



College Flora

DEPARTMENT OF BOTANY



Spathodea campanulata

Family- Bignoniaceae

African Tulip tree

- It is an ornamental plant.
- It produces large flamboyant reddish-orange flowers that have approximately five petals.
- The flowers are bisexual and zygomorphic. These are displayed in a terminal corymb-like raceme inflorescence.
- This flower also has a yellow margin and throat. The pistil can be found at center of four stamens that is inserted on the corolla tube. This flower has a superior ovary and is two celled. The seeds of this tree are flat, thin, and broadly winged.
- The opened flower are cup shaped and hold rain drops and dew making them attractive to many species of birds for pollination.



Caryota urens

Family- Arecaceae

Fish Tail Palm

- *Caryota urens* species is a solitary-trunked tree that measure up to 15 m. Widely spaced leaf-scar rings cover its gray trunk.
- Leaves are bipinnate, triangular in shape, bright to deep green in color.
- The obdeltoid pinnae are long with a pointed edge and a jagged edge.
- long inflorescences emerge at each leaf node, from top to bottom, producing pendent clusters of white, unisexual flowers.
- The fruit is a drupe, red in color with one seed.
- Fruit contains oxalic acid , a skin and membrane irritant
- Pulp of the fully grown up plant is cut , sun dried, powdered and is edible . It has a sweet taste.



Roystonea oleracea

Family- Arecaceae

Royal Palm

- Native to Colombia, Venezuela, Trinida, Tobago and India.
- The tallest and most majestic royal palm
- It is often used as an ornamental plant
- It is a large palm which reaches heights of 40 metres. Stems are grey or whitish-grey. The upper portion of the stem is encircled by leaf sheaths, forming a green portion known as the crownshaft .
- Leaves consist of a long petiole and a rachis.
- The inflorescence bears white male and female flowers.
- Fruit are long and turn purplish-black when ripe.
- The wood can be used for constructions. The terminal bud is edible.
- The sap of young inflorescence can be fermented to produce alcohol.
- Immature inflorescence could be pickled and eaten as a vegetable

