

Sri Chamarajendra Park (Cubbon Park)

Tree Mapping & Inventory Project

Report Submitted by
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ABSTRACT

Trees are the stabilizers of a planet's ecosystem and trees in the urban setting are fundamental for healthy living. A good tree inventory is an essential tool for gathering and analyzing the biodiversity and the distribution and it also helps us in tracking the growth rate, tree health and provide us with information required for the ongoing maintenance.

The Cubbon Park (officially known as Sri Chamarajendra Park) tree mapping and inventory project includes the detailed description of each and every tree species that is mapped, which includes information such as its phenology, its family, its origin, some of its common names, its brief description and its flowering and fruiting period. It also includes information about the GBH or DBH (girth or diameter at breast height), height, overall health condition and the geographical location for each and every single tree that has been planted at the park. Information of whether the given species is endemic, exotic, indigenous or invasive has also been collected. Numerous field guides, apps and web sources were used to help with identification and collate all the other related information. GHB or DBH was measured using a tape at breast height and tree height was measured using the trigonometric approach, in which the angle was measured using an app.
The tree health rating scale ranges from 1-5, 5 meaning that the tree is in excellent health condition, 1 meaning the tree health condition is very poor. The geographical location was noted down using Google maps. The total biomass and the carbon sequestered by each tree that has been mapped has also been calculated.

Overall **8866 trees** were identified and mapped in Cubbon park. There are quite a good number of heritage trees in the park which are of great cultural, historical and ecological significance. From this project we hope to promote awareness amongst the general public not just about biodiversity and the ecological importance of these trees, but also regarding their cultural and aesthetic prominence.

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INTRODUCTION

Urban parks provide critical habitat for urban flora and fauna and are characterized by high levels of diversity and with large populations of exotic species. Urban parks constitute critical biodiversity hotspots in crowded, concrete dominated city environments. They contribute multiple valuable ecosystem services, helping to provide clean air, buffer microclimatic variations, lower noise levels and regulate water flows. They play a fundamental role in environmental control and regulation and specially in an urban setting because they not just help in boosting the wildlife habitat around, but also improve the air quality and add aesthetic value to the property. Despite the importance of these green spaces, very little is known about them in most parts of the world in contrast to the attention paid on forested areas. This lack of understanding of biodiversity distributions and dynamics in the urban parks makes it very difficult to plan strategies for urban conservation.

Additionally, urban development projects have resulted in considerable loss to urban greenery, including heritage trees—and we may not even be aware of trees that have been lost to projects. This is where the prominence of a tree mapping and inventory project comes in, because they are a way to determine the environmental impact of the trees on the community, improve the process of planting and caring of trees, to understand the species that might need special care as they might be endangered and which trees are better to be removed. They provide a detailed information to community members, local governments and the funding sources. There have been many tree inventory and mapping projects done in urban parks in Bangalore and all around other cities in India as well.

Cubbon Park, officially known as **Sri Chamarajendra Park**, is the landmark lung area of the Bangalore city. The area is currently reported to be around 300 acres, with a rich recorded history of abundant flora and fauna.

Cubbon Park was originally created by Major General Richard Sankey, in 1870, during his time as the Chief engineer of the Mysore State. The park was firstly named as Meade's Park in 1870. Later it was renamed as Cubbon Park following the name of Sir Mark Cubbon, who served for the longest period as the commissioner. In the year 1927, once again, the parked was renamed as Sri Chamarajendra. The renaming was done as a tribute to the ruler, Sri Chamarajendra Wodeyar.

The Cubbon Park tree inventory and mapping project collates data about the biodiversity and distribution of trees in the park, while also including the detailed description of each and every tree species that is mapped. The analysed and collated data highlights information like the trees with largest girth, the tallest tree and which species they belong to, the total number of trees with excellent health condition and those trees whose health condition is quite poor. It presents us with information of the endemic, indigenous, exotic species that are present and their count. It also provides us with figures of the threatened species present at the park (according to the IUCN red list) and the net carbon dioxide sequestered by them.

This project encompasses all the details collected of all the **8866** trees in Cubbon park and all this data collated will be made accessible to the public to create awareness about their ecological importance. This data can be used by city planners, researchers, students, urban activists and the interested public as well.

APPROACH

Method for tree girth measurement

Tree girth measurement is one of the most ancient, quickest, and simplest of foresters' measures of size and records of growth of living and standing trees. GBH or DBH stands for girth or diameter of each tree measured at “breast height”, defined as 1.34m up from the highest point of ground at the tree’s base. GBH or DBH measurements can be used to estimate the volume, biomass, and carbon storage of trees.

Here, the GBH or DBH measurement was taken from the person’s chest level. In case forking or branching occurs below the chest level, the girth has been measured separately for each of the branches. In case there is a growth of a burl on the tree trunk at the chest level, the girth is taken above those obstacles. For species of palm (like ***Phoenix reclinata*** and young ***Caryota urens***) which have no true stem, girth has not been considered.

Method for measuring the height of the trees

Tree height is an important ecological trait, as the competition for sunlight determines which trees flourish, and which trees become suppressed and eventually die out. It also influences the understory vegetation over time and cover for wildlife. As such, it is an important part of many natural resource data collections.

A **trigonometric method** was used to measure the tree height. We stand at a distance away from the tree till we can see the tip of the tree without lifting our head up . Once we are able to clearly see the tip at the top of the tree, we measure the angle using the Spirit Level app (In forest measurements a digital clinometer is used, here the spirit level app was used instead). The angle is measured by keeping the phone near the

eye and tilting it until it seems to be coinciding with the tip of the tree. Angle measured is noted down in degrees and later converted to radians (radians = degrees * (π/180)). Once this is done, we measure the distance (using a measuring tape) from the base of the tree to the point from where the angle was measured from (in meters), that is, the place where the person is standing looking at the tip or the tallest point of the tree. The last step would be to measure the height of the person taking the angle from the eye level to the ground. Once all of this data has been collected, the height of the tree (H) is calculated using the formula.

H = Tan (angle measured) * distance from the base of the tree + distance from the eye level to the ground.

This approach gives us an approximate height of the tree which is measured in meters.

Note that there will be some margin of error in both the girth and the height measurement of trees due to various reasons. It may be because the canopy is too wide due to which the exact tip or the tallest point of the tree cannot be seen or simply because the canopies of other trees are overlapping due to which the tip of that particular tree is not clearly visible. Just like there will be some percentage of errors associated with any scientific measurement that is carried, these measurements involve some random and instrumental errors; instrumental due to the measuring tape and Spirit Level app.

For each tree there have been comments added regarding the overall tree health and the tree rating is given as well. The intention of writing comments is to evaluate and check if there are any immediate threats that the tree is facing, and if yes, what is the threat that it is facing and what mitigative and curative measures can be taken. The overall health of the tree may be affected by the abiotic stress agents, moisture and temperature extremes, other climatic stress agents, mineral deficiency and excesses, air pollution, biotic stress agents like nematodes, bacteria, viruses and fungi.

All the physical observations mentioned below were considered while noting down comments for each tree.

1] Creepers and climbers observed clinging on to the tree.
2] Any epiphytes growing on the tree. In some scenarios, the epiphytes have been identified and recorded as well.
3] Any burls or tumorous growth observed on the trees.
4] Mosses and lichen growth observed on the tree.
5] Species of fungi growing on the tree.
6] Leaves eaten by insects.
7] Discoloration in leaves, brown spots and leaf curling.
8] Tree hollows observed in tree trunks or branches.

The tree health rating scale chosen here was from 1 to 5 - 1 indicating the health condition of the tree is extremely poor and 5 indicating that the tree is perfectly healthy.

The geographical location of each tree was taken from the Google Maps, where the latitude and longitude were mentioned in Degree Decimal System.

The biomass and the net carbon dioxide sequestered (in tonnes) by each tree was estimated.

Above-ground and below-ground biomasses (AGB and BGB) were estimated on the basis of field measurements of diameter at breast height (DBH) of the tree using allometric equations. The below given equation is applicable to dry climates with annual rainfall < 1500 mm; hence, it can be used for Bangalore where the whose Long Period Average (LPA) average annual rainfall is 986mm, as per the Indian Meteorological Department (IMD).

AGB = 34.4703 - 8.0671D + 0.6589D*D
where D is the DBH (cm)

BGB = AGB × (15/100)

Estimation of Total Biomass (TB) Total biomass of individual trees will be the sum of their above- and below-ground biomasses, respectively, given by the following equation:

Total Biomass = AGB + BGB

Generally, for any plant species, 50% of its biomass is its carbon content.

Carbon Content = 0.5 × Total Biomass

CO2 equivalent is then calculated using the below given equation:

CO2 (eq.) = (Carbon content × 44)/12

The above formulae estimates the net carbon dioxide sequestered by each tree, and this data is used to roughly estimate the net carbon dioxide that is sequestered by the entire park.

The process started with the Botany team identifying and mapping the periphery regions of all the zones of the park. This process gave an insight to the team about the locations of all the different zones present in the park. While the periphery regions were being mapped, the painting work had begun, where the trees were first coated with green paint, over which the numbers were painted in white. All the data that was collated by the Botany team was put up in the Google Sheets whose access was given to all the team members. The Botany team was further split into two teams - The Identification team and the Mapping team. The Identification team, which ranged between 2-4 members, would start identifying the peripheral trees of the different zones in Cubbon park and add the name of the zone and the tree identified on the Google Sheet. The Mapping team would now start mapping (measuring girth, height and mentioning comments, overall tree health rating and its geographical location) each of these trees that has been identified. By the time the entire periphery of the whole park and the smaller zones in the park had been identified and mapped, the painting work had already commenced.

Since the numbers were painted on the trees, the task was much simpler when it comes to mapping large areas. The process followed was the same as before; the identification team would put up the painted number on the google sheet and identify that particular tree species and all mapping of that particular tree would be done right after that. After one zone is completed, one team would check with peripheral trees and add the painted tree numbers on the sheet; this was done because all the peripheral trees were mapped much before the painting work had started.

As the field work was happening, collation of all the data regarding the trees had also begun simultaneously. This included the common name and the Kannada name of that particular tree species, which family it belongs to, which region is it originally from, its conservation status, its phenology, fruiting and flowering period, a detailed description and some its significant economical and medicinal uses (if there were any).

Once a significant number of trees around the park had been painted and numbered, the Photography team had started their work, where they would take the picture of each tree, its leaves, fruits, flowers and the bark. The geographical location mentioned by the Botany team while mapping the individual trees helped them find the location of the trees in different zones of the park with ease. All of these photos taken would be uploaded in a drive link and later all of these were organised and arranged in different folders number wise, i.e like from 1 - 500 tree pictures in one folder and so on.



Species Diversity in Cubbon Park

1. ***Acacia auriculiformis*** A. Cunn. ex Benth.

Family : Fabaceae



Origin : Australia, Indonesia, Papua New Guinea

Common Name - Ear Leaf Acacia

Kannada Name : -



Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen



Flowering period : December - January

Fruiting period : February - March

Description : Medium to large evergeen tree, 15-30 m tall. Leaves alternate, simple, reduced to phyllodes (flattened leaf stalks), these blade-like, slightly curved, 5-8 in long. Flowers in loose, yellow-orange spikes at leaf axils or in clusters of spikes at stem tips; flowers mimosa-like, with numerous free stamens. Fruit a flat, oblong pod, twisted at maturity.

Uses : Its wood is used for making paper, furniture and tools. It contains tannin which is used in animal hide tanning.

2. Acacia ferruginea DC.



Family : Fabaceae

Origin : India, Sri Lanka

Common Name - Rusty acacia

Kannada Name : - Banni mara, Kiri banni

Species type : Indigenous



Conservation status : Vulnerable

Phenology : Deciduous

Flowering period : March - May

Fruiting period : June - August

Description : Medium-sized tree, up to 20m tall. Leaves are alternately arranged, double-compound, prickles twin, infra-stipular, slightly curved. Flowers are pale yellow in numerous lax axillary spikes, which are often panicled at the end of the branches. Pods glabrous, contain a dry sweetish pulp, dark brown and pinnately dehiscent, 3-7 seeded. Seeds flat ovate, oblong, distinctly stalked, greenish to brown.

Uses : A bark decoction, in conjunction with ginger is frequently used as an astringent for the teeth. The wood is mostly used in cartwheels, posts, beams and agricultural implements.

3. Adenanthera pavonina L.



Family : Fabaceae

Origin : China

Kannada Name : Aane gulaganji, Manchatige

Common Name - Red Bead Tree



Species type : Exotic

Conservation status : Not known

Phenology : Deciduous

Flowering period : March - June

Fruiting period : May - August

Description : Medium to large deciduous tree, up to 15m tall. Leaves bipinnate, oval-oblong, with an asymmetric base and blunt apex, dull green on topside and blue-green underside. Flowers borne in narrow spike-like racemes at branch ends, small, creamy yellow, fragrant; each flower star shaped with 5 petals. Pods long and narrow, with slight constrictions between seeds, dark brown, turning black upon ripening, leathery, curve and twist upon dehiscence to reveal 8-12 hard-coated, showy, lens shaped, vivid scarlet seeds.

Uses : This tree is used for making soap and a red dye can be obtained from the wood. The wood, which is extremely hard, is also used in boat-building, making furniture and for firewood. A decoction of the

young leaves and bark is used to treat diarrhoea. Also, the ground seeds are used to treat inflammation.

Additional Information - The seeds are considered as a symbol of love in China. In India, the seeds have been used as units of weight for fine measures, of gold for instance, throughout recorded history because the seeds are known to be almost identical weights to each other.

4. Aegle marmelos (L.) Correa



Family : Rutaceae

Origin : India, Bangladesh, Sri Lanka

Kannada Name : Bilvapatre

Common Name – Bengal quince, Bael



Species type : Indigenous

Conservation status : Near threatened

Phenology : Deciduous

Flowering period : April – May

Fruiting period : March – June (following year)

Description : Small to medium sized tree, up to 15m tall. Alternate leaves, borne singly or in 2's or 3's, are composed of 3 to 5 oval, pointed, shallowly toothed leaflets, the terminal one with a long petiole. Fragrant flowers, in clusters of 4 to 7 along the young branchlets, have 4 recurved, fleshy petals, green outside, yellowish inside, and 50 or more greenish-yellow stamens. The fruit, round, pyriform, oval, or oblong, thin, hard, woody shell. Inside, there is a hard central core and 8 to 20 faintly defined triangular segments, with thin, dark-orange walls, filled with aromatic, paleorange, pasty, sweet, resinous, more or less astringent, pulp. Seeds flattened-oblong, bearing woolly hairs and each enclosed in a sac of adhesive, transparent mucilage.

Uses : Its extracts when applied on the exposed area, help to cure inflammation. Its leaf juice with honey can prove useful for treating fever. It can be used to treat tuberculosis.

The fruits can be eaten either fresh from trees or after being dried and produced into candy, toffee, pulp powder or nectar. If fresh, the juice is strained and sweetened to make a drink similar to lemonade.

5. Agathis robusta (C.Moore ex F.Muell.) Bailey



Family : Araucariaceae

Origin : Australia

Kannada Name : -

Common Name - Queensland Kauri, Smooth-barked kauri



Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period :

Fruiting period :

Description : Medium to large evergeen coniferous tree, up to 30m tall. Leaves spirally arranged on primary shoots, opposite to subopposite on lateral shoots, entire on petioles, linear to elliptic, stiff; veins fine, longitudinal, more or less parallel. Cones globular to cylindric, scales 340-440. Pollen cones shortly pedunculate or almost sessile, usually axillary on slender leafy twigs, cylindric, bearing 600-1300 microsporophylls, each with 2-8 pollen sacs on the underside. Seeds narrowly cordate, winged.

Uses : The bark yields a resin known as dammar - used for making varnish, lacquers, oil paints, etc. A fibre obtained from the inner bark is used to make ropes and nets.

6. Aglaia elaeagnoidea (A. Juss.) Benth.



Family : Meliaceae

Origin : Australia, Indian subcontinent

Kannada Name : Gadagayya, Kempu nola, Thottilu

Common Name - Droopy leaf tree



Species type : Indigenous

Conservation status : Least concern

Phenology : Evergreen

Flowering period : November - August

Fruiting period : November - August

Description : Small to medium-sized tree, up to 10 m. Leaves imparipinnate, alternate, estipulate, leaflets elliptic, elliptic-obovate, lanceolate or oblanceolate, base oblique, acute or attenuate, apex acute, acuminate or caudate-acuminate, margin entire. Flowers polygamodioecious, yellow in axillary branching panicles. Fruit a berry, globose, buff coloured; seeds 1-2.

