of leaflets.
- ❖ **Inflorescence** : Corymbose panicles axillary or terminal.
- ❖ **Flowers** : Yellowish to deep red, with short pedicels. Calyx tubular, lobes 4, Petals absent.
- ❖ **Fruit** : Legume compressed, oblong, slightly curved and oblique, leathery to rather woody

**Economic Importance :** Saraca asoca has been traditionally used in Indian system medicine for treatment of uterine, genital ailments and other reproductive disorders in women, fever, inflammation, pain, diabetes and haemorrhagic dysentery. All parts of the tree used in medicine.





## *Semecarpus anacardium*

Latitude:17.54644N, Longitude:78.45688E



**Local name** : Nalla Jeedi, marking Nut

**Family** : Anacardiaceae

**Habit** : Medium size deciduous tree 6-12 mt height

### Key Identification Characters :

- ❖ **Stem** : Grayish brown, peeling off in thin irregular flakes.
- ❖ **Leaves** : Simple, obovate or oblong – elliptic, dark green above pale beneath, leathery in texture.
- ❖ **Flowers** : Terminal large panicles, pale yellow with spreading stamens.  
Flowering time: August – September.
- ❖ **Fruits** : Drupes. Obliquely ovoid – orbicular, smooth, shining, black when ripe with fleshy orange colored receptacle.  
Fruiting time: November – January.

**Economic Importance :** Ripened receptacles are edible. Fruit contains corrosive juice which is used as marking ink. Various parts are used in traditional systems of medicine.





## *Simarouba glauca*

Latitude: 17.54543N, Longitude: 78.45784E



Leaves



Flowers

<b>Local name</b>	: Simarouba, Paradise-tree, dysentery-bark, and bitterwood
<b>Family</b>	: Simaroubaceae
<b>Habit</b>	: The tree is well suited for warm, humid, tropical regions. It is suited for temperature range of 10 to 40 °C.

### Key Identification characters :

- ❖ **Stem/ bark** : Grey colour.
- ❖ **Leaves** : They have compound leaves, with between 1 and 12 pairs of alternate pinnate leaflets
- ❖ **Flower** : It bears yellow flowers and oval elongated purple colored fleshy fruits.
- ❖ **Fruit** : The thick, white juicy flesh is slightly astringent, sweetish and insipid the fruit closely resembles an olive. The fruit is eaten commonly but is of inferior quality.
- ❖ **Seed** : Best sown as soon as it is ripe, it has a viability of only a few months.

**Economic Importance :** The plant is often used for medicinal purposes. The leaves and bark have a long history of medicinal use in the tropics, particularly in the treatment of malaria, fevers and dysentery; as an astringent to stop bleeding; and as a tonic. They are also used as a digestion and to treat parasites both within and on the body.





## *Soymida febrifuga*

Latitude: 17.54366 N, Longitude: 178.45202E



**Inflorescence**

**Fruits**

**Local name** : Somi, Indian Redwood, Bastard cedar, Raktarohan,

**Family** : Meliaceae (Neem family)

**Habit** : Indian Redwood is a huge deciduous tree.

### Key Identification Characters :

- ❖ **Stem/ bark** : Tough bark exfoliating in plates or scales.
- ❖ **Leaves** : The compound leaves are crowded at the ends of branches. Leaflets are 3 to 6, elliptic or oblong, entire.
- ❖ **Flower** : The greenish white flowers are borne in large clusters.
- ❖ **Fruit** : Fruit is a woody capsule. Fruits of the Indian-redwood are very common ingredients in imported potpourri. Whole fruits are sold as “wild lily flowers,” the columella as (central interior columns) are sold as “lily pods,” while segments of the pericarp, or valves, are sold as “lily petals.”

**Economic Importance :** Bark used in the treatment of diarrhoea, dysentery and fever and also as a general tonic; decoction used in gargles, vaginal infections, rheumatism swellings and as enemata.