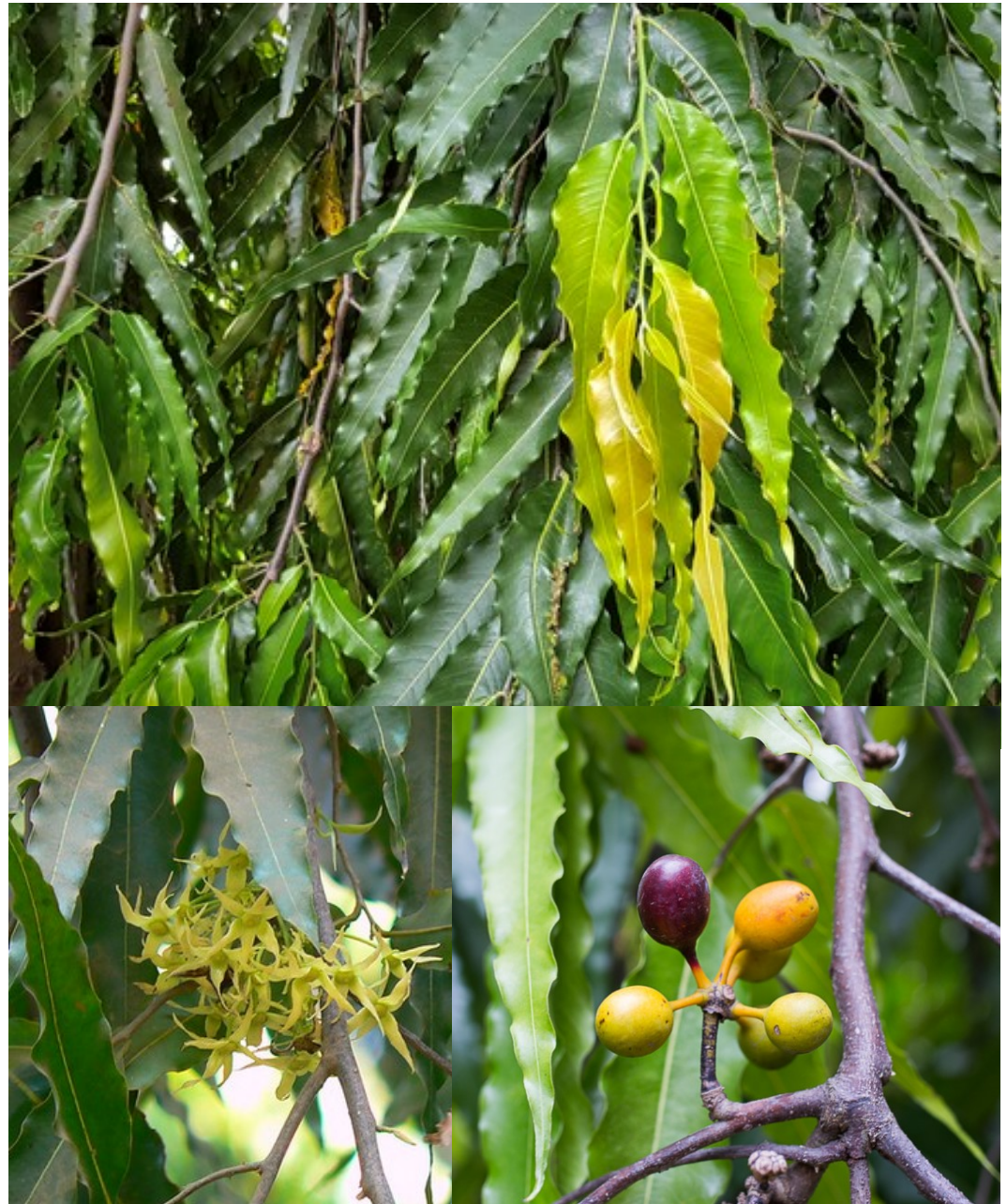


Polyalthia longifolia

Family- Annonaceae

False Ashoka Tree

- It has a straight slim trunk and short branches that droop, resulting in a narrow columnar shape.
- The leaves are lance-shaped with wavy margins and either bronze, lime green or dark green, depending on their age.
- They remain on the tree in all seasons and in a dense arrangement that almost completely cloaks the trunk in lush greenery, from near the bottom to the top of the tree.
- masses of pale yellow-green star-shaped flowers bloom amid the leaves. These are followed by green coffee-berry-like fruit with a single seed, ripening to dark purple or near black
- Its wood is mostly used for manufacturing small articles such as pencils, boxes, matchsticks etc.
- The oil of the seed has been confirmed to possess anti-oxidant and anti-microbial activity.



Albizia lebeck

Family- Mimosoideae

Fry wood/

Women's tongue tree

- Lebbek (*Albizia lebeck* (L.) Benth.) is a deciduous, perennial medium-sized legume tree.

- Leaves are bipinnate with 3-11 pairs of bright green, oblong leaflets.

- Inflorescences are heads umbellate with globular clusters of 15-40 white fragrant flowers.

Filaments exerted, connate below into a short tube.

- The fruits reddish-brown pods that contain flat rounded, free moving seeds.

- Tree is used to produce timber

- The bark is used medicinally to treat inflammation.

- Its flower is squeezed and juice is extracted, it is titrated with black pepper and sugar and used for nasal instillation and for oral intake in snake bites.



Syzygium cumini
Family- Myrtaceae
Black plum (Neeredu)

- *Syzygium cumini* is fast-growing tree ranges up to 30m.
- The leaves are smooth, opposite, shiny, leathery and oval.
- The flowers are pink or nearly white.
- The fruits are oval, green to black when ripe, with dark purple flesh.
- It contains a large seed. The seeds and fruits are used in the treatment of diabetes.
- Seeds and bark are used against dysentery. Bark juice is used for treating wounds and enlargement of the spleen.
- This tree is favoured for its fruit , timber and ornamental value
- Wood is used to make bullock cart wheels and other agriculture equipment
- Timber of neeredu is used to construct doors and windows.



Ixora coccinea

Family- Rubiaceae

Jungle flame

(Rama Banam)

- It is the national flower of Suriname
- Widely grown as Ornamental Plant
- *Ixora coccinea* is a dense, multi-branched evergreen shrub
- Leaves are mostly stalkless, opposite decussate, glossy, leathery, oblong with entire margins
- **Interpetiolar Stipules are present.** stipules triangular, cuspidate or awned.
- Flowers are borne at branch-ends, in dense corymb-like cymes,
- Flowers are stalkless, bright scarlet
- The fruit when fully ripe are used as a dietary source
- The flowers, leaves, root and the stem are used to treat various ailments in the Indian traditional system of medicine, The Ayurveda and various folk medicines.