Uses : In Ayurveda, the fruits are reported to be astringent and cooling. They are recommended in the treatment of inflammations and febrile complaints. The seeds are said to be useful in the treatment of painful micturition.

7. Ailanthus triphysa (Denst.) Alston.



Family : Simaroubaceae

Origin : Indian subcontinent, Australia

Kannada Name : Baggada dhoopa, Haalumaddi

Common Name – Malabar Tree of Heaven



Species type : Indigenous

Conservation status : Not known

Phenology : Evergreen

Flowering period : January – May

Fruiting period : January –May

Description : Medium to large sized tree, up to 30 m. Leaves imparipinnate, alternate, crowded towards the apex of branches, estipulate, oblong-ovate, oblong-lanceolate or elliptic to lanceolate, base oblique, apex acute or acuminate, margin entire, revolute, glabrous, coriaceous. Flowers polygamous, greenish-yellow, in axillary panicles. Fruit a samara, prominently veined, not twisted, reddish-brown with rounded ends.

Uses : The bark and leaves are renowned as a tonic, especially in debility after childbirth, they also possess febrifuge properties and are useful in dyspeptic complaints.

8. Alangium salviifolium (L.f.) Wangerin.

Family : Cornaceae



Origin : Tropical Asia, Tropical Africa

Kannada Name : Guddada goni, Kallu maavina mara

Common name - Sage-leaved alangium

Species type : Exotic



Conservation status : Not known

Phenology : Evergreen

Flowering period : February - April

Fruiting period : March - May

Description : Small, bushy tree, growing up to 10m. The leaves are elliptic oblong, elliptic lanceolate or oblong lanceolate. The flowers are greenish white, fascilcled, axillary or on old wood. The berries are ovoid, ellipsoid or nearly globose.glabrous, smooth and violet to purple.

Uses : In Ayurveda the roots and the fruits are used for the treatment of rheumatism and haemorrhoids. Externally, it is used for the treatment of bites by rabbits, rats, and dogs. The root-bark is also used in traditional medicine skin problems and as an antidote for snake bite. The wood is used to make ornamental work, pestles and rollers and also is also used as a fuel wood.

9. Albizia julibrissin Durazz.



Family : Fabaceae

Origin : Southwestern and eastern Asia

Kannada Name : Chela

Common name – Pink silk tree, Persian silk tree



Species type : Exotic

Conservation status : Not known

Phenology : Deciduous

Flowering period : April – June

Fruiting period : August – September

Description : Small to medium-sized tree, 6-15m tall. The bark is light brown, nearly smooth, and generally thin with lens shaped areas along the stem. Leaves large, bipinnately compound with 10-35 pairs of leaflets, many oblong leaflets alternate along the stems. Flowers showy, fragrant pink, resembling pompoms and are arranged in panicles at the ends of branches. Fruits are flat, straw-colored pods containing light brown oval-shaped seeds.

Uses : The leaves can be used to treat the effects of stinging nettle by rubbing them in hand and then applying to the rash area. Relief is almost instantaneous. The flowers and stem bark are used to make medicine.

10. Albizia lebbeck (L.) Benth.



Family : Fabaceae

Origin : Indomalaya, New Guinea, Northern Australia

Kannada Name : Baage mara, Sireesa



Common name - Flea tree, Woman's tongue tree

Species type : Exotic

Conservation status : Not known

Phenology : Deciduous

Flowering period : April - May

Fruiting period : December - January

Description : Medium-sized tree, up to 30m tall. Compound leaves bipinnate, glabrous or slightly hairy on the axis; pinnae in 2-4 pairs, each with 2-11 pairs of obliquely oblong leaflets, shortly stalked. Flowers are white, heavily scented, with the stamens free above the corolla, stamens 30-40, yellowish-green on top side, white underside. Pods pale straw to light brown at maturity, narrow-oblong, papery, leathery, flat and not raised or constricted between seeds; seeds brown, flat, orbicular or elliptic, transversely placed with 6- 12 in each pod.

Uses : It is an astringent, also used by some cultures to treat boils, cough, to treat the eye, flu, gingivitis, lung problems, pectoral problems, is used as a tonic, and is used to treat abdominal tumors. The bark is used medicinally to treat inflammation.

11. Albizia odoratissima (L.f.) Benth.



Family : Fabaceae

Origin : Indian subcontinent

Kannada Name : Kaadu baaga, Bilvara

Common name - Black Siris



Species type : Indigenous

Conservation status : Not known

Phenology : Deciduous

Flowering period : March - June

Fruiting period : August - October

Description : Medium sized tree, 22-40m in height. Leaves dark green, bipinnately compound, alternate, stipulate; stipule free, lateral, caducous. Inflorescence clustered into hairy terminal panicles; flowers 10-15 per head, dimorphic, pale yellowish white, fragrant. Pods thin, flat, leathery, brown when ripe, dehiscent, each containing 8-14 seeds. Seeds ovoid.

Uses : The bark of the tree is useful in ulcers, leprosy, skin diseases, cough, bronchitis, diabetes and burning sensation. The premium quality wood is suitable for paneling and furniture. It is also used for carts, wheels, farm implements and construction timbers. The tree's presence in tea monoculture reduces incidence of tea pests, particularly red spider mites and scarlet mites.

12. Alstonia macrophylla Wall. ex G.Don





Family : Apocynaceae

Origin : Indonesia, Malaysia, Philippines

Kannada Name : Janthaala mara

Common name - Hard milkwood tree

Species type : Exotic

Conservation status : Least concern

Phenology : Deciduous

Flowering period : December - March

Fruiting period : May - July

Description : Medium to large evergreen tree, growing upto 30 m. Bark is smooth and light grey in color. Leaves are in whorls of three to four, simple, penni-veined, oblong-obovate, membranous, and glabrous above. Leaf-blades are widest in or above the middle, and cuneate at the base. The flowers are small, yellowish-white, and borne on short cymes at the end of branches. The flowers consist of a long tube, opening into 5 pure-white petals. The fruit is a double follicle, pendant, very long, and slender. The seeds are small and very flat, deep-brown.

Uses: The timber is of superior quality and less liable to attack by boring insects. It is used for making roof beams, frames, poles and toys. The bark, in the form of a powder, decoction, infusion, tincture or wine preparation, is used as an antiamoebic, anti choleric, antidysenteric, antimalarial, antiperiodic, emmenagogue, febrifuge, tonic and a vulnerary.

13. Alstonia scholaris (L.) R. Br.



Family : Apocynaceae

Origin : Southern China, Tropical Asia

Kannada Name : Adda sarpa mara

Common name - Devil's tree



Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period : October - March

Fruiting period : April - June

Description : Medium to large tree, up to 40m in height. Leaves in whorls of 4-8 in the upper axils, the lamina obovate to elliptical or elliptical-lanceolate, glabrous or sparsely hairy, upper surface is dark green, the lower is green-white; The tip of the leaf is rounded or shortly pointed, tapering towards the base. The inflorescence is a much-branched terminal panicle; flowers white, cream or green, strongly perfumed. Fruit a pendulous, two-lobed, dehiscent follicle, brown or green, dry or woody, spindle-shaped, containing numerous flat, oblong, brown seeds, with a tuft of hairs at each end.

Uses : The wood is used for the manufacture of pencils. It has proved a valuable remedy in chronic diarrhoea and the advanced stages of dysentery. It has also been found effective in restoring the tone of the stomach and of the system generally in debility after fevers and other exhausting diseases.

Additional details : At high doses, an extract of the plant exhibited marked damage to all the major organs of the body in both rats and mice.

14. Anonna muricata L.

Family : Annonaceae

Origin : Tropical America, Caribbean

Kannada Name : Mullu ram phal

Common name - Soursop, Graviola

Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : All year

Fruiting period : All year





Description : Small evergreen tree, up to 10 m tall. Leaves simple, alternate, oblong-ovate, dark green and glabrous above, pale green and slightly pubescent below, base cuneate to rounded, apex acute to obtuse. Inflorescence axillary, 1 to 2 flowered. Flower bisexual, petals 6, thick, yellowish, pubescent. Fruit dark green, ovoid, echinate, pulp white, juicy and aromatic. Seeds brownish.

Uses: The pulp is also used to make fruit nectar, smoothies, fruit juice drinks, as well as candies, sorbets, and ice cream flavorings. The leaves are usually boiled to make tea. It is believed to have medicinal benefits such as for preventing cancer and anti-inflammation. Powder of dried leaves and sap from

fresh ones are useful in destroying vermin. A powder or oil from the seeds has been used to kill lice and bedbugs. All tree parts have insecticidal properties and can be used, with fruit as bait, to kill fish.

15. Aphanamixis polystachya (Wall.) R. Parkar.

Family : Meliaceae

Origin : Indian subcontinent

Kannada Name : Mukhyamuttage, Mullumuttaga

Common name – Pithraj tree



Species type : Indigenous

Conservation status : Least concern

Phenology : Evergreen

Flowering period : January – October

Fruiting period : January – October

Description : Evergreen tree, 20–30 m in height. Leaves compound, imparipinnate, alternate, pulvinate, oblong-elliptic, membranous when young, later leathery, base oblique, apex acute or acuminate with entire margin. Inflorescence axillary panicles. Flower polygamous, white, 6–7 mm in diameter. Fruit a single seeded orange-red subglobose capsule.

Uses : Bark is used in spleen, liver diseases, tumour and abdominal complaints. Seed-oil is used in rheumatism.

16. Aquilaria malaccensis Lam.

Family : Thymelaeaceae



Origin : Indian subcontinent, Singapore, Thailand

Kannada Name : Agaru, Kaaragilu

Common name - Agar wood, Malayan eagle-wood

Species type : Indigenous

Conservation status : **Critically endangered**

Phenology : Evergreen



Flowering period : April - June

Fruiting period : April - September

Description : Evergreen tree up to 40 m tall with an irregular crown. Peeling outer bark dark to pale grey, inner bark cream-white. Leaves simple, alternate, oval-oblong to oblong-lanceolate, thin and leathery, acuminate. Inflorescence in clusters of 10. Flower dirty yellow, 5-6 mm long. Fruit green and flattened, woody when ripe. Seeds pear shaped covered with orange-brown hairs, attached to fruit with a twisted appendage.

Uses : It is a major source of agar wood resin that is used for perfume and incense. The resin is produced when the tree is infected by a parasitic fungus, Phaeoacremonium parasitica. The incense is used against cancer in Western, Chinese, and Indian medicine.

17. Araucaria columnaris J.R.Forst. Hook**.**





Family : Araucariaceae

Origin : New Caledonia

Kannada Name : -

Common name - Christmas tree

Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period : -

Fruiting period : -

Description : Evergreen, narrowly conical tree up to 60 m tall. Bark papery. The relatively short, mostly horizontal branches are in whorls around the slender, upright to slightly leaning trunk. The branches are lined with cord-like, horizontal branchlets. The branchlets are covered with small, green, incurved, point-tipped, spirally arranged, overlapping leaves, younger leaves needle like. Male cone oblong-cylindrical, 5-10 cm long, finely teethed. Female cone 10-15 cm long with short bracts. Seeds 3-3.5 cm long and winged.

Uses : It is used as an ornamental tree.

18. Araucaria cunninghamii Mudie.



Family : Araucariaceae

Origin : Australia

Kannada Name : -

Common name - Hoop pine, Moreton Bay pine



Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period :

Fruiting period : Seed dispersal - November - February

Description : Evergreen tree up to 70 m tall. Bark gray-brown, rough, splits naturally and peels easily. Lateral branches dense and drooping. Leaves dimorphic: leaves of young trees and lateral branchlets loosely arranged, needle like, falcate, wide at base, apex acute or acuminate; leaves on mature trees and cone bearing branchlets densely arranged, overlapping, ovate to triangular, apex acute or obtuse. Male cones terminal, solitary and ovoid or ellipsoid. Female cones ovoid or ellipsoid, 6-10 cm long, bracteate, apex caudate. Seeds ellipsoid with membranous lateral wing.

Uses : The bark exudes a resin when cut. This resin can be dissolved in alcohol to treat kidney ailments. it is suitable for use as general-purpose construction timber; better grades are suitable for internal finishes for buildings, furniture and cabinet making. It is also an excellent veneer species and is used as such for making plywood.

19. Artabortrys hexapetalus *(L.f.) Bhandari*

Family : Annonaceae

Origin : South China, Phillippines, India



Kannada Name : Manoranjani, Kandaala

Common name - Tail grape, Climbing lang-lang

Species type : Indigenous

Conservation status : Not known

Phenology : Evergreen

Flowering period : April - July

Fruiting period : September - February

Description : A woody, evergreen, climbing shrub up to 10 m tall. Leaves simple, alternate, oblong-elliptic, glabrous above and glaucous below, base cuneate, apex acuminate to acute. Inflorescence 1 to 2 flowered. Flowers bisexual, green and fade to yellow with age and are extremely fragrant. Petals 6 or 9 in two whorls. Fruit 3-4 cm long, berry.

Uses : A decoction of the leaves is used as a treatment against cholera. The fruit is used to treat scrofula. The flowers yield an essential oil that is used in perfumery.

20. Artocarpus heterophyllus Lam.



Family : Moraceae

Origin : Western Ghats

Kannada Name : -

Common name - Jackfruit tree



Species type : Endemic

Conservation status : Not known

Phenology : Evergreen

Flowering period : March - April

Fruiting period : June - August

Description : Evergreen tree, 10- 20 m tall, blackish- grey bark. All parts contain a sticky, white latex. Leaves simple, spirally arranged, elliptic to obovate, lobed leaves in saplings, coriaceous, base cuneate, apex acute to obtuse, entire. Male inflorescence axillary or terminal catkins, female inflorescence catkins, borne on main trunk and old branches, flowers unisexual, minute, yellowish green in colour and enclosed in spathe like bracts. Fruit a sorosis, globose with tubercles, fleshy yellow to orange pulp. Seeds glossy.

Uses: The golden yellow timber with good grain is used for building furniture and house construction. It is termite-resistant and is superior to teak for building furniture. The wood is also used for manufacturing musical instruments. The pulp of young fruit is cooked as a vegetable, pickled or canned in brine or curry. Pulp of ripe fruit is eaten fresh or made into various local delicacies. The sap is an anti-syphilitic and a vermifuge.

21. Artocarpus lacucha Buch.-Ham.

Family : Moraceae



Origin : Indian subcontinent, Southeast Asia

Kannada Name : Esuluhuli, Vatehuli, Kanchisimbu

Common name - Monkey fruit tree

Species type : Indigenous



Conservation status : Not known

Phenology : Deciduous

Flowering period : February - May

Fruiting period : July - August

Description : Large deciduous tree, 10-15 m tall. Leaves simple, elliptical, sometimes pinnately lobed, are densely covered with yellow bristles, base broadly cuneate, apex obtuse, margin entire. Male inflorescences ovoid, orange-yellow. Female inflorescence slightly longer. Fruit globose, yellow, 7 cm in diameter.

Uses: The sap and juice of the bark is applied externally to boils, pimples, cuts and wounds. The root is astringent and is also used as a purgative. The macerated bark is used as a poultice for treating skin ailments.

22. Averrhoa carambola L.



Family : Oxalidaceae

Origin : India, Indonesia, Sri Lanka

Kannada Name : Kaparakhi mara

Common name - Carambola, Star fruit tree

Species type : Indigenous



Conservation status : Not known

Phenology : Evergreen

Flowering period : July - August

Fruiting period : October - January

Description : Small, evergreen tree, 5-12 m tall. Leaf compound, imparipinnate, alternate, leaflets ovate-elliptic, pubescent, base rounded or truncate, apex acute to acuminate. Inflorescence axillary or ramal panicles or cymes. Flowers numerous, small, lilac to purple, petals 8-9 mm long. Fruit a berry, narrowly oblong, 5 ridged, yellow when mature.

Uses : Starfruit juice can be used to remove stains from linen. The fruit can be a laxative on account of the oxalic acid it contains. It is also used in traditional medicine for skin disorders and fevers. It is valued by Chinese communities as

a remedy for high blood pressure, whilst it is also said to reduce blood sugar levels and so is of help to diabetics. The flowers are used to relieve coughs. The leaves are used to treat rheumatism. The seed is emmenagogue, galactagogue and abortifacient. The powdered seed is a good anodyne for treating asthma, colic and jaundice.