## *Spathodea campanulata*

Latitude: 17.54668N, Longitude: 78.45646E



Flower

**Local name** : African tuliptree, fountain tree, pichkari or Nandi flame.

**Family** : Bignoniaceae

**Habit** : Ornamental tree

### Key Identification characters :

- ❖ **Stem/bark** : The tree has a stout, tapering, somewhat buttressed trunk covered in warty light gray bark. The lateral branches are short and thick.
- ❖ **Leaves** : The 1-2 ft long opposite leaves, which emerge a bronzy color, are massed at the ends of the branches. They are composed of 5-19 deeply veined oval leaflets.
- ❖ **Flower** : Reddish-orange or crimson, campanulate flowers. The tree flowers in spurts all through the growing season, but peak bloom is usually in the spring.
- ❖ **Fruit** : They are followed by 5-10 in green brown finger like pods pointing upwards and outwards above the foliage. Each of these pods contains about 500 tissue papery seeds.
- ❖ **Seed** : Papery seeds

**Economic Importance :** Bark and leaves have anti-bacterial properties, used in traditional medicine to treat wounds and burns. Leaves reported to have anti-malarial action. Stem-bark decoctions exhibit blood sugar lowering action in mice.





## *Sterculia urens*

Latitude: 17.54198 N, Longitude: 78.44949 E



Tree



Fruits

**Local Names** : Tapsi, Kovela gum.

**Family** : Sterculiaceae

### Key identification Characteristics :

- ❖ **Leaves** : Long petioles, crowded at the ends of branches, tomentose beneath, glabrous above.
- ❖ **Flowers** : Greenish yellow, small, panicles, coriaceous, red covered with stinging hairs.
- ❖ **Fruit** : Consists of 5 sessile, radiating, ovate-lanceolate, coriaceous carpels, red when ripe.
- ❖ **Seeds** : Oblong, dark chestnut-brown.
- ❖ **Stem** : *Sterculia urens* is a medium-sized, deciduous tree to 15 m in height, crooked, bark thick, greyish-white or reddish, smooth.

**Economic Importance :** Fiber. Gum or resin as food, foodstuff. Timber for construction etc.





## *Strychnos nuxvomica*

Latitude: 17.54402N, Longitude: 78.45397E



Fruits and leaves



Seeds

**Local Name** : Mushni, Poison nut/Kuchila

**Family** : Strychnaceae/ loganiaceae

**Habit** : Deciduous tree.

### Key Identification Characters :

- ❖ **Stem/Bark** : Dark grey or yellowish grey coloured bark
- ❖ **Leaves** : Leaves are simple, opposite, orbicular to ovate 6-12 cm long and 6-10 cm broad, coriaceous, glabrous and 5-nerved
- ❖ **Flowers** : White or greenish white coloured and fragrant, calyx 5 lobed, pubescent, small, corolla tube is cylindrical, greenish white inside and slightly hairy near the base, stamens 5 in number and have short filament
- ❖ **Fruit** : Indehiscent berry, 5-6 cm in diameter, thick shelled, orange red when ripe with fleshy pulp
- ❖ **Seed** : Discoid, compressed coin like, concave on one side and convex on the other side and covered with fine grey silky hairs.

**Economic Importance :** Major source of highly poisonous alkaloids strychnine and brucine.

Used to kill feral animals, it is used in herbal medicines for treating cancer and heart diseases





## *Strychnos potatorum*

Latitude 17.54594N, Longitude: 78.45462E



Leaves and Flowers



Seeds

**Local Name** : Chilla, Clearing nut tree/Nirmali

**Family** : Strychnaceae/ Loganiaceae

**Habit** : Deciduous tree

### Key Identification Characters :

- ❖ **Stem/Bark** : Cracked and scaly black.
- ❖ **Leaves** : Leaves are simple, opposite, elliptic, acute, glabrous and shining.
- ❖ **Flowers** : White fragrant, axillary cymes.
- ❖ **Fruit** : Ovoid or globose, glabrous berries, black when ripe.
- ❖ **Seed** : One or two, yellow, circular, not much compressed.