Mangifera indica

Family- Anacardiaceae

**Mango/The Pride Fruit
of India**

- Mango is the national fruit of India, Pakistan and The Philippines and National Tree of Bangladesh
- The mango tree is a large, spreading evergreen with a dense crown.
- The inflorescence is a compound raceme or Panicle.
- The mango fruit is a large, fleshy drupe, containing an edible mesocarp of varying thickness.
- Mango seeds are solitary, large and flat, ovoid oblong, and surrounded by the fibrous endocarp at maturity.
- Raw mangoes can be used in making of Pickles and chutneys.
- Raw Mango is rich in Vitamin C and ripe mangoes in Vitamin A
- Fruit is diuretic .
- The wood is used as fire wood.



Cycas revoluta

Family- Cyacadaceae

Sago palm

- Cycas belongs to Gymnosperms – Plants with naked seeds. Fruits are absent.
- Stem is Caudex. The plant supports a crown of shiny, dark green Compound leaves.
- It is dioecious. Male plant posses male cones.
- Female plants do not have cones but bear a group of mega sporophylls.
- pollination can be done naturally by insects or artificially.
- Well known as an ornamental plant and in Bonsai.
- The plant is very slow growing and requires about 50-100 years to acheive this weight (over 20 ft or 6-7 meters).
- Roots are called coralloid having symbiotic association with Anabaena allowing nitrogen fixation.
- It yield starch called sago.



Female Plant



Male Plant

Pritchardia pacifica

Family: Arecaceae

Fiji fan palm

- Solitary, upright stems, pale gray to tan in color, with faint leaf scars.
- **Leaves:** Costapalmate, induplicate, 2-3 m across, undulate, forming a semi-circle, divided into stiff, single-fold segments usually no more than one-third the length of the leaf blade, with erect, bifid leaf segment tips.
- The leaf color is bright green with a thin waxy coating. The petiole is smooth and unarmed.
- Inflorescences usually shorter than or equal to the leaf petiole in length), with panicles branched to two orders and yellow flowers. Fruits spherical, reddish-black, about 12 mm in diameter.
- Widely grown as an ornamental plant .
- Leaves of fiji fan plam were traditionally used as fans.
- Flexible wood was used to construct a boarder for the leaves and uses to both a fan and an umbrella.
- The leaves of figi fan palm were used for protection from both the sun and the rain.



Epipremnum aureum

Family: Araceae

Money plant

- *Epipremnum aureum* is an evergreen vine growing to 20 m climbing by means of aerial roots which adhere to surfaces.
- The leaves are alternate, heart-shaped, entire on juvenile plants, but irregularly pinnatifid on mature plants.
- The flowers are produced in a spathe .
- This plant produces trailing stems when it climbs up trees and these take root when they reach the ground and grow along it.
- It is commonly known as money plant in many parts of the Indian sub continent
- It is also called as Devils vine because it is almost impossible to kill .and it stays green even ,when they kept in dark.
- It is an ornamental plant
- The plant is able to remove indoor pollutants ,such as formaldehyde ,trichloro ethane , xylene and benzene in controlled circumstances.
- The plant is listed as toxic to the cats and dogs



Cocos nucifera

Family: Arecaceae(Palmae)

Coconut tree

- *Cocos nucifera* is a large palm, growing up to 30 m, with pinnate leaves; old leaves break away cleanly, leaving the trunk smooth.
- the coconut fruit is a drupe.
- it has three layers: the exocarp, mesocarp, and endocarp. The exocarp and mesocarp make up the "husk" of the coconuts.
- The endosperm is initially in its nuclear phase suspended within the coconut water.
- It is one of the most useful trees in the world and is often referred to the tree of life.
- It provides food ,fuel , cosmetics ,folk medicine and building material, among many other uses.
- The coconut tree has cultural and religious significance in certain societies in India



Dypsis pambana

Family : Arecaceae

- The *Dypsis pambana* is an attractive, clustering palm, with a slender smooth, ringed trunk.
- It has dark green elegant leaves, with evenly close leaf arrangements.
- The leaflets are close and evenly spaced growing from the rachis at a steep angle producing a 'V' shape in cross section.
- It is commonly called as pemba plant.
- *Dypsis pambana* is a species of flowering plant . it is only found in Tanzania.