23. Azadirachta indica A. Juss.

Family : Meliaceae



Origin : Africa, Indian Subcontinent

Kannada Name : Bevina mara

Common name - Neem tree

Species type : Indigenous



Conservation status : Least concern

Phenology : Deciduous

Flowering period : March - April

Fruiting period : July - August

Description : Evergreen tree, 15-20 m tall. Crown dense and roundish. Leaves compound, imparipinnate, alternate pulvinus leaf base, medium to dark green, leaflets ovate-lanceolate to lanceolate, glabrous, base oblique, apex acuminate, margin serrate. Inflorescence an axillary panicle. Flowers bisexual, white, sweet scented, 8 mm in diameter. The fruit is a drupe, oblong-ovoid, greenish-yellow, sweet pulp surrounding a single seed.

Uses : Neem leaves are dried and placed in cupboards to prevent insects eating the clothes. It acts as an antifeedant, repellent, and egg-laying deterrent and thus protects the crop from damage. Neem oil has been shown to avert termite attack as an eco friendly and economical agent.

24. Barringtonia acutangula (L.) Gaertn.



Family : Lecythidaceae

Origin : Southeast Asia, Australia

Kannada Name : Dhatripala

Common name - Freshwater mangrove, Mango pine

Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period : March - May

Fruiting period : March - May

Description : Medium sized, evergreen tree, up to 15 m tall. Leaves simple, alternate, obovate to oblong, glabrous, base attenuate or cuneate, apex acute-acuminate, margin finely serrate. Inflorescence a terminal pendulous raceme. Flowers bisexual, 2 to 3 cm in diameter, red coloured. Fruit ovoid, quadrangular, 2 to 6 cm long, single seed.

Uses : Research on this plant has reported a number of medicinal uses, including antitumor (seed extract), antibiotic, inhibition of growth of Helicobacter pylori, antinociceptive activity and antifungal activity. Its bark contains potent opioid painkillers

25. Barringtonia asiatica (L.) Kurz**.**



Family : Lecythidaceae

Origin : Islands in Indian and Pacific ocean

Kannada Name : -

Common name - Sea poison tree, Fish poison tree



Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period :

Fruiting period :

Description : Small to medium-sized tree, 7-20 m tall. Bark fissured. Leaves simple, obovate to obovate-oblong, 20-40 cm in length and 10-20 cm in width, coriaceous, glabrous, base cuneate, apex obtuse or broadly rounded, margin entire. Inflorescence a terminal raceme. Flowers large, fragrant, petals white, stamens numerous, white coloured and red tipped. Fruit broadly pyramidal, smooth, 9-11 cm with spongy and fibrous pericarp. Seed 4-5 cm.

Uses : A decoction of the leaves is used to treat hernia. The leaves are heated and externally applied for stomach-ache. Fresh leaves are applied topically to bring relief from rheumatism and to treat sores. The toxic seeds are employed as a vermifuge.

26. Bauhinia purpurea L.



Family : Fabaceae

Origin : South China, South-east Asia

Kannada Name : Basavana Pada, Mandara mara

Common name - Camel foot tree



Species type : Indigenous

Conservation status : Not known

Phenology : Evergreen

Flowering period : September - February

Fruiting period : January - April

Description : It is a medium sized, semi-evergreen tree, growing up to 10 m. Leaves simple, alternate, sub-orbicular, bilobed, thin coriaceous, glabrous, minutely pubescent lower surface when young, base sub-cordate, apex slightly acute or rarely rounded, margin entire. Inflorescence an axillary or terminal, raceme or panicle. Flowers bisexual, petals 5, pink and fragrant. Fruit a pod, compressed, containing 12 to 16 seeds, coils after splitting open.

Uses: It is used in making poultices for treating swelling, bruises, boils, and ulcers. Various parts of the plant are also used in decoctions to treat fever and stomach ailments, as well as being used as an astringent. In Indian traditional medicine, the leaves are used to treat coughs while the bark is used for glandular diseases and as an antidote for poisons. The flowers are also used in pickles and curries and are regarded as a laxative.

27. Bauhinia tomentosa L.



Family : Fabaceae

Origin : Tropical Africa, India, Sri Lanka

Kannada Name : Kaadu mandara, Vana sampige

Common name - Yellow orchid tree

Species type : Indigenous

Conservation status : Not known



Phenology : Evergreen

Flowering period : December - March

Fruiting period : January - June

Description : Shrub or a small tree, evergreen but can be deciduous in harsh climates, up to 8 m tall. Young branches glabrous to pubescent. Leaves simple, sub-orbicular, bilobed, papery, tomentose on lower surface, glabrous above, base cordate, lobes rounded at apex. Inflorescence a terminal or lateral raceme. Flowers yellow, petals 5. Fruit a dehiscent pod, occasionally tomentose, 8-12 seeded. Seeds blackish-brown.

Uses : The root bark is used internally for conditions of the large intestine, while the flower is used as a remedy for dysentery and diarrhoea. A decoction of the root bark is used in India as a vermifuge and an infusion of the stem bark as an astringent gargle. The fruit is said to be diuretic, and the seed is eaten in India as a tonic and aphrodisiac.

Additional details : The generic name commemorates the Bauhin brothers Jean (1541-1613) and Gaspard (1560-1624), the Swiss botanists; the two lobes of the leaf exemplify the two brothers.

28. Beaucarnea recurvata Lem.



Family : Asparagaceae

Origin : Mexico

Kannada Name : -

Common name - Ponytail palm

Species type : Exotic

Conservation status : Critically endangered



Phenology : Evergreen

Flowering period :

Fruiting period :

Description : Small tree, evergreen growing up to 5m with a noticeable expanded caudex, for storing water. The single palm-like stem produces terminal tufts of strap-shaped simple, recurved coriaceous leaves, arranged in a rosette. Inflorescence a panicle of small white flowers, flowers rarely.

Uses : The leaves are very tough. They are used for thatching, making brooms, caskets, coarse hats, mats, etc. The fibre is used locally for cordage.

29. Bixa orellana L.

Family : Bixaceae

Origin : Central America

Kannada Name : Rangumaale, Sindhuri gida, Aranattu

Common name - Achiote, Lipstick tree



Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period :

Fruiting period :

Description : Evergreen, shrub or small tree, 6–10 m high. Young branches covered with red-brown scales. Leaves simple, alternate, cordate-ovate, glabrous, young leaves covered with scales on the lower surface, base, base cordate or truncate, apex acuminate, margin entire. Inflorescence a terminal panicle or corymb. Flower bright pink or mauve. Fruit globular, ovoid capsule purple-brown and spiny. Seeds numerous, red-brown.

Uses : The tree is best known as the source of annatto, a natural orange-red condiment obtained from the waxy arils that cover its seeds. Annatto and its extracts are also used as an industrial food coloring to add yellow or orange color to many products such as butter, cheese, margarine, ice creams, meats, and condiments.

30. Bombax ceiba DC.



Family : Malvaceae

Origin : Southern and Eastern Asia, Australia

Kannada Name : Kempu booruga

Common name - Malabar silk cotton tree, Red silk cotton tree



Species type : Indigenous

Conservation status : Not known

Phenology : Deciduous

Flowering period : January - February

Fruiting period : March - May

Description : A large, deciduous tree growing up to 45 m. Trunk buttressed, bears numerous conical prickles, particularly when young, but get eroded when older. Leaves palmately compound, with about 5-7 leaflets, alternate; leaflets elliptic, elliptic-lanceolate, elliptic-ovate, base attenuate or cuneate, apex acuminate, margin entire. Inflorescence terminal, solitary or fascicule. Flowers bisexual, large, red or orange-red, 10 cm in diameter. Fruit a capsule, 8-10 cm long, finely tomentose. Seeds numerous, brown, embedded in white cotton.

Uses : The flowers are astringent and refrigerant. They are used to treat cutaneous troubles. The young roots are diuretic and tonic. The seed floss is used as a stuffing material for pillows, cushions etc. It is considered to be vermin-proof.

31. Brownea grandiceps Jacq.



Family : Fabaceae

Origin : South America

Kannada Name :

Common name - Rose of Venezuela, Scarlet flame bean



Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : February - April

Fruiting period : April - May

Description : Evergreen tree, growing up to 20 m tall. Leaves paripinnate, alternate, 8-26 leaflets; leaflets elliptic or oblong, with elongated apex. Young leaves pendant, reddish-brown. Inflorescence is a terminal panicle or head. Flowers bisexual, pink or red. Fruit a woody pod, covered in brown velvety hairs containing up to 5 seeds.

Uses : Flowers are used in Venezuelan folk medicine as anti-hemorrhagic in women with heavy menstrual blood loss (menorrhagia).

32. Butea monosperma (Lam.) Taub.



Family : Fabaceae

Origin : Indian subcontinent

Kannada Name : Muttuga, Palasha

Common name - Flame of the forest, Palash

Species type : Indigenous



Conservation status : Not known

Phenology : Deciduous

Flowering period : February - April

Fruiting period : April - May

Description : Small to medium, deciduous tree, 10- 20 m tall, bark greyish black. Leaves are pinnately trifoliate, leaflets unequal, terminal leaflet obovate, lateral leaflets narrowly ovate, leathery with obtuse or emarginate apex, stipules small and deciduous. Inflorescence an axillary or terminal raceme, flowers bisexual, bright orange- red, silky pubescent outside. Fruit is a pod 10- 20 cm long, seed reddish brown.

Uses: It is used for timber, resin, fodder, medicine, and dye. The gum is known as Bengal Kino and is considered valuable by druggists because of its astringent qualities and by leather workers because of its tannin.

33. Calliandra haematocephala Hassk.



Family : Fabaceae

Origin : Bolivia

Kannada Name : -

Common name - Powderpuff tree



Species type : Exotic

Conservation status : Not known

Phenology : Deciduous

Flowering period : August - September



Fruiting period : October - November

Description : Shrub or small tree, 8-20 m tall. Leaves bipinnate, leaflets in pairs of 4-8, lanceolate, coriaceous, glabrous, base oblique, apex mucronate or obtuse. Inflorescence is a terminal or axillary panicle. Flower scarlet coloured, stamens numerous and red coloured. Fruit a pod, brown when ripe, 6-11 cm long. Seeds 5-6 in number.

Uses : It is used as an ornamental plant.

34. Callistemon citrinus R. Br.

Family : Myrtaceae



Origin : Australia

Kannada Name : -

Common name - Crimson bottlebrush



Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : February - May, August - November

Fruiting period : February and September

Description : Evergreen, erect, large shrub or small tree, up to 7.5 m tall. Young branchlets pink or lilac and hairy. Leaves narrowly lanceolate, glabrous, oil glands scattered, base cuneate, apex acuminate. Leaves have a citrus aroma when crushed. Inflorescence a spike growing beyond into a leafy shoot. Flowers crimson, sometimes lilac or purple-red. Stamens numerous, filaments crimson coloured, free at the base. Fruit a capsule, woody, depressed globose.

Uses : The different parts of this herb have been used in common remedies for treatment of diarrhoea, dysentery and rheumatism. It is also used as a water accent, anti cough, antibronchtits and insecticide in folk medicine .

35. Callistemon viminalis (Soland. ex. Gaertn.) G. Don.



Family : Myrtaceae

Origin : Australia

Kannada Name : -

Common name - Weeping bottlebrush tree

Species type : Exotic



Conservation status : Not known

Phenology : Evergreen

Flowering period : All year

Fruiting period : All year

Description : Evergreen, large shrub or small tree, up to 8 m tall. Bark grey and furrowed. Branches weeping, twigs silky haired. Leaves simple, alternate, linear-lanceolate, hairy when young, glabrous on maturity, base attenuate, punctate, glandular. Inflorescence a spike growing beyond into a leafy shoot. Flowers bright red. Stamens numerous, filaments red coloured and fused at the base. Fruit a capsule, woody, cup shaped.

Uses : It is considered antibacterial, antifungal, anthelmintic, hemostatic, diuretic. Studies have shown anthelmintic, anti-quorum sensing, insecticidal, anti-infective, antibacterial, molluscicidal, antioxidant, anticancer, anti-inflammatory, anti-platelet aggregation properties.

36. Calophyllum inophyllum L.





Family : Calophyllaceae

Origin : Australia, Southeast Asia

Kannada Name : -

Common name : Alexandrian laurel tree

Species type : Indigenous

Conservation status : Least concern

Phenology : Evergreen

Flowering period : December – January

Fruiting period : December – January

Description : Evergreen, large trees, 7.5-30 m tall. Bark grey with longitudinal fissures, trunk relatively short and long spreading branches. Leaves simple, opposite decussate, rarely verticillate, elliptic-oblong to obovate, coriaceous, glabrous, glossy, base broadly cuneate or rounded, apex rounded or emarginate, margin undulate. Inflorescence an axillary raceme, 7-12 flowered. Flowers bisexual, rarely polygamous, white coloured, petals 4. Fruit an indehiscent drupe, ovoid-globose, pale brown when ripe, endocarp spongy with a single seed.

Uses : A root decoction is traditionally used to treat ulcers, boils and ophthalmia. The bark is used to treat orchitis. The latex is rubbed on the skin in the treatment of rheumatism and psoriasis.

37. Careya arborea Roxb.



Family : Lecythidaceae

Origin : Indian subcontinent, Afghanistan, Indochina

Kannada Name : Alagavvele, Gonji, Goujal

Common name - Wild guava



Species type : Indigenous

Conservation status : Not known

Phenology : Deciduous

Flowering period : March - April

Fruiting period : June - July

Description : Medium sized deciduous tree growing up to 12m high. Leaves simple, alternate, obovate, oblong-obovate, glabrous, base cuneate or attenuate, apex round or shortly acuminate, margin crenate-serrate. Inflorescence a terminal spike. Flowers are greenish white, bisexual with an unpleasant smell. Fruit a berry, globose 2 - 3 inch long with numerous seed.

Uses : The bark of the tree and the sepals of the flowers are well-known Indian remedies, and are valued on account of their astringent and mucilaginous properties, being administered internally in coughs and colds and applied externally as an embrocation.

38. Caryota urens L.



Family : Arecaceae

Origin : Indian subcontinent

Kannada Name : -

Common name - Fishtail Palm

Species type : Indigenous

Conservation status : Least concern

Phenology : Evergreen

Flowering period : January - April

Fruiting period : January - April

Description : Trunk solitary, annulate, erect, up to 12 m tall. Leaves bipinnate, with a terminal leaflet, leaflets alternate, cuneate, fan-shaped, apex premorse. Inflorescence axillary, spadix and pendulous. Flowers unisexual and white. The fruit matures to a round drupe, red in color, juicy, irritant due to oxalate crystals, seeds 1-2.

Uses : Toddy is extracted from the inflorescence, and is considered somewhat powerful compared to toddy extracted from few other palm trees. Pulp of the fully grown up plant is cut, sun dried, powdered and is edible. The leaves possess strong fibres and are used for basketry

39. Cassia fistula L.



Family : Fabaceae

Origin : Indian subcontinent, Southeast Asia

Kannada Name : Kakke mara

Common name - Indian Laburnum

Species type : Indigenous



Conservation status : Not known

Phenology : Deciduous

Flowering period : April - July

Fruiting period : October - March

Description : It is a medium-sized tree, growing to 10–20 m tall. The leaves are deciduous and pinnate with three to eight pairs of leaflets. The flowers are produced in pendulous racemes 20–40 cm long, each flower 4–7 cm diameter with five yellow petals of equal size and shape. The fruit is a legume, 30–60 cm long and 1.5–2.5 cm broad, with a pungent odor and containing several seeds.

Uses : The ripe pods and seeds are widely used in both traditional and conventional medicine as a laxative. The bark or leaves are widely applied to skin problems. Broken bones and tropical ulcers are bandaged with bark scrapings and leaf sap.

40. Cassia grandis L.f.





Family : Fabaceae

Origin : South America

Kannada Name : -

Common name - Pink shower tree

Species type : Exotic

Conservation status : Not known

Phenology : Semi-deciduous

Flowering period : February - March

Fruiting period : March - May

Description : Deciduous or semi-deciduous, up to 30 m tall. Branchlets pubescent towards the tip, later glabrous. Leaves paripinnate, alternate with 10-20 pairs of leaflets; leaflets oblong-elliptic, tomentose below, pubescent above, base rounded, apex obtuse or rounded, margin entire. Inflorescence an axillary raceme. Flowers bisexual, pink to white. Fruit an indehiscent pod, cylindrical, up to 90 cm long with numerous seeds.

Uses : The membrane surrounding seeds is used as a chocolate substitute in Central America. It is reported to give strong multipurpose wood, used in joinery, carpentry, beams among others. The fruit pulp is used as a laxative and fresh juice of the leaves is used externally in the treatment of ringworm.