### Economic Importance :

The leaves are used to treat watering and aching eyes. A decoction is taken to treat epilepsy.

The seeds are used for the treatment of liver, kidneys and stomach diseases. The seeds are also used to clean impurities in the water.





## *Syzygium cumini*

Latitude: 17.547237 N, Longitude: 78.458748E



Fruits



Leaves & Fruits

**Local Name** : Jamun, Neredu.

**Family** : Myrtaceae

### Key Identification Characteristics :

- ❖ **Leaves** : Leaves are entire with narrow, 7-18 cm long, 3-9 cm broad, opposite, thick, coriaceous, glabrous, upper surface dark green.
- ❖ **Flower** : Flowers white or pink, many, small, about 7 mm long, slightly fragrant, nearly stalkless.
- ❖ **Fruits** : Elliptical berries, numerous, crowded in clusters, almost stalkless along twigs at the back of leaves; purple-black in colour.
- ❖ **Stem** : Straight to crooked, short, stout trunk, crown is irregular.

**Economic Importance :** Used for construction, boat building, commercial tea and chest plywood, agricultural implements, tool handles, cart wheels, well curbs and troughs, sleepers, furniture, diabetic medicine etc.





## *Tamarindus indica*

Latitude: 17.54628N, Longitude: 78.45615E



Leaves and Flowers



Fruits & Seeds

<b>Local Name</b>	: Chinta, Tamarind, Imli
<b>Family</b>	: Fabaceae
<b>Habit</b>	: The tamarind is a long-lived, medium-growth tree. The crown has an irregular, vase-shaped outline of dense foliage. The tree grows well in full sun. It prefers clay, loam, sandy, and acidic soil types, with a high resistance to drought and aerosol salt.

### Key Identification Characters :

- ❖ **Stem/Bark** : The branches droop from a single, central trunk as the tree matures,
- ❖ **Leaves** : The evergreen leaves are alternately arranged and pinnately lobed. The leaflets are bright green, elliptic-ovular, pinnately veined.
- ❖ **Flower** : The tamarind flowers are red and yellow elongated flowers. Buds are pink as the four sepals are pink and are lost when the flower blooms.
- ❖ **Fruit** : The fruit is an indehiscent legume, sometimes called a pod, with a hard, brown shell. The fruit has a fleshy, juicy, acidulous pulp.
- ❖ **Seed** : The seeds are somewhat flattened, and a glossy brown.

**Economic Importance :** Tamarind lumber is used to make furniture, carvings. The ripened fruit is used in desserts, as a jam, blended into juices, or sweetened drinks, sorbets, ice creams and other snacks. In most parts of India, tamarind extract is used to flavor foods, in curries and traditional dishes. The oil is made from kernel of tamarind seeds.





## *Tectona grandis*

Latitude: 17.54918N, Longitude: 78.45826E



Leaves

**Local name** : Teak, Segun.

**Family** : Lamiaceae

### Key Identification Characters :

- ❖ **Stem/bark** : Bark 10-20 mm thick, yellowish-brown, rough, shallowly vertically fissured, fibrous; blaze pale yellowish concentrically lamellate;
- ❖ **Leaves** : Leaves simple, opposite, stipulate; petiole 10-50 mm long, stout, tomentose, margin entire, wavy, coriaceous, prominent.
- ❖ **Flower** : Flowers bisexual, white, cymose panicles, stigma linearly bifid.
- ❖ **Fruit** : Drupe, globose, brown, densely floccose hairy, covered by the inflated calyx, epicarp spongy, endocarp stony.