Cascabela thevetia

Family : Apocynaceae

Yellow oleander

- *Cascabela thevetia* is an evergreen tropical shrub or small tree, widely cultivated as ornamental plant
- Its leaves are willow-like, linear-lanceolate, and glossy green in color. They are covered in waxy coating to reduce water loss
- The stem is green turning silver/gray as it ages.
- The sap is milky.
- The sweetly perfumed flowers are funnel-shaped, bright yellow or peach coloured,
- Its fruit is a drupe encasing a large seed
- It is effectively drought resistant and tolerant to high temperatures.
- Yellow flowers are used for religious purpose, especially in the worshipping of the Hindu deity Vishnu.
- The plant toxins have tested in experiments for uses in biological pest control.
- All parts of the plant body are toxic to the most vertebrates (they contain cardiac glycosides)



Alstonia scholaris

Family: Apocynaceae

Devils tree (saptaparni)

- Stem **Exudates** milky white Latex
- Leaves simple, whorled, exstipulate
- lamina 5-20 x 3-7 cm, obovate, margin entire, glabrous.
- **Inflorescence / Flower** -Flowers bisexual, in terminal and lateral, paniculate cyme, greenish white
- calyx cupular, lobes 5, ovate, unequal, obtuse, puberulous, eglandular; corolla salver shaped
- Flowers are very fragrant similar to the flower of *Cestrum nocturnum* .
- **Fruit and Seed** -Follicles, linear 20-50 cm long; seeds many, linear-oblong, flat with a fringe of long hairs at both ends.
- The wood has been recommended for the manufacture of pencils.
- The bitter bark of the tree is used as a valuable remedy in chronic diarrhoea and advanced stage of dysentery.



Tecoma stans

Family: Bignoniaceae

**Yellow trumpet brush
(Swarna Ganneru)**

- It is an attractive plant that is cultivated as an ornamental. It has sharply toothed, pinnate green leaves and bears large, showy, bright golden yellow trumpet-shaped flowers.
- The plant produces pods containing yellow seeds with papery wings.
- It is the official flower of the United States Virgin Islands and the floral emblem of the Bahamas.
- It is drought tolerant and grows well in warm climates.
- The plant is desirable fodder when it grows in fields grazed by live stock.



Phyllanthus emblica

Family: Euphorbiaceae

Indian gooseberry /Amla

- The tree is small to medium in height. The branchlets finely pubescent, long, usually deciduous.
- the leaves are simple, subsessile and closely set along branchlets, light green, resembling pinnate leaves.
- The flowers are greenish-yellow.
- The fruit is nearly spherical, light greenish-yellow, quite smooth and hard on appearance, with six vertical stripes or furrows.
- The fruit is one of the component of TRIPHALA POWER (AMLA ,BIBHITAKI and HARITAKI)
- The fruits contain high amount of vitamin C.
- All parts of the plant are used in various Ayurvedic medicine ,herbal preparations
- In the Buddhist tradition half an AMLA fruit was final gift to the Buddhist Sangha by the great Indian emperor ASHOKA.



Greivllea robusta
Family: Proteaceae
southern silk/ Silver oak

- It is a fast growing ever green ornamental tree with single main trunk
- The bark is dark grey and furrowed. Its leaves are fern-like.
- The flowers are arranged in one-sided, "toothbrush"-like groups, sometimes branched.
- The flowers are glabrous and mostly yellowish orange, or sometimes reddish
- The timber used in manufacture of furniture ,cabinetry and fences
- The flower and fruit contain Toxic Hydrogen Cynide



Pongamia pinnata

Family: Fabaceae

Poonga Oil tree (Ganuga)

- The tree is a fast growing, glabrous, deciduous, tree with branches drooping
- Leaves are imparipinnate, shiny; young leaves pinkish red, mature leaves glossy, deep green
- 5–9 leaflets are present with the terminal leaflet larger than the others; stipules caducous.
- Flowers fragrant, white to pinkish, paired along rachis in axillary, pendent, long racemes or panicles; calyx campanulate or cup-shaped, truncate, short-dentate
- Pod short stalked, oblique-oblong, flat, smooth, thickly leathery to subwoody, indehiscent, seed thick, reniform
- Oil made from the seeds know as pongamia oil is an important asset of this tree and has been used as lamp oil, in soap making and as a lubricant
- The seed oil is has been found to be useful in diesel generators (Bio fuel) along with Jatropha and Castor.



Delonix regia

Family: Caesalpinaceae

Gulmohar

- It is naturally found in wet tropical forests in Madagascar.
- Delonix regia* is a fast-growing tree with an umbrella shaped, spreading crown.
- The compound (doubly pinnate) leaves have a feathery appearance and are a characteristic light, bright green. Each leaf has pairs of primary leaflets or pinnae, each divided into secondary leaflets or pinnules.
- The flowers of *Delonix regia* are large, with four spreading scarlet or orange-red petals and a fifth upright petal called the standard, which is slightly larger and spotted with yellow and white. They appear in corymbs along and at the ends of branches.
- The pods are green and flaccid when young and turn dark-brown and woody. In addition to its ornamental value it is also used as shade tree in tropical conditions.