41. Cassia javanica L.



Family : Fabaceae

Origin : Southeast Asia

Kannada Name : -

Common name - Apple blossom tree

Species type : Exotic



Conservation status : Least concern

Phenology : Deciduous

Flowering period : April - June

Fruiting period :

Description : Deciduous tree growing up to 20 m, sometime up to 30 m. Leaves paripinnate, alternate with 10-20 pairs of leaflets; leaflets oblong, oval, pilose, base cuneate or rounded, apex acute, obtuse or shortly acuminate. Inflorescence a lateral or terminal raceme. Flowers bisexual, pink or crimson, stamens bright yellow. Fruit a pod, 20-60 cm long, black when ripe, seeds 50-75 in number.

Uses : The ripe pods and seeds are used as a traditional laxative. The bark and seeds are used as antipyretics in the treatment of fevers. The bark has been used for tanning, but the amount of tannin is comparatively low.

42. Cassia roxburghii DC.

Family : Fabaceae

Origin : South India

Kannada Name : Kakke

Common name - Red cassia

Species type : Indigenous

Conservation status : Not known

Phenology : Deciduous

Flowering period : May - August

Fruiting period : May - July



Description : Medium-sized tree, deciduous tree, 15-20 m tall with spreading, drooping branches. Leaves paripinnate, alternate with 8-20 pairs of leaflets; leaflets oblong, ovate-elliptical, unequal sided, tips blunt. Inflorescence an axillary pendulous raceme. Flower bisexual, red to pink, older flowers pink. Fruit a pod, 20-30 cm long, cylindrical and glabrous.

Uses : The dry leaves and bark is used to treat muscle spasms, diabetes, gastric problems, cold, diarrhea. Economical uses include its cultivation as ornamental plants.

43. Cassine paniculata (Wight & Arn.) T.P. Ramamoorthy

Family : Celastraceae

Origin : Western Ghats

Kannada Name : -

Common name - Panicled cassine

Species type : Endemic

Conservation status : Not known

Phenology : Evergreen

Flowering period : April - July

Fruiting period :





Description : Evergreen, large buttressed tree, up to 40 m tall. Trunk is hollow in very old trees. Bark is gray, smooth, blaze red with watery exudation. Leaves simple, opposite decussate, elliptic-oblong, glabrous, coriaceous, base acute or cuneate, apex acute or obtusely acuminate, margin crenate. Inflorescence an axillary dichasial corymbose cyme. Flowers bisexual, greenish-yellow, 1 cm across. Fruit a drupe, globose to ellipsoid, apiculate, 1-2 seeded.

Uses : Bark is given internally in extreme cases of anemia, as a blood purifier, given as cardiac tonic and as wound healing.

44. Castanospermum australe A. Cunn. C. Fraser**.**



Family : Fabaceae

Origin : Australia

Kannada Name : -

Common name - Moreton bay chestnut

Species type : Exotic



Conservation status : Not known

Phenology : Evergreen

Flowering period : October - November

Fruiting period : February - April

Description : Large, evergreen tree, up to 40 m tall. Leaves imparipinnate, alternate with 11-15 leaflets; leaflets alternate, oval shaped. Inflorescence a raceme. Flowers bisexual, yellow or orange, later turning into red, 4-5 cm long. Fruit a pod, cylindrical, up to 30 cm long with 1 to 5 seeds.

Uses : The seed yields compounds called castanospermine that are under investigation as HIV inhibitors and might be useful in the treatment of AIDS. Parts of the tree contain chemicals which, after careful extraction, have been shown to have anti-cancer, anti-inflammatory, and anti-HIV properties. The seedpods are astringent. They are used to treat postprandial hyperglycemia in diabetic patients.

Additional details : Flowers are produced on the old wood. This species has a symbiotic relationship with certain soil bacteria, these bacteria form nodules on the roots and fix atmospheric nitrogen. Some of this nitrogen is utilized by the growing plant but some can also be used by other plants growing nearby.

45. Casuarina equisetifolia L. ex. J.R. & G.Forst.



Family : Casuarinaceae

Origin : Southeast Asia, Australia

Kannada Name : Kyasurina Sarve mara

Common name - Australian pine tree



Species type : Exotic

Conservation status : Least concern

Phenology : Indigenous

Flowering period : April - June

Fruiting period : September - December

Description : Evergreen tree which grows upto 35m, monoecious, often pyramidal; bark dark grey or brownish. Youngest persistent stems with internodes with whorls of 6-8 scale leaves, 2-3 mm, straw coloured, narrowly triangular, pubescent, margin with numerous white or pale cilia. Persistent branches give rise to nuumerous deciduous branches that are green, 7-8 parallel ribs; scale leaves in whorls of 6-8, pale green or straw coloured, small, adpressed, united at base, glabrous, margin with cilia. Male inflorescenes abundant on deciduous branches, rare on persistent branches. Female inflorescnces axillary and borne on apices of younger persitent branches. Infructescence short, cylindricalor sub-globose with flattened apex. Fruit a samara, woody, pale brown, containing a single seed.

Uses : Root extracts are used for the treatment of dysentery, diarrhoea and stomach-ache. A decoction of the twigs is used for treating swelling. The fresh bark is an excellent astringent. It is used in the treatment of chronic diarrhoea and dysentery. A decoction of the inner bark, combined with the inner bark of ***Terminalia catappa***, is taken as a treatment for asthma and shortness of breath.

46. Ceiba pentandra (L.) Gaertn.





Family : Malvaceae

Origin : Mexico, Central America, South America

Kannada Name : Bili booraga

Common name - Java cotton, Silk cotton tree

Species type : Exotic

Conservation status : Least concern

Phenology : Deciduous

Flowering period : January - March

Fruiting period : September - October

Description : Large deciduous tree, evergreen, 30-40 m tall. Buttresses present. Bark smooth, green or greenish-grey with scattered conical spines, up to 1.5 cm long, young branches glabrous or pubescent. Leaves palmately compound, alternate with 5-9 leaflets; leaflets elliptic, obovate-oblong, glabrous, base acute or cuneate, apex acute or acuminate, margin entire. Inflorescence in clusters of 3-10, axillary, rarely solitary. Flowers bisexual, creamy white or pink; petals glabrous outside, silky villous inside. Fruit a capsule, woody, smooth, brown, oblong-ellipsoid, 10-26 cm long. Seeds numerous, embedded in white or greyish silky wool.

Uses : The bark decoction has been used as a diuretic, as an aphrodisiac, and to treat headache, as well as type II diabetes. It is used as an additive in some versions of the psychedelic drink Ayahuasca. Oil from its seeds are extracted and used as vegetable oil.

47. Ceiba speciosa A. St. Hil.

Family : Malvaceae



Origin : South America

Kannada Name : -

Common name - Silk floss tree

Species type : Exotic

Conservation status : Least concern



Phenology : Deciduous

Flowering period : September - October

Fruiting period : March - May

Description : Deciduous tree, up to 25 m tall. Bark greenish in younger trees, covered with numerous spines. Leaves palmately compond, composed of 5 to 7 leafltes; leaflets more or less lanceolate, glabrous, base acute, apex acuminate, margin serrate. Inflorescence in clusters or soliatry in axils of terminal branches. Flowers bisexual, creamish-white in the center and pink towards the tips. Fruit a dehiscent capsule, about 20 cm long, seeds embedded in white cottony mass.

Uses : The silk floss tree is cultivated mostly for ornamental purposes. The wood can be used to make canoes, as wood pulp, and to make paper. The bark has been used to make ropes. From the seeds it is possible to extract vegetable oil.

48. Centrolobium tomentosum Guill. ex Benth.

Family : Fabaceae



Origin : South America

Kannada Name : -

Common name - Araribá rosa

Species type : Exotic



Conservation status : Not known

Phenology : Deciduous

Flowering period :

Fruiting period :

Description : Deciduous tree, dense, spreading crown, 10-12 m tall. Leaves imparipinnate; leaflets 13-17, oblong-ovate, pubescent, base obliquely truncate. Inflorescence a panicle. Flowers are papilionaceous, yellow. Fruit a pod, spiny, with a broad falcate-ovate wing.

Uses : It is used in reforestation projects for restoring native woodland. A very decorative wood, it is used for cabinet making, furniture, ship building, indoor and outdoor hydraulic work, beams, canoes, wagons, general carpentry.

Additional details : This species has a symbiotic relationship with certain soil bacteria, these bacteria form nodules on the roots and fix atmospheric nitrogen. Some of this nitrogen is utilized by the growing plant but some can also be used by other plants growing nearby.

49. Cerbera odollam Gaertn.

Family : Fabaceae



Origin : South America

Kannada Name : -

Common name - Araribá rosa

Species type : Exotic



Conservation status : Not known

Phenology : Deciduous

Flowering period :

Fruiting period :

Description : Small evergreen tree, up to 6 m tall, bark greenish-brown, latex milky. Leaves simple, alternate, crowned at the tip of branches, lanceolate or oblanceolate, glabrous, base cuneate or attenuate, apex acuminate or acute, margin entire. Inflorescence a pseudoterminal cyme. Flowers bisexual, white. tube funnel-shaped. Fruit a drupe, globose or ellipsoid, green, rosy when ripe; seeds 1-2.

Uses : It is used in reforestation projects for restoring native woodland. A very decorative wood, it is used for cabinet making, furniture, ship building, indoor and outdoor hydraulic work, beams, canoes, wagons, general carpentry.

Additional details : This species has a symbiotic relationship with certain soil bacteria, these bacteria form nodules on the roots and fix atmospheric nitrogen. Some of this nitrogen is utilized by the growing plant but some can also be used by other plants growing nearby.

50. Chukrasia tabularis A. Juss.



Family : Meliaceae

Origin : Indian subcontinent

Kannada Name : Kalgarike, Madagari bevu

Common name - Indian mahogany, Chitta gong wood



Species type : Indigenous

Conservation status : Least concern

Phenology : Deciduous

Flowering period : April - May

Fruiting period : December - March

Description : Large, deciduous tree, up to 35 m tall. Bark thick, dark brown, with thin irregular flakes, blaze pink-red. Leaves paripinnate, 12-50 cm long, alternate, pulvinate; leaflets 10-24, alternate or subopposite; leaflets narrow ovate to lanceolate, coriaceous, glabrous above, pubescent beneath, base oblique, apex acuminate, margin entire. Inflorescence a terminal panicle, greyish, pubescent. Flowers bisexual, yellowish-white. Fruit a capsule, globose, 4 cm across, 4-5 valved, glabrous; seeds many, broadly winged at base.

Uses : Major uses are fine furniture, turnery, doors, windows and light flooring. Flowers contain a red and yellow dye. The bark and leaves contain commercial gums and tannins and the astringent bark has medicinal uses. It is planted as a shade tree for coffee plantations.

51. Cinnamomum verum J.Presl.



Family : Lauraceae

Origin : Sri Lanka, India

Kannada Name : Lavanga Chakke, Lavangapatte

Common name - Cinnamon tree

Species type : Indigenous

Conservation status : Least concern



Phenology : Evergreen

Flowering period : January - March

Fruiting period : June - August

Description : Evergreen trees, 10-20 m tall. Bark smooth, brown with strong cinnamon smell; buttressed. Leaves simple, opposite or subopposite, rarely alternate, ovate, elliptic ovate to elliptic-lanceolate, glabrous, base acute to attenuate, apex acute to acuminate, margin entire, tri-nerved venation. Inflorescence terminal or axillary panicles. Flowers bisexual, greenish-yellow. Fruit a berry, ellipsoid, dark purple 1-2 cm containing a single seed.

Uses: Cinnamon bark is astringent, stimulant and carminative. It possesses the property of checking nausea and vomiting.Cinnamon bark oil is employed in a range of dental and pharmaceutical preparations. Oils extracted from it are used in the food flavouring industry but are also used in tobacco flavours and for incense. It has limited use in some perfumes.

52. Citharexylum spinosum L.



Family : Verbenaceae

Origin : Caribbean, Tropical America

Kannada Name : Beli parijatha

Common name : Florida fiddlewood



Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period : All year

Fruiting period : All year

Description : Large shrubs or small, evergreen trees up to 15 m tall. Branches and branchlets 4-angular. Leaves simple, opposite decussate, ovate, oblong-elliptic, to lanceolate, glabrous, chartaceous, base cuneate to acute, apex acuminate, margin entire or dentate. Inflorescence terminal or axillary racemes. Flowers bisexual, creamish-white, fragrant. Fruit a drupe, oblong, black and fleshy.

Uses : A decoction of the young twigs is used in the treatment of children's thrush. A decoction of the bark is used as a treatment for colds. It is used for making furniture, musical instruments such as guitars, and is also used for general construction, windows, doors, beams. The wood is useful for fence posts and other rough construction where resistance to termites and to rot are required.

53. Citrus limon (L.) Burm.f.

Family : Rutaceae



Origin : Northeast India, Myanmar, China

Kannada Name : Nimbe hannu mara

Common name : Lemon Tree

Species type : Indigenous

Conservation status : Not known



Phenology : Evergreen

Flowering period : All year

Fruiting period : All year

Description : Evergreen, spinous shrubs or small trees, 3-6 m tall. Spines axillary. Leaves simple, alternate, elliptic to ovate, glandular, base obtuse or rounded, apex subacute or obtuse, margin serrulate, petioles narrowly winged. Inflorescence clusters or solitary, axillary. Flowers bisexual, white, strongly scented. Fruit a hesperidium, globose to elongated, glandualr, yellow when ripe, with a leathery rind or peel.

Uses : The essential oil from the skin of the fruit is strongly rubefacient and when taken internally in small doses has stimulating and carminative properties. The fruit is rich in vitamin C which helps the body to fight off infections and also to prevent or treat scurvy.

54. Clitoria arborea Benth.



Family : Fabaceae

Origin : Brazil, Bolivia, Peru

Kannada Name : -

Common name - Butterfly pea tree



Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period :

Fruiting period :

Description : Evergreen, small tree. Stem galbrous; leaf pinnately compound, leaflets broadly obovate, obtuse, emarginated at the base, unevenly rounded, glabrous. Inflorescence a raceme. Flowers bisexual, pink, papilonaceous corolla. Fruit a pod.

Uses :

55. Cocos nucifera L.



Family : Arecaceae

Origin : Southeast Asia, Caribbean

Kannada Name : Thengina mara



Common name - Coconut tree

Species type : Exotic

Conservation status : Not known



Phenology : Evergreen

Flowering period : All year

Fruiting period : All year

Description : Large palm, erect, with annular petiolar scars, usually not straight, trunk usally swollen at the base, growing up to 30 m tall. A tuft of leaves arises at the apex, pinnate, leaflets 60-100 in number; leaflets opposite near the base, alternate and opposite near the tip, shiny green above, paler below, coriaceous, base narrow, apex tapering, acute, midrib prominent. Inflorescence an axillary panicle. Flowers unisexual; male flowers yellowish-brown, 8 mm long; female flowers woody. Fruit a drupe, up to 30 cm long, ovoid or globose, trigonous, pericarp fibrous, endocarp stony. Seed coherent with the endocarp. Endosperm white, mily fluid.

Uses : It has many culinary uses all over the world. The roots are used as a dye, a mouthwash, and a folk medicine for diarrhea and dysentery. Coconut trunks are used for building small bridges and huts; they are preferred for their straightness, strength, and salt resistance. The leaves are used as brooms and for making baskets,etc.

56. Colvillea racemosa Boj.



Family : Fabaceae

Origin : Madagascar

Kannada Name : -

Common name - Colville's glory

Species type : Exotic



Conservation status : Least concern

Phenology : Deciduous

Flowering period : August - October

Fruiting period :

Description : Deciduous tree, 20-30 m tall with spreading branches. Bark brownish-grey with copper tone and brown corky spots. Leaves bipinnate, alternate, with 20-30 pairs of pinnae, each bearing 20-28 pairs of leaflets arranged oppositely; leaflets linear to oblong, base rounded, apex obtuse to rounded, margin entire. Inflorescence a raceme. Flowers bisexual, scarlet to orange; stamens, 10, prominent and yellow. Fruit a pod, oblong, two valved.

Uses : It is suitable for light joinery, interior trim, furniture, boxes and crates. The boles are used to make dug-out canoes. It is planted as an ornamental tree because of its bright orange flowers and delicate foliage.

57. Cordia dichotoma G.Forst.





Family : Boraginaceae

Origin : Indomalayan realm

Kannada Name : Challe

Common name - Indian cherry tree

Species type : Indigenous

Conservation status : Not known

Phenology : Deciduous

Flowering period : March - May

Fruiting period : June- August

Description : Medium sized, deciduous tree, up to 15 m tall with a spreading crown.Bark is greyish brown, smooth or longitudinally wrinkled. Leaves simple, alternate, broadly ovate or elliptic oblong, sparsely pubescent or glabrous, base rounded to broadly cuneate, apex obtuse to mucronate, margin dentate or entire. Inflorescence a dichotomous corymbose cyme. Flowers dimorphic; male flowers white; bisexual flowers larger than male flowers, white. Fruit a drupe, fragrant, subglobose, yellow or pinkish-yellow, black on ripening, with sticky mesocarp, persistent calyx, single seeded.