**Economic Importance :** Timber used in construction of building, boat building, furniture making, etc.





## *Terminalia arjuna*

Latitude: 17.54092 N, Longitude: 78.45697 E



Leaves & Fruits

**Local/Common name :** Tella maddi, Arjun

**Family** : Combretaceae

**Habit** : Large deciduous tree

### Key Identification Characters :

- ❖ **Stem/bark** : Usually has a buttressed trunk, smooth, grey bark
- ❖ **Leaves** : Leaves alternate to opposite, oblong-lanceolate, thick coriaceous, margin crenate-serrate, apex obtuse; two glands on the petiole close to the leaf-blade
- ❖ **Flower** : In axillary panicled spikes; cream, fragrant. Flowering from April-July.
- ❖ **Fruit** : A drupe, 5-angled, 5-winged, wings equal, apex notched; seed solitary. Fruiting June onwards.
- ❖ **Seed** : Solitary

**Economic Importance :** Timber, Medicines.





## *Terminalia bellirica*

Latitude: 17.54390N, Longitude: 78.45283E



Leaves and Fruits



Flowers

**Local Name :** Tani, Bahera

**Family :** Combretaceae

**Habit :** Large deciduous tree.

### Key Identification Characters :

- ❖ **Stem/Bark :** Bark pale brown or ashy, with shallow fissures
- ❖ **Leaves :** Smooth, broadly oval, tapering at base, blunt or notched at apex
- ❖ **Flower :** Greenish yellow, slender, crowded spikes, lacking petals, scent sweet but nauseating
- ❖ **Fruit :** Ovoid or flask shaped, grey brown, velvety on the outside
- ❖ **Seed :** Nuts of the tree are rounded but with 5 flatter sides.

**Economic Importance :** Fatty acids of 40% oil content are used as a major biodiesel requirement.





## *Terminalia catappa*

Latitude: 17.54395 N, Longitude: 78.45816 E



Leaves and Inflorescence

**Local/Common name** : Badam, Indian almond

**Family** : Combretaceae

**Habit** : Large deciduous tree, with symmetrical branching

### Key Identification Characters :

- ❖ **Stem/bark** : Bark is brown
- ❖ **Leaves** : The leaves are large, long and 10–14 cm broad, ovoid, glossy dark green, and leathery. They are dry-season deciduous.
- ❖ **Flower** : The trees are monoecious, with distinct male and female flowers on the same tree. Both are 1 cm in diameter, white to greenish, inconspicuous with no petals; they are produced on axillary or terminal spikes.
- ❖ **Fruit** : Drupe, green at first, then yellow and finally red when ripe
- ❖ **Seed** : Single

**Economic Importance** : Medicines, the wood is red and highly water resistant, Ornamental/avenue plantation





## *Terminalia chebula*

Latitude : 17.54357N, Longitude : 78.45187E



Leaves ans Fruits

**Local name** : Karaka.

**Family** : Combretaceae

**Habit** : Medium to large deciduous tree

### Key Identification character :

- ❖ **Stem/Bark** : Stem bark is dark brown, large tree umbrella shape crown
- ❖ **Leaves** : Leaves are sub-opposite, ovate or oblong-ovate, 8–20 cm long, and deciduous during cold season
- ❖ **Flower** : Flowers are yellowish-white and emit a strong offensive odour.
- ❖ **Fruit** : Fruit is drupe yellowish-green, obovoid or ellipsoid
- ❖ **Seed** : Seed is globuse pale yellow in colour

**Economic importance** : Fruit is used to produce tannin. It has antiseptic, diuretic, astringent properties. Important ingredient of 'triphalā', an Ayurvedic formulation used in the treatment of constipation.





## *Terminalia tomentosa*

Latitude:17.54247N, Longitude:78.46145E



Tree, Stem, Bark, Leaves and Inflorescence

**Local Name** : Indian laurel, Nallamaddi

**Family** : Combretaceae

**Habit** : Large deciduous, moderately fast growing tree .

### Key Identification Characters :

- ❖ **Stem** : Bark blakish grey with deep longitudinal fissures like crocodile skin.
- ❖ **Leaves** : Simple, ovate-oblong leathery.
- ❖ **Flowers** : Axillary terminal, panicled, spikes, paleyellow, small.
- ❖ **Fruit** : Drupeappeared throughout the year.

**Economic Importance :** Wood used in pole, fuel, furniture.





## *Wrightia tinctoria*

Latitude: 17.54289N, Longitude: 78.45048E.