Hibiscus rosa sinensis

Family:Malvaceae

China rose/ Mandaram

- It is a national flower of Malaysia.
- It is a bushy, evergreen shrub or small tree with glossy leaves and solitary flowers.
- Inflorescence-solitary cymose ,epicalyx is present, monoadelphous stamens, spinous pollen grains, penta carpellary condition with five lobed stigma and style passes through staminal tube.
- The flowers are large, conspicuous, trumpet-shaped, with five petals and their colors can be white to pink, red, orange, peach, and yellow or purple
- At the bottom of every hibiscus bud is the calyx which is green in color. The pointed ends of the calyx are the sepals.The five hairy red spots on the top of the flower is the stigma
- It is grown as ornamental plant and many species are grown as landscape shrubs and are used to attract butterflies ,bees, and hummingbirds.
- The tea made from its leaves reduce high B.P, Cholesterol, digestive & inflammatory problem, and also it helps to cure liver disease and reduce the risk of cancer.
- The paste of the leaves used for hair pack for healthy hairs.



Artocarpus heterophyllus

Family: Moraceae

Jack fruit/ Panasa Pandu

- This grows as an evergreen tree that has a relatively short trunk with a dense treetop.
- The bark of the jackfruit tree is reddish-brown and smooth. In the event of injury to the bark, a milky juice is released.
- The leaves are alternate and spirally arranged. They are gummy and thick and are divided into a petiole and a leaf blade.
- The inflorescences are formed on the trunk, branches or twigs (cauliflory).
- The flowers are small, sitting on a fleshy rachis
- The fruit is a multiple fruit subtype of Sorosis formed from entire inflorescence.
- Jack fruit is the national fruit of Bangladesh and Srilanka and the state fruit of the Kerala and Tamilnadu.
- Ripen jack fruit can be used to make variety of dishes, including custards, cakes it is also called “Vegetable meat”
- Jack fruit wood is prized for the making of budhist statue in temple.



Annona squamosa

Family: Annonaceae

Custard apple/ Sitaphal

- It is a small or semi or late deciduous much branched shrub, fruit yielding plant and it grows as wild plant.
- The leaves are simple, alternate and can be leathery or hairy and generally ovate with smooth margin.
- Flowers are solitary or in short lateral clusters, Hemicyclic, [perianth present, trimerous flowers. Three green outer petals, purplish at the base, three inner petals reduced to minute scales or absent.
- Anthers are hooded.
- The unusual flowers feature 6-8 fleshy curved petal in two whorls and numerous stamens and pistils
- Fruit develops from Multicarpellary, apocarpous condition called aggregate fruit. It is etario of berries.
- Pulpy mesocarp is edible.
- Leaves, shoots, bark and roots have been reported to have medicinal properties.



Tectona grandis

Family: Verbanaceae

Teak

- Teak is a large deciduous tree up to 40 m tall with grey to greyish-brown branches
- Its leaves are ovate-elliptic to ovate and are held on robust petioles. Leaf margins are entire.
- Fragrant white flowers are borne on wide panicles from June to August. Flowers are weakly protandrous.
- It is known for its high quality wood.
- Wood texture is hard and ring porous.
- Wood is used for shipbuilding fine furniture , door and window frames



Bougainvillea glaba

Family :Nyctaginaceae

Paper flower

- It is evergreen climbing shrub with thick thorny stems and drooping branches that are glabrous or sparsely hairy.
- The leaf blade is ovate to ovate-lanceolate, pointed or briefly pointed.
- The leaf-like bracts are purple, oblong or elliptical, pointed.
- The actual flower of the plant is small and generally white ,but each cluster of three flowers is surrounded by 3 to 6 bracts with bright colours.
- The crown tube is greenish, clearly angled.
- It is a popular ornamental plant