Uses : The fruit used to remedy treatment to relive several diseases as anti-diabetic, immunomodulator, hepatoprotective, treatment of inflammation, fever, bronchitis and astringent, wounds healing and paralytic in folk medicine.

58. Cordia myxa L.



Family : Boraginaceae

Origin : South Iran, Indo-China

Kannada Name : Kaaduchalle

Common name - Assyrian plum tree

Species type : Indigenous

Conservation status : Not known



Phenology : Deciduous

Flowering period : March - April

Fruiting period : July - August

Description : Deciduous, small trees, 6-12 m tall. Bark greyish brown with vertical fissures. Leaves simple, alternate, broadly ovate to circular, subcoriaceous, glabrous above, glabrous to pubescent below, base rounded to cordate or cuneate, apex obtusely acuminate, margin entire to slightly dentate. Inflorescence a terminal cyme. FLowers variable, unisexual and bisexual flowers, white. Fruit a drupe, 20 mm long, ovoid or globose, apiculate, glabrous, yellow or brownish-yellow with mucilaginous sweet pulp, 1 seeded.

Uses : The fruit pulp is commonly used in folk medicine to treat cough and chest complaints, as well as for the treatment of wounds and ulcers. Several studies have confirmed its anti-inflammatory and analgesic activities.

59. Cordia sebestena L.



Family : Boraginaceae

Origin : Tropical America

Kannada Name : Challekendala

Common name - Geiger tree, Scarlet cordia

Species type : Exotic



Conservation status : Not known

Phenology : Evergreen

Flowering period : All year

Fruiting period : All year

Description : Shrubs or small trees, up to 8 m tall. Brachlets pubescent. Leaves simple, alternate, coriaceous, pubescent on the underisde, base rounded, apex acute, margin entire to undulate. Inflorescence in terminal cymose panicles. Flowers bisexual, vermillon coloured. Fruit a drupe, ovoid, hard, white when ripe, fleshy, 1-4 seeded.

Uses : The leaves are emollient. They are used in the treatment of bronchitis, coughs, fever and influenza. The plant has been used as a remedy for intestinal and stomach complaints, and also for bronchial affections. A syrup prepared from the bark, flowers and fruit is a local remedy for affections of the chest.

60. Couroupita guianensis Abul.



Family : Lecythidaceae

Origin : Central and South America

Kannada Name : Lingada hoovinamara

Common name - Cannonball tree



Species type : Exotic

Conservation status : Least concern

Phenology : Deciduous

Flowering period : All year

Fruiting period : All year

Description : Deciduous trees growing up to 35 m. Leaves in clusters at the tip of branches, simple, alternate, oblong, obovate, elliptic or broadly lanceolate, veins on underside pubescent, base cuneate, apex acute, margin entire or finely serrate. Inflorescence a raceme. Flowers bisexual, yellow and red tinged, deep red to pink inside, fragrant. Fruit indehiscent, globose, hard woody exocarp, reddish-brown, pulpy inside with 200-300 seeds.

Uses: The extracts of several parts of the tree to treat hypertension, tumors, pain, and inflammation. It has been used to treat the common cold, stomachache, skin conditions and wounds, malaria, and toothache.

Additional details : In India, the tree has been adopted as sacred to Hindus, who believe its hooded flowers look like the nāga, and it is grown at Shiva temples.

61. Crescentia cujete L.



Family : Bignoniaceae

Origin : Africa, Central and South America

Kannada Name : Sokeburude

Common name - Calabash tree



Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : All year

Fruiting period : All year

Description : Small, evergreen tree, up to 10 m tall. Leaves simple, sessile, clustered at ends, obovate to oblanceolate, alternate, chartaceous, glabrous above, pubescent below, base attenuate, apex acute to obtuse. Inflorescence one or two cauliflorous flowers. Flower bisexual, yellowish-white with musty odour. Fruit a pepo, spherical to ovoid, up to 30 cm long, green; seeds small, scattered throughout the pulp.

Uses: The juice of the fruit is used to treat diarrhoea, pneumonia and intestinal irregularity. The leaf is chewed to treat toothache. The leaves are used as a wash to cleanse dirty wounds.

62. Cupressus funebris Endl.



Family : Cupressaceae

Origin : China, Vietnam

Kannada Name : -



Common name - Chinese weeping cypress

Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period :

Fruiting period :

Description : Evergreen, coniferous tree, up to 35 m. Bark smmoth, brown. Braches more or less horizontal, brachlets arranged in a plane, pendulous, green, slender, flattened, ca. 1 mm wide. Leaves light green or gray-green, densely appressed, scale-like, dimorphic, 1-1.5 mm long, apex pointed; facial pairs with a linear abaxial gland; lateral pairs folded face-to-face, overlapping basal part of facial pairs, ridged abaxially. Pollen cones ellipsoid or ovoid with 10-14 microsporophylls. Seed cones dark brown when ripe, globose, 8-15 mm across in diameter, cone scales 6-12, each fertile scale with 3-6 seeds. Seeds light brown, lustrous, flattened, ovate-rhombic or suborbicular.

Uses: The leaf is antiperiodic. It is used in the treatment of bleeding piles, excessive menstrual flow etc. A decoction of fruiting branches is used in the treatment of colds.

63. Cupressus sempervirens L.



Family : Cupressaceae

Origin : Mediterranean region

Kannada Name : -

Common name - Mediterranean cypress, Italian cypress



Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period : March - April

Fruiting period :

Description : Evergreen, coniferous tree, up to 30 m tall; bark greyish brown, shallowly fissured; branches ascending or horizontal spreading; brachlets not arranged in a plane, ultimate ones 4-angled, ca. 1 mm in diameter. Leaves in 4 ranks, densely appressed, dark green, not glaucous, 0.5-1 mm, ridged abaxially, without a conspicuous abaxial gland, apex obtuse or subacute. Pollen cones 4-8 mm. Seed cones yellowish grey when ripe, subglobose or ellipsoid, 2-3 cm in diameter, cone scales 8-14, each fertile scale with 8-20 seeds. Seeds brown, compressed, winged and narrow.

Uses: The cones and young branches are anthelmintic, antipyretic, antirheumatic, antiseptic, astringent, balsamic and vasoconstrictive. Taken internally, it is used in the treatment of whooping cough, the spitting up of blood, spasmodic coughs, colds, flu and sore throats.

64. Cycas circinalis L.



Family : Cycadaceae

Origin : Western Ghats

Kannada Name : Guddeechal, Mandeechal

Common name - Queen sago



Species type : Endemic

Conservation status : Endangered

Phenology : Evergreen

Flowering period : December - February

Fruiting period : December - February

Description : A dioecious cycad, slow growing, up to 6 m tall. Leaves pinnate, alternate, in spirals, 3 m long and 2 ft wide, glossy, dark green; leaflets 0.5 inch wide; small spines line the petiole; leaf bases persistent. Male and female cones are borne on separate plants. Male cones, brown, up to 2 feet long, 5 inches thick, erect. Female cones leaflike, with each sporophyll bearing 6-10 large ovules on the margins. Mature seeds orange, smooth, 2.5 inches in diameter.

Uses: The male cone scales are commonly sold for use as an anodyne in bazaars in India. The bark and the seeds are ground to a paste with oil and used as a poultice on sores, cuts, wounds, ulcers and swellings.

65. Dalbergia latifolia Roxb.



Family : Fabaceae

Origin : Indian subcontinent

Kannada Name : Beete mara

Common name - Indian rosewood tree

Species type : Indigenous



Conservation status : Vulnerable

Phenology : Deciduous

Flowering period : December - March

Fruiting period : January - April

Description : Deciduous tree, up to 25 m high. Bark thick, grey, smooth with irregular cracks, blaze yellow to yellow-brown. Leaves imparipinnate, rarely 1-foliate, alternate, pulvinate; leaflets 3-9, alternate, orbicular, glabrous, coriaceous, base acute or very rarely trunctae, apex obtuse or emarginate, margin entire. Inflorescence axillary panicles. Flowers bisexual, white, 5-6 mm long. Fruit an indehiscent pod, oblong-lanceolate, tip obtuse, up to 7.5 cm; seeds 1-4, reniform and brown.

Uses : Wood from the tree is used in premium furniture making and cabinetry, guitar bodies and fretboards, exotic veneers, carvings, boats, skis, and for reforestation. Medicines are made from the tannins in the bark, for diarrhoea, worms, indigestion, and leprosy.

66. Dalbergia melanoxylon Guill. & Perr.



Family : Fabaceae

Origin : Africa

Kannada Name : -

Common name - African blackwood



Species type : Exotic

Conservation status : Near threatened

Phenology : Deciduous

Flowering period : December - March

Fruiting period : January - April

Description : It is a spiny, deciduous shrub or tree, reaching 5-12 m tall, sometimes up to 30 m with grey bark , heartwood purplish-brown to black. Leaves pinnately compund, 8-20 cm long; 8-12 or more leaflets; leaflets circular to broadly elliptic or obovate, glabrous, slightly pubescent beneath, slightly cordate or cuneate at the base, apex emarginate or retuse, margin entire. Inflorescence a terminal or axillary panicle. Flowers white, fragrant, 3.5-5 mm long. Fruit a pod 3-7 cm long, elliptic-oblong, glabrous, 1-3 seeded.

Uses : The roots are used in traditional medicines to treat abdominal pain, diarrhoea and syphilis; the wood smoke is inhaled to treat headaches and bronchitis.

67. Dalbergia sissoo Roxb. ex DC.

Family : Fabaceae

Origin : Indian subcontinent

Kannada Name : Beete mara

Common name - North Indian rosewood, Sheesham tree

Species type : Indigenous

Conservation status : Least concern

Phenology : Deciduous

Flowering period :March

Fruiting period : April - May



Description : Medium to large deciduous tree, up to 30 m high. Bark thin, grey, longitudinally furrowed. Leaves imparipinnate, alternate, leaflets 3-5; leaflets broadly ovate or subobicular, glabrous when old, apex acuminate, margin entire. Inflorescnce an axillary panicle. Flowers yellowish-white. Fruit a pod, linear-oblong, strap shaped, 3.7-10 cm long, glabrous, 1-4 seeded. Seeds flattened.

Uses : It 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. In India, the wood has been used in Siddha medicine system for skin disorders and stomach-related issues.

Additional details : It is the larval food plant of the black rajah (***Charaxes solon***).

68. Delonix regia (Bojer ex Hooke.) Raf.



Family : Fabaceae

Origin : Madagascar

Kannada Name : Kempukenjiga, Kempu torai

Common name - Gulmohur tree

Species type : Exotic



Conservation status : Least concern

Phenology : Evergreen

Flowering period : April - July

Fruiting period : June - August

Description : Large deciduous tree, up to 30 m tall. Bark greyish-brown, rough with conspicuous lenticels. Leaves bipinnate, up to 60 cm long, pinnae 11-18 pairs, leaflets in 20-30 pairs. Leaflets opposite, oblong, usually puberulent along the veins, base oblique, apex obtuse, margin entire. Inflorescence a terminal or axillary corymbose raceme. Flowers bright red to orange-red, 7-10 cm in diameter, stamens red. Fruit a pod, brown to blackish brown when mature, broadly linear, slightly curved, compressed, 30-50 cm long. Seeds 20-40, mottled.
Uses : The seeds contain gum that may find use in textile and food industries. It is mainly valued as a decorative tree, often being planted in avenues and gardens.

Additional information : There is a popular belief among Saint Thomas Christians of Kerala that when Jesus was crucified, there was a small gulmohar tree nearby his Cross. It is believed that the blood of Jesus Christ was shed over the flowers of the tree and this is how the flowers got a sharp red color.

69. Dimocarpus longan Lour.



Family : Sapindaceae

Origin : Tropical Asia, China

Kannada Name : Kendaala, Kanekendaala

Common name - Longan tree

Species type : Exotic



Conservation status : Near threatened

Phenology : Evergreen

Flowering period : December

Fruiting period : June- July

Description : Evergreen trees, up to 25 m high. Leaves pinnate, alternate, leaflets 3-6 pairs, oblong-elliptic to oblong lanceolate, glabrous, base broadly cuneate to truncate, apex acute, sometimes obtuse, margin entire. Inflorescence terminal or axillary panicles. Flower polygamous, yellowish-white. Fruit a schizocarp, globose, reddish-brown, tubercled, 1.5 cm across. Seed 1, black, covered by fleshy aril.

Uses : The flesh of the fruit is administered as a stomachic, febrifuge and vermifuge, and is regarded as an antidote for poison. A decoction of the dried flesh is taken as a tonic and treatment for insomnia and neurasthenic neurosis.

70. Diospyros discolor A. DC.



Family : Ebenaceae

Origin : Taiwan

Kannada Name : -

Common name - Velvet apple, Butter fruit

Species type : Exotic

Conservation status : Not known



Phenology : Evergreen

Flowering period :

Fruiting period :

Description : Large, evergreen, dioecious trees up to 30m in height. Braches initially pubescent. Leaves simple, alternate, oblong-lanceolate, coriaceous, galbrous above, pubescent below, base obtuse, rounded or subcordate, apex sharp or rarely obtuse, margin revolute. Male flowers in axillary cymose inflorescences. Female flowers solitary, hairy flower. Flowers yellowish-green in colour. Fruit a berry, globose, lightly flattened, densely reddish hairy, reddish when ripe with whitish pulp.

Uses : A decoction of the young leaves is used as a treatment for hypertension, heart ailments and diabetes. The juice of unripe fruit is astringent. It is used as a wash for wounds.

71. Diospyros malabarica (Desr.) Kostel.



Family : Ebenaceae

Origin : Indian subcontinent, South east Asia

Kannada Name : Holitupare

Common name - Gaub tree, Malabar ebony



Species type : Indigenous

Conservation status : Not known

Phenology : Evergreen

Flowering period : May - June

Fruiting period : March - April (the following year)

Description : Evergreen, dioecious tree, up to 35 m tall. The bark is black, smooth, and the inner bark turns bluish on exposure to sunlight. Leaves simple, alternate or sub-opposite, oblong-lancelate, glabrous, acute or obtuse. Flowers unisexual, the male flowers are formed in 3-5 flowered cymes in leaf axils; Female flowers are solitary. Fruit a berry, globose, yellow when ripe, pulp glutinous; 4-8 seeded, compressed.

Uses : The bark, leaves, flowers and fruits are much used in Ayurvedic medicine. The juice of the fresh bark is useful in the treatment of bilious fevers. The seeds are used as a treatment for diarrhoea and chronic dysentery.

72. Duabanga grandiflora (Roxb. ex DC.) Walpers



Family : Lythraceae

Origin : India, Nepal, China

Kannada Name : -

Common name - Duabanga

Species type : Indigenous



Conservation status : Not known

Phenology : Evergreen/Semi-deciduous

Flowering period : April

Fruiting period :

Description : Evergreen or semi-evergreen trees, growing up to 40 m. Sparingly branched, branches are four-angled. Leaves simple, rigis, distichous, ovate to oblong, abaxially glaucous, base cordate, apex shortly acuminate. Inflorescence a corymb. Flowers bisexual white. Fruit a capsule, subglobose, 6-9 valved. Seeds 4-6 mm.

Uses : The fruits and leaves are boiled to make a black dye. The wood is used for purposes such as boxes and crates, tea boxes, furniture components, house and boat building, blockboard, fibre boards and pulp.

73. Elaeis guineensis Jacq.



Family : Arecaceae

Origin : West and South Africa

Kannada Name : -

Common name - African oil palm

Species type : Exotic



Conservation status : Least concern

Phenology : Evergreen

Flowering period : All year

Fruiting period : All year

Description : Stem erect, up to 30 m tall. Trunk covered by remains of leaf bases when young. Crown massive, 40-50 leaves arranged in several planes. Leaves pinnate, 8/13 phyllotaxis, 100-150 leaflets on each side. Inflorescences either male or female, rarely both. Male flower with 3 chaffy sepals and 3 chaffy acute petals. Female flower accompanied by 2 abortive male flowers. Fruit broadly ellipsoid or ovoid, orange proximally and brown to blackish diatally, endocarp black.

Uses : Palm oil extracted from this tree is popular in West Africa and Malaysia for cooking. Palm wine is the delicious wine obtained by tapping the base of the immature inflorescence of the oil palm.