Flowers



Fruits

**Local Name** : Doodhi Pala.

**Family** : Apocynaceae.

**Habit** : Medium sized deciduous tree.

### Key Identification Characters :

- ❖ **Stem/Bark** : Yellowish, smooth, brown
- ❖ **Leaves** : Simple, oppositely arranged, ovate, obtusely acuminate.
- ❖ **Flower** : Corymb like cymes, 5 white petals and oblong petals.
- ❖ **Fruit** : Cylindrical, blackish green with white, long horn like which united at tip
- ❖ **Seed** : Brown and flat with bunch of white hairs.

**Economic Importance :** High quality timber (white wood) used for turnery, toy making, match boxes and furniture. Bark used as medicine for diarrhea, piles. Bark powder is for the treatment of kidney stones.





## Ximenia americana.

Latitude : 17.54281N, Longitude : 78.45065E



Leaves and Fruits

**Local Name** : Nakkera, Tallow wood, yellow plum, sea lemon.

**Family** : Olacaceae

### Key Identification Characters :

- ❖ **Stem/Bark** : Narrow crown, twisted trunk, spreading branches.
- ❖ **Leaves** : Oval Shaped bright green and have a strong smell of almonds.
- ❖ **Flower** : Flowers are pale colour.
- ❖ **Fruit** : Fruits are lemon Yellow or orange red.
- ❖ **Seed** : The seed coat to remove can reduce germination period.

**Economic Importance** : Food and medicinal important (specially skin and hair treatment).





## Ziziphus mauritiana

Latitude: 17.54292N, Longitude: 78.45052E



Leaves & Fruits

**Local Name** : Regu, Ber, Indian jujube.

**Family** : Rhamnaceae.

**Habit** : *Ziziphus mauritiana* is a medium-sized tree that grows vigorously and has a rapidly developing taproot, a necessary adaptation to drought conditions.

### Key Identification Characters:

- ❖ **Stem/Bark** : Nearly black with wavy ridges and deep, vertical furrows, inner bark reddish brown
- ❖ **Leaves** : Broadly oval; glossy green on top, white-downy below; margins very finely toothed.
- ❖ **Flower** : Pale greenish yellow; 5 starry segments of the flower-cup alternating with 5 tiny petals, arranged around a central cushion
- ❖ **Fruit** : Cherry or Olive like, up to 3 cm long; green at first, ripening yellow or reddish; fleshy, surrounding a hard stony seed.
- ❖ **Seed** : Hard, stony seeds.

**Economic Importance** : Fruits are edible and wood is used for agriculture tools making.





## *Zizyphus oenoplia*

Latitude:17.54451N, Longitude:78.45855E



**Local Name** : Pariki

**Family** : Rhamnaceae

**Habit** : Thorny tree.

### Key Identification Characters :

- ❖ **Stem** : Light greyish brown.
- ❖ **Leaves** : Simple, alternate, ovate-lanceolate, acute and oblique.
- ❖ **Flowers** : Greenish sub sessile axillary cymes.
- ❖ **Fruit** : Globoseredup, black and shiny when ripe.

**Economic Importance :** Fruits are edible, bark use as tanning and herbal medicine.





## *Ziziphus xylopyrus*

Latitude :17.54292 N, Longitude :78.45052E



Leaves and Flowers

**Local Name** : Gotti.

**Family** : Rhamnaceae

### Key Identification Characters :

- ❖ **Stem/Bark** : 12 m high, bark thin, spiny shrubs.
- ❖ **Leaves** : Leaves simple, alternate, stipulate, entire with three prominent basal veins.
- ❖ **Flower** : Flowers bisexual greenish yellow in colour.
- ❖ **Fruit** : A globose or oblong , drupe ,tomentose, edible, often sweet & sugary, reminiscent of a date in texture and flavor.
- ❖ **Seed** : Seeds are oblong, sulcate in the middle.

**Economic Importance :** Fruits are eaten by birds, prepare medicine etc.





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### 5<sup>th</sup> Batch FOREST RANGE OFFICER TRAINEES.