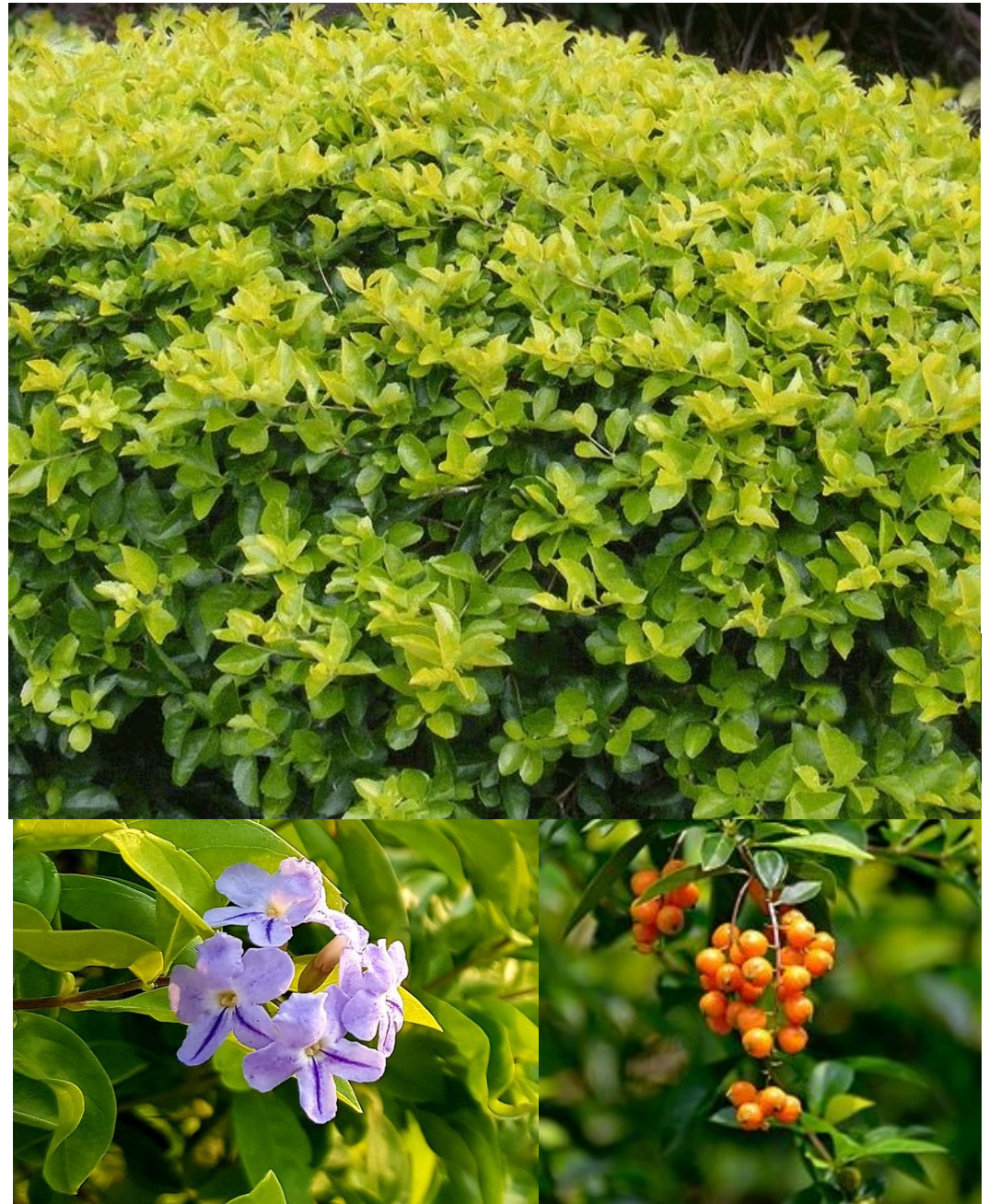


Duranta erecta

Family: Verbenaceae

Sky flower

- *Duranta erecta* is a sprawling shrub widely cultivated as an ornamental plant in gardens.
- Mature specimens possess axillary thorns, which are often absent on younger specimens. The leaves are light green, elliptic to ovate and opposite.
- The flowers are light-blue or lavender, produced in tight clusters located on terminal and axillary stems, blooming almost all year long.
- The fruit is a small globose yellow or orange berry, containing several seeds.



Tamarindus indica

Family: Caesalpinacea

Tamarind

- The tamarind is a long-lived, medium-growth tree, commonly grown as fruit and timber yielding plant.
- The evergreen leaves are alternately arranged and pinnately lobed. The leaflets are bright green, elliptic-ovular, pinnately veined.
- Flowers are five-petalled, borne in small racemes, and yellow with orange or red streaks. Buds are pink as the four sepals are pink and are lost when the flower blooms.
- The fruit is an indehiscent legume sometimes called a pod with a hard, brown shell. The fruit has a fleshy, juicy, acidic pulp. It is mature when the flesh is coloured brown or reddish brown.
- The seeds are somewhat flattened, and a glossy brown.
- The sweet tangy pulp is used in cuisine around the world.
- Tamarind timber is used to make furniture ,carvings,turned objects such as mortars and pestles ,chopping block and other small speciality woodm items.