74. Elaeocarpus angustifolius Blume.



Family : Elaeocarpaceae

Origin : Australia

Kannada Name : - -

Common name - Blue marble tree

Species type : Exotic



Conservation status : Not known

Phenology : Evergreen

Flowering period :

Fruiting period :

Description : Evergreen trees, up to 30 m tall. Branchlets yellowish-brown, villous. Leaves simple, alternate oblong-obovate to oblong-lanceolate, membranous, villous when young, glabrescent when mature, base broadly cuneate, apex acute or obtuse, margin serrate. Inflorescence an axillary raceme. Flowers bisexual, creamish-white. Fruit a drupe, globular, glabrous, bright blue, 5 locular, one seed per locule, rugulose.

Uses : The seeds are valued as a remedy for blood pressure and heart ailments. The fruit is used in the treatment of diseases of the head and epileptic fits. The leaf sap is used to cure stomach-ache or pain in the chest and shoulders.

Additional Information - Fruit stones were used by native Australians for necklaces. The seeds are known as Rudraksha in India and are considered to be sacred.

75. Enterolobium cyclocarpum (Jacq.) Griseb.



Family : Fabaceae

Origin : Tropical America

Kannada Name : -

Common name - Monkey ear tree, Elephant ear tree

Species type : Exotic



Conservation status : Not known

Phenology : Deciduous

Flowering period : March - April

Fruiting period :

Description : Medium-sized to large deciduous tree, up to 30 m tall. Crown spreading, thin; young branchlets, leaves and inflorescences white pubescent. Leaves bipinnate, alternate; pinnae 3-9 pairs; leaflets 12 -30 pairs, falcate-lanceolate, sparsely pubescent, base truncate, apex mucronate, margin entire. Inflorescence a head. Flowers bisexual, greenish or white, stamens numerous. Fruit an indehiscent pod, black-brown, curved, auriculate-reniform, flesh and rounded. Seeds 10-20 arranged in 2 rows, dark brown and shiny.

Uses : Bark extracts are used medicinally against colds and bronchitis. The wood is resistant to attack by dry-wood termites and Lyctus, and can be used in house construction as well as in interior elements, including panelling. The wood is also excellent for producing quality paper.

76. Eucalyptus globulus Labill.



Family : Myrtaceae

Origin : Australia

Kannada Name : Neelagiri

Common name – Southern blue gum tree



Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : December – May

Fruiting period :

Description : Large trees, up to 45 m tall. The bark is usually smooth, white to cream-coloured but rough and brownish bark at base. Young leaves opposite, sessile, ovate. Leaves simple, alternate, lancelate, falcate, coriaceous, both surfaces glandular, apex acuminate, margin entire. Inflorescence an axillary umbel. Flowers sessile, bisexual, operculum flattened, hypanthium as wide as operculum. Fruit obconic to hemspherical, glaucous, 1–2.1 cm long, 3–5 valves. Seeds flattened and ellipsoid.

Uses : The leaves are steam distilled to extract eucalyptus oil which has therapeutic, perfumery, flavoring, antimicrobial and biopesticide properties. The leaves are used in herbal tea.

77. Ficus amplissima Rees.

Family : Moraceae



Origin : Western ghats, Sri Lanka

Kannada Name : Bilibasari mara

Common name - Indian bat tree

Species type : Indigenous

Conservation status : Not known



Phenology : Evergreen

Flowering period : December - January

Fruiting period : December - February

Description : A large deciduous tree, up to 18 m tall. Bark-greenish-grey, young shoots whitish puberulous to vinous. Leaves simple, coriaceous, ovate or elliptic-lanceolate to ovate-oblong, glabrous, coriaceous, base rounded to cuneate, acute or obtusely acuminate at apex, stipules ovate-lanceolate. Inflorescence a syconium. Hypanthodia monoecious, sessile, in axillary pairs and around old leaf scars, depressed globular or obovoid, glabrous to puberulous basal bracts. Male flowers: few, disperse, stamen single. Female flowers: sessile; ovary white. Figs depressed-globose to pyriform, pink to purple, smooth achenes.

Uses : It has been traditionally used in Ayurveda, Siddha, and Unani medicine for the treatment of diabetes. The bark of the tree is a natural anti-diabetic and antioxidant medicine, reducing blood glucose levels. The phenol in leaves

gives the foliage anti-inflammatory and wound healing properties. In native medicine, leaf juice is applied on chronic wounds and the latex is applied on fresh wounds.The figs are chewed and their juice is sucked to treat mouth ulcers.

78. Ficus benghalensis L.

Family : Moraceae



Origin : Indian subcontinent

Kannada Name : Aaalada mara

Common name - Banyan tree

Species type : Indigenous



Conservation status : Not known

Phenology : Evergreen

Flowering period : March - April

Fruiting period : March - May

Description : A large, evergreen to deciduous tree, up 25 m tall, pillar-like prop roots and accessory trunks. Trunk massive, fluted, bark grey, smooth, young softly white puberulous. Leaves with stout, hairy petiole; simple, ovate or obovate to elliptic, glabrous above, finely pubescent beneath, coriaceous, base subcordate or rounded, apex obtuse, margin entire, cystoliths abundant on side, few or absent below. Inflorescence a syconium. Hypanthodia sessile, in axillary pairs on young depressed-globose, green, hairy, minutely hairy basal bracts, Male flowers: numerous ostiolar; stamen solitary, with shortly mucronate anther. Female flowers: sessile, mixed with gall flowers, small. Gall flowers numerous, pedicellate. Figs globose to depressed-globose, pinkish-red, hairy.

Uses : The leaves are used to remedy dysentery and diarrhoea. They are used in a decoction with toasted rice as a diaphoretic. The young leaves are heated and used as a poultice. The bark is tonic and diuretic.

Additional information : The tree is considered sacred in India, and temples are often built nearby. It is the tree under which Lord Adhinath the first Jain Tirthankara attained Kewal Gyan or spiritual enlightenment.



79. Ficus benjamina L.

Family : Moraceae

Origin : Asia, Australia

Kannada Name : Java atthi mara

Common name - Weeping fig tree

Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period :
Fruiting period :





Description : Evergreen trees, to 30 m tall. Bark gray to gray-white, smooth. Main branches producing aerial roots which can develop into new trunks; branchlets gray-white, pendulous, glabrous. Leaves simple, blade ovate to broadly elliptic, glabrous, coriaceous, base rounded to cuneate, margin entire, apex shortly acuminate. Inflorescence a syconium. Figs axillary on leafy branchlets, paired or solitary. Male, gall, and female flowers within same fig. Male flowers: few, shortly pedicellate; stamen 1. Gall flowers: many. Female flowers: sessile. Fruit an achene, ovoid-reniform, shorter than persistent style. Figs purple, red, or yellow [or red with white dots] when mature, globose to depressed globose or sometimes pear-shaped, glabrous or pubescent, base attenuate into stalk, sessile.
Uses : The pounded leaves and bark are applied as a poultice in the treatment of rheumatic headaches. The wood is of low quality, but is used for temporary constructions, mouldings, interior work, cladding, drawers, small domestic articles, fruit crates etc.

80. Ficus drupacea (Roth.) Corner



Family : Moraceae

Origin : South Asia, Australia

Kannada Name : Goni mara

Common name - Weeping fig tree

Species type : Indigenous

Conservation status : Not known

Phenology : Evergreen

Flowering period : January - April

Fruiting period : January - April

Description : Deciduous trees, 10–15 m tall. Bark grayish white, densely yellowish brown woolly. Leaves simple, narrowly elliptic to obovate-elliptic, coriaceous, glabrous or abaxially yellowish brown woolly but glabrescent, adaxially green and glabrous or sparsely shortly pubescent or densely yellowish brown long pubescent but glabrescent, base rounded or cordate to auriculate, apex acute, margin entire or slightly undulate. Inflorescence a syconium. Figs axillary on leafy branchlets, paired, reddish orange to red and with scattered white spots, oblong, pillow-shaped, or conic-ellipsoid, glabrous or densely covered with brownish yellow long hairs. Male, gall, and female flowers within same fig. Male flowers: long-pedicellate, stamen 1, anther narrowly ellipsoid. Gall flowers: pedicellate; sepals connate, apically 3- or 4-lobed; Female flowers: white, broadly lanceolate. Fruit achenes, tuberculate.

Uses : The roots are an effective vulnerary when powdered and applied to wounds.

81. Ficus elastica Roxb. ex Hornem.



Family : Moraceae

Origin : South and Southeast Asia

Kannada Name : -

Common name : Rubber fig

Species type : Exotic



Conservation status : Not known

Phenology : Evergreen

Flowering period :

Fruiting period :

Description : Large, evergreen trees, 20-30 m tall. Bark pale gray, smooth. Branchlets strong. Leaves simple, oblong to elliptic, coriaceous, glabrous, base broadly cuneate, apex abruptly short-acuminate or apiculate, margin entire. Inflorescence a syconium. Figs axillary on leafless branchlets, paired, yellowish green to pale yellow, ovoid-ellipsoid, subsessile. Male, gall, and female flowers within same fig. Male flowers: scattered among other flowers, pedicellate, stamen 1, anther ovoid-ellipsoid. Gall flowers: sepals 4. Female flowers: sessile; style persistent, long. Achenes ovoid, tuberculate.

Uses : It is grown as an ornamental plant.

82. Ficus hispida L.f.



Family : Moraceae

Origin : Asia, Australia

Kannada Name : Kaadatthi, Adavi atthi, Kallatthi

Common name - Hairy fig, Opposite leaf fig

Species type : Exotic



Conservation status : Not known

Phenology : Evergreen

Flowering period : June - July

Fruiting period : June - July

Description : Shrubs or small trees, up to 10 m tall, coarsely hairy; dioecious. Leaves simple, opposite, ovate, oblong, or obovate-oblong, thickly papery, abaxially with coarse gray hairs, adaxially rough and with short thick hairs, base rounded to cuneate, apex acute to mucronate, margin entire or bluntly toothed. Inflorescence a syconium. Figs axillary on normal leafy shoots, sometimes on leafless branchlets or branchlets from main branches, solitary or paired, yellow or red when mature, top-shaped, pedunculate; involucre bracts present; lateral bracts sometimes present. Male flowers: many, near apical pore, stamen 1. Gall flowers: calyx absent, short, thick. Female flowers: calyx lobes absent; style lateral, with hairs.

Uses : The bark is antiperiodic, emetic and tonic. The juice of the root is used in treatment of fevers and the juice of the fig is used to treat liver problems.

83. Ficus microcarpa L.f.



Family : Moraceae

Origin : Tropical Asia

Kannada Name : Kirigoli, Kirugoli

Common name - Chinese banyan, Curtain fig tree



Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period : March - May

Fruiting period : March - May

Description : Evergreen trees, 15-25 m tall, crown wide, bark dark gray. Branches producing rust-colored aerial roots when old. Leaves simple, alternate, narrowly elliptic, glabrous to puberulous, base cuneate, apex obtuse to subacute, rarely retuse, margin entire; basal lateral veins long. Figs axillary on leafy branchlets or on leafless older branchlets, paired, yellow to slightly red when mature, depressed globose, inside with a few short bristles among flowers, sessile. Male, gall, and female flowers within same fig. Male flowers: scattered, sessile or pedicellate; filament as long as anther. Gall and female flowers: sepals 3, broadly ovate; style lateral; stigma short, clavate. Achenes ovoid.

Uses : bark is used therapeutically in the treatment of raktapitta (bleeding) doshas, ulcers, skin diseases, burning sensation, inflammation, and oedema.

84. Ficus neriifolia Sm.



Family : Moraceae

Origin : Bhutan, Burma, China, India, Nepal

Kannada Name : -



Common name - Willow-leaf fig

Species type : Indigenous

Conservation status : Not known



Phenology : Evergreen

Flowering period :

Fruiting period :

Description : Deciduous trees, to 15 m tall. Bark dark gray, smooth. Branchlets green to pale green, leaf traces and stipular scars conspicuous. Leaves simple, elliptic, ovate, ovate-elliptic, both surfaces glabrous and green, abaxially densely covered with cystoliths, adaxially smooth, base cuneate to rounded, apex acuminate to caudate, margin entire. Inflorescence a syconium. Figs axillary on leafy or older leafless branches, paired, narrowly cylindric, ovoid, carpodermis thick or thin and with or without stone cells, inside without bristles, apical pore navel-like, sessile. Male flowers: many, pedicellate; calyx lobes 3 or 4, ovate-lanceolate; stamens 2 or 3. Gall flowers: few; ovary ovoid, short. Female and gall flowers: calyx lobes 3 or 4; female flowers: ovary globose; style thin. Achenes smooth.

Uses : The latex from the plant is applied to boils on the tongue. The juice of the stem bark is used as a folk remedy for conjunctivitis and boils. It is also pruned and grown as a bonsai.

85. Ficus racemosa L.

Family : Moraceae

Origin : Tropical Asia, Australia

Kannada Name : Atthi mara

Common name - Cluster fig tree

Species type : Exotic

Conservation status : Least concern

Phenology : Deciduous

Flowering period : January - April

Fruiting period : March - July



Description : Evergreen to occasionally deciduous trees, 25-30 m tall. Bark grayish brown, smooth. Branchlets, young leaf blades, and figs with bent hairs or densely covered with white soft pubescence. Branchlets brown. Leaves simple, alternate, elliptic-obovate, elliptic, or narrowly elliptic, abaxially pale green, pubescent when young, glabrescent, adaxially dark green and glabrous, base cuneate to obtuse, apex acuminate to obtuse, margin entire. Figs in a tumorlike aggregate on short branchlets of old stem, occasionally axillary on leafy shoot or on older leafless branchlets, paired, reddish orange when mature, pear-shaped. involucral bracts triangular-ovate. Male, gall, and female flowers within same fig. Male flowers: near apical pore, sessile; calyx lobes 3 or 4; stamens 2. Gall and female flowers: pedicellate; calyx lobes linear, apex 3- or 4-toothed; style lateral; stigma clavate.

Uses : The bark is rubbed on a stone with water to make a paste, which can be applied to boils or mosquito bites. The rough leaves of the plant can also be used to remove caterpillar bristles lodged in skin. A common folk remedy is to rub the affected area lightly with a leaf, which effectively dislodges the stinging hairs.





86. Ficus religiosa L.



Family : Moraceae

Origin : Indian subcontinent

Kannada Name : Arali mara

Common name - Sacred fig tree

Species type : Indigenous

Conservation status : Least concern



Phenology : Deciduous

Flowering period : November - December

Fruiting period : April - May

Description : Deciduous or semievergreen trees, 15-25 m tall, epiphytic when young. Bark gray, smooth, exudation milky. Branchlets grayish brown, sparsely pubescent when young. Leaves simple, alternate, leaf blade triangular-ovate, coriaceous, abaxially green, adaxially dark green and shiny, base broadly cuneate to cordate, apex acuminate-caudate, margin entire or undulate. Inflorescence a syconium. Figs axillary on leafy branchlets, paired or solitary, with no internal bristles, red when mature, globose to depressed globose, smooth. Flowers unisexual; male flowers, ostiolar, sessile in one ring; female flowers sessile, brownish, glabrous; gall flowers similar to female. Achenes smooth.

Uses : Ficus religiosa is used in traditional medicine for about fifty types of disorders including asthma, diabetes, diarrhea, epilepsy, gastric problems, inflammatory disorders, infectious and sexual disorders.

87. Ficus virens Aiton.

Family : Moraceae



Origin : Pakistan, India, Southeast Asia, Australia

Kannada Name : Basari mara, Kari basari

Common name – White fig



Species type : Indigenous

Conservation status : Not known

Phenology : Deciduous

Flowering period :

Fruiting period :

Description : Deciduous or semideciduous trees, epiphytic when young, with buttress or prop roots. Bark greenish-grey, smooth. Leaves simple, alternate, obovate, narrowly lanceolate, ovate-lanceolate, or elliptic-ovate, thin coriaceous, base bluntly rounded, cuneate, or cordate, apex acuminate to shortly acuminate, margin entire. Inflorescence a syconium. Figs axillary on leafy branchlets, paired or solitary or in clusters on leafless older branchlets, purple red when mature, globose. Flowers unisexual, within the same fig. Male flowers few, near apical pore, sessile; female and gall flowers pedicellate. Achenes wrinkled on surface.

Uses : A decoction of the bark is used as an injection in the treatment of leucorrhoea. Applied externally, a bark decoction is used as a wash on ulcers and as a gargle in salivation.