Casuarina equisetifolia

Family: Casurianace

She oaks

- *Casuarina* is an evergreen tree grown as an ornamental plant.
- The reddish-brown to gray bark is brittle and peels. Branchlets resemble pine needles.
- The foliage consists of slender, much-branched green to grey-green twigs, bearing minute scale-leaves.
- The flowers are produced in small catkin-like inflorescences.
- The fruit is an oval woody structure, superficially resembling a conifer cone made up of numerous carpels each containing a single seed with a small wing.



Psidium guajava

Family: Myrtaceae

Guava tree

- These plant is a large shrub with thick glossy green oval leaves that are opposite, simple, elliptic to ovate, and white flowers
- Guava fruit is a berry. Fruit are medium to large in size and have four or five protruding floral remnants.
- Based on the cultivar, fruit can be spherical, ovoid or pyriform in shape. Fruit surface is rough to smooth, free of pubescence. Skin colour of immature and unripe fruit is mostly dark green which changes to yellowish-green, pale yellow
- Pulp of ripe fruit is soft and juicy and is white, pink or salmon-red
- The outer mesocarp of guava fruit is sandy or gritty in texture due to presence of stone cells
- Guava tree cultivated for its edible fruits (berry fruits).
- Fruits are processed into jams, jellies, and preserves and are commonly pastry fillings.
- Fresh fruits are rich in vitamin A, B and C.



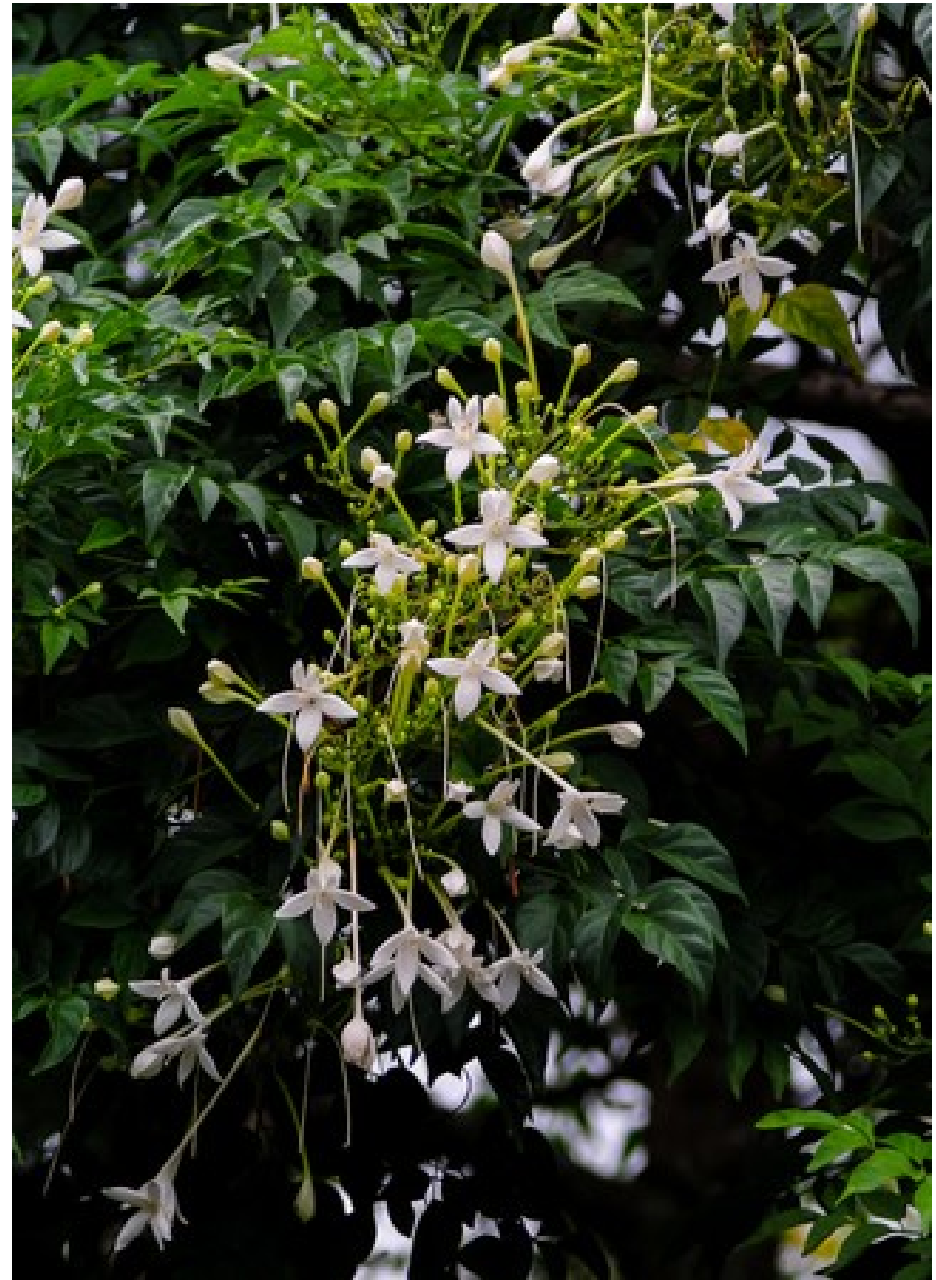
Millingtonia hortensis

Family: Bignoniaceae

Indian cork tree

(Boddu malli/ Ponnaga)

- This is an evergreen ornamental tree and has an elongated pyramidal stem.
- The tree grows to a height of between 18 to 25 meters.
- The leaf is imparipinnate
- The white flowers come in large panicles which emit a pleasant fragrance. They are bisexual and zygomorphic.
- The fruit is a smooth flat capsule and is partitioned into two. It contains broad-winged seeds.
- The leaves are also used as a chief substitute for tobacco in cigarettes.
- The wood is also used as timber and bark is used as an inferior substitute for cork



Terminalia catappa

Family: Combretaceae

(Indian almond tree)

- It is a large deciduous tree, growing up to 90 feet tall with horizontal whorls of branches.
- Clusters of foot long, obovate leaves are present that turn pink-red to red - yellow before falling.
- The greenish - white female - and male flowers are on the same tree; these flowers are inconspicuous and not very showy.
- It has large nutty fruits that taste very much like commercially grown almonds. The color of the oval fruit is green, yellow or reddish.
- It is grown as an ornamental tree in many tropical cities in the world.
- The leaves contain agents for chemo-prevention of cancer and probably have anti carcinogenic potential.
- The wood is red and solid and has high water resistant, it has been used in Polynesia for making canoes (light boat).



Azadirachta indica

Family: Meliaceae

Neem tree

- Moderately fast-growing tree.
- The bark is dark grey to grey-brown, smooth on young trees, with age becoming vertically furrowed and rough.
- The opposite, pinnate leaves long, with 20 to 30 medium to dark green leaflets. The petioles are short.
- The (white and fragrant) flowers are arranged in more-or-less drooping axillary panicles.
- The fruit is a smooth (glabrous), olive-like drupe
- The fruit skin (exocarp) is thin and the bitter-sweet pulp (mesocarp) is yellowish-white and very fibrous. The mesocarp is thick. The white, hard inner shell (endocarp) of the fruit encloses one elongated seeds having a brown seed coat.
- The plant has long been used in Ayurvedic and folk medicine and used in cosmetics ,and in organic farming applications.
- Neem oil is a naturally occurring pesticides found in seeds from the neem tree.
- Neem leaf is used for leprosy, eye disorders,skin ulcers,diabetes,nd also used for the birth control and to case abortions.



Thuja occidentalis

Family: Cupressaceae

- *Thuja* are evergreen trees. The shoots are flat, with side shoots only in a single plane.
- The leaves are arranged in flattened fan shaped groupings with resin-glands, and oppositely grouped.
- The leaves on flattened lateral branchlets are crowded into appressed groups and scale-like and the lateral pairs are keeled.
- The male cones are small, inconspicuous, and are located at the tips of the twigs.
- The female cones grow to about 1–2 cm long, have overlapping, thin, leathery scales, each scale bearing 1–2 small seeds with a pair of narrow lateral wings.
- * They are widely grown as ornamental trees and extensively used for hedges.
- * The leaves and leaf oil are used as medicine for respiratory, skin and nerve disorders.



Peltophorum pterocarpum

Family: **Cesalpiniaceae**

Yellow flame tree

- It is a deciduous tree. The leaves are bipinnate
- The flowers are yellow, produced in large compound raceme.
- The fruit is a pod, red at first, ripening black, and containing one to four seeds.
- It is widely grown in tropical region as an ornamental tree, particularly in India, Nigeria, Pakistan.
- It is used as decorating flower in telangana state's Batukamma festival.





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