88. Filicium decipiens (Wt. & Arn.) Thwaites ex Hook.f.



Family : Sapindaceae

Origin : Western ghats

Kannada Name : Kaadu hoovarasi

Common Name - Fern tree

Species type : Endemic



Conservation status : Least concern

Phenology : Evergreen

Flowering period : October - December

Fruiting period : October - December

Description : Small or medium sized evergreen tree, 4.5-20 m tall. Bark smooth, whitish. Leaves pinnate, alternate, petiole winged; leaflets 5-10 pairs, sub-opposite or alternate, lanceolate to linear or narrowly oblong-elliptic, glabrous, base acute, apex acute and minutely emarginate, margin entire, crisped-undulate, resinous when young. Inflorescence a terminal panicle. Flowers polygamous, yellow. Fruit a drupe, ellipsoid or subglobose, 1-1.5 cm long, smooth, dark purple.

Uses : Filicium decipiens is traditionally used as anti-diabetic agent in India and Sri Lanka . It also showed a variety of biological activities, such as antifungal, anti-bacterial, anti-inflammatory, antioxidant and molluscicidal activities.

89. Flueggea leucopyrus Willd.



Family : Phyllanthaceae

Origin : Africa, South America

Kannada Name : Bilihuli, Kandekuvana

Common name – Bushweed



Species type : Exotic

Conservation status : Not known

Phenology : Deciduous

Flowering period : April – July

Fruiting period : June – September

Description : It is an erect shrub 1.5–4 m tall with branches cylindrical or obtusely angular when young, grey, ending in spines. Leaves simple, alternate, elliptic, obovate, or round, membranous, glabrous, base cuneate, apex emarginate, margin entire. Male inflorescence a cyme, female inflorescence sub-solitary. Flowers unisexual, tiny, yellowish or greenish-white. Fruit is a nearly spherical capsule, about 4 mm in diameter, whitish when ripe. Seed 1, globose.

Uses : The leaves are considered as aphrodisiac and laxative. The bark is an astringent. The fruit, mixed with pulses, is eaten to relieve digestive disorders.

90. Garcinia livingstonei T.Anderson

Family : Clusiaceae





Origin : South Africa

Kannada Name : -

Common name - African mangosteen

Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : June – September

Fruiting period : June – September

Description : Evergreen tree, up to 18 m tall. Trunks are short, often twisted, occasionally multi stemmed. Bark reddish brown to dark grey, with shallow grooves or deeply fissured, ridged and scaly, exuding yellow or red resinous latex when cut. Leaves are simple, in whorls of 3, coriaceous, brittle, variable in shape, lanceolate or oblanceolate to oblong or obovate, glabrous, base broadly cuneate, rounded or cordate, apex acute to rounded, margin crenate or entire. Inflorescence a fascicle. Flowers polygamous, white or pale to yellowish green. Fruits ovoid to round berries, orange yellow, reddish, or purple; 1-2 seeded. Seeds are creamy brown.

Uses : The root and bark of Garcinia livingstonei possess therapeutic properties and are used for preventing development of cancer and even tuberculosis. The plant possesses antioxidant properties too.

91. Gliricidia sepium (Jacq.) Steud.





Family : Fabaceae

Origin : Mexico, Central America

Kannada Name : Gobbarada mara

Common name - Gliricidia, Quickstick

Species type : Exotic

Conservation status : Not known

Phenology : Deciduous

Flowering period : November - December

Fruiting period : January - February

Description : Medium-sized, deciduous tree, 10-12 m high. The bark is smooth, and its color can range from a whitish gray to deep red-brown. Leaves imparipinnate, usually alternate, sometimes subopposite; leaflets 5-20, opposite to rarely subopposite or alternate, ovate or elliptic, glabrous above, pubescent below, base slightly revolute, apex acute or acuminate, margin entire. Inflorescence a raceme. Flowers bisexual, bright pink to lilac color that is tinged with white, yellowish at base. Fruit a dehiscent pod, yellow-brown when ripe. Seeds 4-10, dark brown, oblong.

Uses : The whole plant is a folk remedy for various conditions such as but not limited to colds, cough, fever, headache, bruises, burns, rheumatism, ulcers, and wounds.

92. Grevillea robusta A. Cunn ex R. Br.



Family : Proteaceae

Origin : Australia

Kannada Name : -

Common name - Silver oak tree, Silky oak tree



Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : March - May

Fruiting period : May - October

Description : Evergreen, erect tree, up to 30 m high. The bark is dark grey and furrowed. Leaves pinnate, alternate; leaflets 7-19, sessile, olive green above, silver grey silky hairy beneath, lanceolate, glabrous, base cuneate, apex acute, entire or pinnatifid, margin recurved. Inflorescence a raceme. Flowers bisexual, glabrous, yellowish orange, or sometimes reddish. Fruit a follicle, 2 silver-grey to olive green, dehiscent. Seeds 2, broadly winged, thin, ovate.

Uses : They were also used by Australian Aborigines as traditional bush medicines to treat wounds and sores, skin diseases, diarrhoea and dysentery and as bactericidal preparations.

93. Guazuma ulmifolia Lam.



Family : Malvaceae

Origin : Central America, Java

Kannada Name : Rudraakshi

Common name - Indian elm tree



Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : All year

Fruiting period : All year

Description : Deciduous tree, up to 25 m tall. Young branches puberulent. Leaves simple, alternate, ovate to lanceolate, membranous to chartaceous, scabrous above, velvety below, base oblique, apex acuminate, margin serrate to dentate. Inflorescence axillary or terminal, thyrsiform cyme. Flowers small, bisexual, brown-yellow color. Fruit a capsule, globose or oblong-ellipsoid, black, tuberculate. .

Uses : It is used in the treatment of diarrhea, hemorrhages, fever, coughs, bronchitis, asthma, gastrointestinal pain and hypertension, and as stimulant for uterine contractions. Dried leaves are brewed into tea in some countries and used for kidney and gastrointestinal diseases, fever, dysentery and diabetes, and externally as an ailment for wounds, skin eruptions and even baldness.

94. Handroanthus chrysotrichus (Mart. ex DC.) Mattos



Family : Bignoniaceae

Origin : Brazil

Kannada Name : -

Common name - Golden haired trumpet tree



Species type : Exotic

Conservation status : Not known

Phenology : Semi-evergreen

Flowering period : April - May

Fruiting period : April - May

Description : Small deciduous tree with a rounded crown, 2-10 m high. Young braches subtetragonous to subterete, with starry trichomes when young, glabrescent. Leaves palmate, 3-5 foliate; petiole with starry trichomes; leaflets oblong-ovate to oblong-elliptical, chartaceous, lepidotes present, scabrous, stellate trichomes, base obtuse to truncate, apex obtuse or rounded to abruptly cuspidated-subacumined, margin entire, rarely dentate at the apex. Inflorescence a terminal glomerule. Flowers bisexual, tubular, golden yellow with red in throat, stellate trichomes present. Fruit a capsule, linear-cylindrical, reddish, hairy with bearded trichomes. Seeds with hyaline membranous wing.

Uses : Its flowers, stem and bark are used for medicinal purposes in the treatment of cardiovascular and immune system diseases.

95. Handroanthus impetiginosus (Mart. ex DC.) Standl.



Family : Bignoniaceae

Origin : South and Central America

Kannada Name : -



Common name - Pink trumpet tree

Species type : Exotic

Conservation status : Least concern



Phenology : Deciduous

Flowering period : February - March

Fruiting period :

Description : Large deciduous tree, up to 25 m high. Bark smooth, grey, wood greenish-brown,; twigs terete, glabrous. Leaves palmate, 5-7 foliate, opposite; leaflets ovate to elliptical, chartaceous to membranous, lepidote, pubescent, base cuneate to rounded, apex acuminate, margin entire or serrulate. Inflorescence a terminal panicle. Flower large, tubular, pinkish- purple to deep magenta, pubescent. Fruit a capsule, elongated-cylindrical, attenuate at both ends, glabrous, 12-56 cm long. Seeds with hyaline wings.

Uses : it is used as a remedy for inflammation, cancer, syphilis, malaria, fevers, trypanosomiasis, fungal infections, bacterial infections and stomach ulcers.

96. Holoptelea integrifolia (Roxb.) Planch.



Family : Ulmaceae

Origin : Indian subcontinent, Myanmar, Indo-China

Kannada Name : Tapasi mara, Raahubeeja, Navule

Common name - Indian elm tree, Jungle cork tree

Species type : Indigenous

Conservation status : Not known



Phenology : Deciduous

Flowering period : January - February

Fruiting period : April - May

Description : Large Deciduous tree, about 20-25 m tall, bark whitish grey to brown, bruised bark and crushed leaves give a strong smell, brachlets pubescent. Leaves simple, alternate, elliptic-ovate, ovate-oblong or ovate, coriaceous, glabrous above, pubescent below, base rounded or subcordate, apex acuminate, margin entire, distinctly serrate when young. Inflorescnece a axillary fascicle. Flowers polygamous, greenish-purple, pubescent; female flowers with longer pedicels. Fruit a samara, 3 cm across, orbicular, wings nerved, glabrous, seed one and flat.

Uses : The bark and leaves are used for treating oedema, diabetes, leprosy and other skin diseases, intestinal disorders, piles and sprue. The seed and a paste of the stem bark is used in treating ringworm.

97. Jacaranda mimosifolia G. Don.

Family : Bignoniaceae

Origin : South America

Kannada Name : -

Common name - Jacaranda

Species type : Exotic

Conservation status : Vulnerable

Phenology : Deciduous

Flowering period : March - May

Fruiting period : October - November





Description : Deciduous tree, up to 20 m. Bark is thin, grey-brown, smooth when the tree is young but eventually becoming finely scaly. Leaves bipinnate, opposite, pinnae 12-31 pinnae, 13-41 sessile leaflets; leaflets narrowly elliptic, chartaceous, glabrous, or slightly puberulous along midrib and margin, base cuneate, apex acuminate, margin slightly revolute. Inflorescence an open terminal panicle. Flowers bisexual, purplish-blue or lilac, pubescent on the outside. Fruit a capsule, compressed, orbicular, reddish-brown, woody. Seeds thin, winged with brownish streaks.

Uses : The bark and roots are used in the treatment of syphilis. The tree creates pleasant open shade and can be used effectively as a screen or as a windbreak. It is also used as an ornamental plant.

98. Khaya grandifoliola C. DC.

Family : Meliaceae



Origin : Africa

Kannada Name : -

Common name - African Mahagony

Species type : Exotic

Conservation status : Vulnerable



Phenology : Deciduous

Flowering period :

Fruiting period :

Description : It is a semi-Deciduous tree growing but up to 30 m, bark dark brown to greyish, buttressed. Leaves paripinnate, leaflets 3-5 pairs; leaflets opposite or subopposite, broadly elliptical, oval-elliptical, coriaceous, base acute or slightly rounded, apex abruptly acuminate, margin undulate. Young foliage reddish. Inflorescence a panicle. Flowers bisexual, yellowish-white. Fruit a dehiscent capsule, woody, round, 4-5 valves. Seeds numerous, winged, reddish-brown.

Uses : The bitter-tasting bark is used in traditional medicine. It is widely used as a treatment against fever caused by malaria, whilst decoctions are also taken to treat stomach complaints including gastric ulcers and diarrhoea caused by intestinal parasites.

99. Kigelia pinnata (Lam.) Benth.



Family : Bignoniaceae

Origin : Tropical Africa

Kannada Name : Aanethoradu Kaayi, Mara southe kayi

Common name - Sausage tree



Species type : Exotic

Conservation status : Not known

Phenology : Deciduous

Flowering period : August - October

Fruiting period : December - June

Description : Tree growing up to 20 m tall with spreading branches. The bark is grey, occasionally brown, smooth at first, peeling on older trees. Leaves imparipinnate, opposite or sub-opposite, 7-9 leaflets; leaflets elliptic to elliptic-obovate, pubescent, base rounded or acute to cuneate, apex rounded, obtuse or acute to acuminate, margin entire to serrate. Inflorescence a terminal panicle. Flowers bisexual, bell shaped, yellow outside, turning orange or red and with dark red to blackish inside. Fruit an indehiscent woody berry, up to 1m long, pendulous, sausage shaped. Seeds numerous embedded in the pulp.

Uses : It is used in a number of skin care products. The timber is used for makoros, yokes and oars. The bark and fruit are combined and used to heal sores and to restore taste. An oily ointment is made from the powder to rub on rheumatic parts and on malignant tumours. The leaves are sometimes used to treat rheumatism, malaria, infertility, epilepsy, headache, dysentery, stomach and kidney complaints.

100. Lagerstroemia duperreana Pierre. ex Gagnep





Family : Lythraceae

Origin : Cambodia, Thailand, Vietnam

Kannada Name : -

Common name - Thorel's crepe myrtle

Species type : Exotic

Conservation status : Not known

Phenology : Deciduous

Flowering period :

Fruiting period :

Description : Deciduous trees 25-30 m tall. Branches terete, glabrous. Leaves simple, oblong-ovate, glabrous, base obtuse or rounded, apex emarginate, rounded or briefly acuminate, margin entire. Inflorescence a terminal panicle. Flowers bisexual, purple or lilac with crumpled petals. The flowers fade to white. Fruit a capsule, ovoid. 1.3 cm long.

Uses :

Additional information :

101. Lagerstroemia indica L.



Family : Lythraceae

Origin : Indian Subcontinent, Southeast Asia

Kannada Name : -

Common name - Crepe myrtle



Species type : Indigenous

Conservation status : Not known

Phenology : Deciduous

Flowering period : June - September

Fruiting period : September - November

Description : Deciduous shrubs or small trees, up to 10 m tall. The bark is thin, smooth, whitish-grey. Branchlets 4-angled or subalate, puberulous, glabrescent. Leaves simple, sessile, alternate, oblong or obovate, obovate-orbicular, coriaceous, glabrous on maurity, base cuneate or narrow, apex subobtuse or subacute, margin entire. Inflorescence a panicle. Flowers bisexual, pink, rose or white. Fruit a dehiscent capsule, suborbicular, clawed, 4-6 valved. Seeds winged.

Uses : The stem bark is febrifuge, stimulant and styptic. The bark, flowers and leaves are considered to be hydragogue and a drastic purgative. A paste of the flowers is applied externally to cuts and wounds. The root is astringent, detoxicant and diuretic. A decoction of the flowers is used in the treatment of colds.

102. Lagerstroemia microcarpa Wt.



Family : Lythraceae

Origin : Western Ghats

Kannada Name : Bilinandi, Belandaru

Common name - Ben teak tree

Species type : Endemic



Conservation status : Not known

Phenology : Deciduous

Flowering period : June - February

Fruiting period : June - February

Description : Deciduous trees, upto 25m tall. Bark smooth, white and peeling. Leaves simple, opposite, sometimes upper leaves alternate; elliptic, glabrous, white velvety beneath, base acute, apex acute to acuminate, margin entire. Inflorescence a terminal or axillary panicle. Flowers bisexual, 5-6 mm across, white, clawed. Fruit a capsule, ellipsoid, woody, 4-6 valved, dehiscent. Seeds many, winged.

Uses : It is good for charcoal and fuel wood. Bark and leaves contain of tannin which is used for making skins.

103. Lagerstroemia speciosa (L.) Pers.

Family : Lythraceae

Origin : Indian Subcontinent, Southern China, Indochina, Philippines, Malaysia, Indonesia.



Kannada Name : Hole daasavaala, Chella

Common name - Queen's crepe myrtle

Species type : Indigenous



Conservation status : Not known

Phenology : Deciduous

Flowering period : April - June

Fruiting period : July - August

Description : Ilt is a medium sized, semi-deciduous tree with a flaky bark, 7-18 m tall. Leaves simple, opposite or subopposite, elliptic, oblong-elliptic to ovate, glabrous, base obtuse or acute, apex acuminate, margin entire. Inflorescence a terminal panicle, 20-40 cm long. Flower bisexual, muave or pink. Fruit a woody capsule, 4-6 valved. Seeds many, winged.

Uses : It is a medicinal tree traditionally used to lower blood sugar in the body. Its high content of corosolic acid makes it an effective anti-diabetic drug. It is also recommended for kidney, bladder problems and hypertension. A decoction of the bark is used against diarrhoea and abdominal pains. A leaf poultice is used to relieve malarial fever and is applied on cracked feet.

Additional information : The tree is recognised as the state flower of the state of Maharashtra. (Tāmhan in Marathi).

104. Leucaena leucocephala (Lam.) de Wit

Family : Fabaceae

Origin : Southern tropical America

Kannada Name : Subabul

Common name - River tamarind tree

Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : April - June

Fruiting period : August - October





Description : Shrub or small evrgreen tree, 0.6-9 m tall. Bark greyish-brown, fissured. Leaves bipinnate, 4-9 pairs of pinnae, leaflets 10-17 pairs; leaflets sessile, linear-oblong, glabrous or subglabrous, base oblique or cuneate, apex acute, margin ciliate. Inflorescence a head. Flowers bisexual, white to cream, anthers hairy. Fruit a pod, linaer and oblong, flat, pubescent, stipe up to 3 cm long. Seeds 15-25, oval, dark brown.

Uses : The wood is used for making pulp in the pulp and paper industry. Red, brown and black dyes are extracted from the pods, leaves and bark. A decoction of the root and bark is abortifacient. The pods and seeds are a good tonic. The roasted seeds are emollient. The seeds have a beneficial effect and are administered in the morning on an empty stomach.

105. Libidibia ferrea (Mart. ex Tul.) L.P.Queiroz



Family : Fabaceae

Origin : Brazil, Bolivia

Kannada Name : -

Common name - Brazilian ironwood, Leopard tree



Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : May - July

Fruiting period :

Description : Medium-sized evergreen tree, 8-15 m tall. Crown umbrella shaped, flat topped. Bark smooth, light grey to ivory, peely, mottled with brown or dark grey. Leaves bipinnately, pinnae 5 to11, leaflets 8-24 per pinna; leaflets opposite, linear-oblong or elliptical, pubescent, base obtuse or subattenuate, apex obtuse, margin entire. Inflorescence a terminal raceme. Flowers bisexual, fragrant, yellow, odd petal spotted red. Fruit a indehiscent pod, woody, elliptic-oblong, compressed, 5-7 cm long.

Uses : The roots and stem bark are used in the treatment of diabetes. The roots are astringent and febrifuge. A decoction of the wood is anticatarrhal and vulnerary.

106. Limonia acidissima L.

Family : Rutaceae

Origin : India, Bangladesh, Sri Lanka

Kannada Name : Bela, baloola

Common name - Wood apple

Species type : Indigenous

Conservation status : Not known

Phenology : Deciduous

Flowering period : May - July

Fruiting period : November - December





Description : Medium sized, deciduous trees, up to 20 m high. Bark dark grey or black, vertically fissured, spines sharp and straight. Leaves imparipinnate, alternate, 1-3 in a cluster; leaflets 5-7, opposite, sessile, obovate, glabrous, pellucid-punctate, coriaceous, base cuneate, aoex obtuse, margin entire, crushed leaf aromatic. Inflorescence an axillary cyme. Flowers polygamous, dull red, 1.3 cm across, pubescent, petals 5. Fruit a berry, 5-7.6 cm across, globose, whitish-brown, woody, rind hard. Seed many, wooly, embedded in sour pulp.
Uses : The fruit has astringent properties. The leaves contain tannins and an essential oil. They are astringent and are used internally, often combined with milk and sugar, in the treatment of indigestion, flatulence, diarrhoea, dysentery (especially in children) and haemorrhoids. An oil derived from the crushed leaves is applied on itchy skins.
Additional information : A majority of Hindu temples will have a sacred tree within its compound and is known as the Sthala Vriksha.

107. Litchi chinensis Sonn.

Family : Sapindaceae

Origin : China

Kannada Name : -

Common name - Lychee tree

Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period :

Fruiting period :





Description : Medium sized evergreen tree, 6-12 m tall. Bark grey-black, branches brownish-red. Leaves pinnate, alternate; leaflets in 2 to 4 pairs, ovate or ovate-lanceolate , glabrous, glaucous beneath, base cuneate, apex acuminate, margin entire. Inflorescence a terminal panicle. Flowers bisexual, white, yellow or green, fragrant. Fruit a drupe, globose to subglobose, red or pink-red when mature. Seed 1, dark brown, covered by fleshy aril.

Uses : The fruit, its peel and the seed are used in traditional medicine; decoctions of the root, bark and flowers are used as a gargle to alleviate throat ailments. The fruit peel is used in the treatment of diarrhoea. Seeds are used as an anodyne in neuralgic disorders and orchitis.

108. Livistona chinensis (Jacq.) R.Br. ex Mart

Family : Arecaceae



Origin : Southeast Asia

Kannada Name : -

Common name - Chinese fan palm

Species type : Exotic

Conservation status : Vulnerable

Phenology : Evergreen

Flowering period :

Fruiting period :

Description : A palm, up to 15 m tall. Trunk rough with leaf scars. Leaves palmate, with green or black recurved spines along margins of petiole, flabellate, plicate, divided into 60-90 segments; segments linear-lanceolate, glabrous, pendulous, apex acuminate and deeply forked. Inflorescence branched to 3 order, yellow when young and then green with unpleasant odour. Flowers small, sessile, in groups of 2-4 flowers. Fruits green or blue-green, globose to ellipsoid or pear-shaped, 1.9 cm long.

Uses : The leaves are used for making fans. They are also used for manufacturing rain hats and coats, brooms etc. The fibres, extracted from the sheath and the petiole of the leaves, are made into cordage.

109. Macadamia integrifolia Maiden & Betche



Family : Proteaceae

Origin : Australia

Kannada Name : -

Common name - Macadamia nut



Species type : Exotic

Conservation status : Vulnerable

Phenology : Evergreen

Flowering period :

Fruiting period :

Description : Evergreen tree, 5-18 m tall. Leaves simple, mostly in whorls of 3, oblong to oblanceolate, glabrous, coriaceous, base attenuate, apex acute to obtuse or retuse, margin irregularly spiny-dentate or entire. Inflorescence an axillary pendulous raceme. Flowers bisexual, creamy-white or yellowish. Fruit a globose follicle. Seed usually 1, globular, with a smooth, hard, thick testa enclosing the edible kernel.

Uses : The decomposed husk is commonly used in potting soil. The oil from the seed is used in cosmetics.

110. Madhuca longifolia (J.Konig) J.F.Macbr.



Family : Sapotaceae

Origin : India

Kannada Name : Ippe, Kaadippe, Hunage

Common name - Mahua, Butter tree



Species type : Indigenous

Conservation status : Not known

Phenology : Evergreen

Flowering period : March - April

Fruiting period : June - August

Description : Medium to large sized, deciduous, much branched tree, up to 18 m high, sap white. Young growth tomentose. Leaves often clustered at the end of branches, simple, alternate, narrowly oblong, elliptic, oblanceolate or obovate, glabrous, cuneate at the base, rounded to acuminate at the apex, margin entire. Inflorescence a fascicle. Flowers are cream, corollas fleshy, juicy, clustered at the end of branches, pubescent. Fruit a berry, ovoid, fleshy, tomentose, greenish, 1-4 seeded. Seed is large, elliptical, compressed.

Uses : The flowers are regarded as anthelmintic, cooling, demulcent, laxative and tonic. They are used in the treatment of coughs, colds and bronchitis and in the treatment of snakebites. The bark is astringent and emollient. It is used in the treatment of leprosy. The bark is used externally to treat itchy skin and bleeding gums.

Additional information : The Tamil saint-philosopher Valluvar is believed to have born under an oil-nut tree within the Ekambareswarar Temple at Mylapore, and hence it remains the sanctum tree of the Valluvar shrine built within the Ekambareswarar temple complex.



111. Magnolia champaca (L.) Baill. ex Pierre

Family : Magnoliaceae

Origin : Indomalayan realm

Kannada Name : Sampige mara

Common name - Yellow jade orchid tree

Species type : Indigenous

Conservation status : Least concern

Phenology : Evergreen

Flowering period : June - September

Fruiting period : September - October







Description : Medium to large sized, evergreen tree, up to 30 m tall. Bark grey, lenticellate, blaze cream with orange speckles. Young shoots rusty tomentose. Leaves are simple, alternate, elliptic-lanceolate, glabrous, chartaceous, base acute to attenuate, apex acuminate, margin undulate. Flowers solitary or rarely in pairs, axillary, yellow, bisexual, fragrant. Fruit a follicle, warty, 2-3 long, dehiscing dorsally. Seeds 1, scarlet.

Uses : The bark is used as a febrifuge. A decoction of the bark and leaves is given after childbirth. The flowers are used to treat leprosy. The leaves are used as a treatment against colic. The seeds are used to treat badly chapped skin. A yellow dye is obtained from the flowers.

112. Magnolia grandiflora L.



Family : Magnoliaceae

Origin : Southeastern America

Kannada Name : Dodda bili sampige

Common name - Magnolia



Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period : June - September

Fruiting period : September - October

Description : Medium to large, evergreen tree, up to 37 m tall. Bark pale brown to grey, fissured. Young shoots shortly tomentose. Leaves simple, alternate, oblong-elliptic, elliptic-obovate, subcoriaceous, glabrous above, paler glaucous and pubescent with brownish hairs below, base obtuse or rounded, apex obtuse, acute to shallow mucronate at the tip, margin entire. Flowers soliatry, terminal, bisexual, creamy-white, lemony fragrance. Fruit a follicle, ovoid, compressed. Seeds 2, compressed, red; aril red.

Uses : The bark is diaphoretic, stimulant, tonic. It is used in the treatment of malaria and rheumatism. A decoction has been used as a wash and a bath for prickly heat itching. The decoction has also been used as a wash for sores and as a steam bath for treating dropsy.

113. Mallotus philippensis (Lam.) Muell.Arg.



Family : Euphorbiaceae

Origin : South Asia, Afghanistan, Australia

Kannada Name : Kumkumada mara, Hulichendu

Common name - Kamala tree, Kumkuma tree



Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : March - April

Fruiting period : July - August

Description : Small or medium-sized, evergreen, dioecious tree, up to 25 m tall. Bark dark grey, thin, wood white. Branchlets, young leaves and inflorescence rusty pubescent. Leaves simple, alternate or subopposite, ovate or ovate-lanceolate, glabrous above, greyish pubescent to fulvous tomentose with minute red glands beneath, coriaceous, base acute or round, apex acuminate or acute, margin entire or sparsely serrate. Inflorescences terminal, spicate or racemose. Flowers rusty red. Male flowers 4.5 mm across; female flowers 4 mm across. Fruit a capsule, 7-8 mm across, globose, 3-lobed, densely red-glandular, pubescent. Seeds 1-4, globose, glabrous, black.

Uses : Kamala powder is used as anthelmintic. All parts of the tree can be applied externally to treat parasitic infections of the skin. The powdered fruits are used to treat skin diseases.

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



Family : Calophyllaceae

Origin : South India

Kannada Name : Surige mara

Common name - Surangi

Species type : Endemic

Conservation status : Not known

Phenology : Evergreen

Flowering period :

Fruiting period :

Description : Medium sized, evergreen trees, 10-18 m tall. Bark rough, outer bark greenish gray, inner bark reddish, resinous or milky white latex. Leaves simple, opposite, ometimes ternately verticellate, lanceolate-obovate to elliptic-oblong, dark green, glabrous, base obtuse, apex acute with rounded tip, obtuse to emarginate, margin entire. Inflorescence a fascicled cyme or solitary. Flowers polygamous, monoecious, bisexual in culrivation fragrant, white or pinkish. Fruit an indehiscent berry, ovoid-globose, glabrous, persistent style, juicy and pulpy, seeds 1-4.

Uses : An infusion of the fresh or dry leaves is given in cases of intermittent fever. Uses of mamea in folk medicine include treatment of scalp infections, diarrhoea, digestive and eye problems. The powdered seeds are employed in the treatment of parasitic skin diseases.

115. Mangifera indica L.

Family : Anacardiaceae



Origin : Indian subcontinent

Kannada Name : Mavina Mara

Common name - Mango tree

Species type : Indigenous



Conservation status : Not known

Phenology : Evergreen

Flowering period : February - March

Fruiting period : May - June

Description : Medium to large sized, evergreen tree up to 30 m tall. Bark dark grey, rough with verticla fissures, blaze yellow, exudation yellowish and gummy. Leaves simple, alternate, clustered at the tips of branchlets, pulvinate, elliptic, elliptic-lanceolate, linear-oblong, coriaceous, glabrous, base attenuate or acute, apex acuminate, acute or obtusely acute, margin entire. Inflorescence a terminal panicle. Flowers polygamous, greenish-white to yellowish-green. Fruit a drupe, oblong-reniform, compressed, yellowish-red when ripe, mesocarp fleshy, fibrous in wild trees, endocarp fibrous; seed 1, subreniform.

Uses : The leaves are astringent and odontalgic. An infusion is drunk to reduce blood pressure and as a treatment for conditions such as angina, asthma, coughs and diabetes. Externally, the leaves are used in a convalescent bath. A mouthwash made from the leaves is effective in hardening the gums and helping to treat dental problems. The leaves are used to treat skin irritations.

The charred and pulverized leaves are used to make a plaster for removing warts and also act as a styptic. The stem is astringent. It is used to treat diarrhoea and to remedy stomach-ache. The roots are diuretic.

116. Manihot carthaginensis Müll.Arg.



Family : Euphorbiaceae

Origin : Brazil

Kannada Name : -

Common name - Ceara rubber tree, Cassava tree



Species type : Exotic

Conservation status : Not known

Phenology : Deciduous

Flowering period : June - September

Fruiting period : October - January

Description : Small, deciduous tree, 6-8 m high. Bark pinkish-grey to dark brown. Leaves are peltate; lobes 3 or 5, lobes broadly elliptic to obovate, glabrous, base narrow, apex subacute or mucronate, margin entire, dark green above, pale bluish green below. Inflorescence a panicle. Flowers unisexual, greenish-white, flowers are greenish-white and muave tinged or pale yellow with reddish markings. Fruit a capsule, globose, smooth, warty when dry. Seeds biconvex, orange-brown, mottled black; caruncle yellow.

Uses : The stem and root are ingredients in a remedy for skin infections.

117. Manilkara zapota (L.) P.Royen



Family : Sapotaceae

Origin : Mexico, Central America, Caribbean

Kannada Name : Sapota

Common name - Sapota tree, Chikoo tree

Species type : Exotic



Conservation status : Not known

Phenology : Evergreen

Flowering period : August - October

Fruiting period : January onwards

Description : Medium to large sized, deciduous tree, up to 30 m tall. Bark light grey to dark brown, fissured, inner bark pink, with sticky latex. Leaves clustered at tip of branches, simple, alternate, elliptic or oblong-elliptic, subcoriaceous, glabrous, brown-tomentose along midrib, base cuneate, apex acute to acuminate, margin sinuate. Inflorescences solitary flowers. Flowers bisexual, white or pale yellow. Fruit a berry, globose or ellipsoid, rough rusty brown, fleshy, sweet scented when ripe. Seeds 5-12, shining black, obovate.

Uses : A leaf decoction is taken for fever, haemorrhage, wounds and ulcers. The bark is astringent, febrifuge and tonic. The fruit is eaten as a remedy for indigestion and diarrhoea. Seeds are antipyretic, and when ground with water they act as a diuretic. They are used to expel urinary and gallbladder stones. The pulverized roots are used to treat thrush in babies.

118. Markhamia lutea (Benth.) K.Schum.



Family : Bignoniaceae

Origin : East Africa

Kannada Name : Kumkuma

Common name - Nile trumpet tree

Species type : Exotic



Conservation status : Least concern

Phenology : Evergreen

Flowering period : All year

Fruiting period : All year

Description : Evergreen tree, 15-21 m tall. Sometimes shrubby, 1.2-4.5 m tall. Bark brown, smooth or rough, ridged. Leaves pinnate; leaflets 7-13, elliptic to obovate, glabrous but densely lepidote above, more sparsely so beneath, often with pubescent axillary domatia beneath, base cuneate to rounded, apex acuminate, margin undulate. Inflorescence a terminal panicle. Flowers bisexual, trumpet shaped, yellow with red veins or spots at the throat. Fruit a capsule, curved, elongated, compressed, glabrous but lepidote, 35-80 cm long. Seeds numerous, winged.

Uses : The tree is considered to be an effective treatment for skin-affections, sores and itch. The plant is also used as a rejuvenator and diuretic, and is given for oedema of the legs and elephantiasis of the scrotum. The leaves and bark are used as medicine for tooth-ache and for convulsion in children. Roots are also used against venereal diseases and for preventing abortion.

119. Melia azedarach L.



Family : Meliaceae

Origin : Indomalayan plane

Kannada Name : Bevu

Common name – Chinaberry tree



Species type : Indigenous

Conservation status : Not known

Phenology : Deciduous

Flowering period : March – May, November – December

Fruiting period :

Description : Medium sized, deciduous tree, up to 15 m tall. Bark dark grey-brown, smooth, longitudinally exfoliating. Leaves bipinnate, rarely tripinnate, alternate; pinnae 5-9, oppoiste; leaflets 3-7, opposite, terminal one slightly larger, ovate, elliptic or lanceolate, sparsely puberulous, glabrescent, base oblique, apex acuminate, margin serrate to subserrate. Inflorescence an axillary panicle. Flower bisexual, small, lilac, fragrant. Fruit a drupe, ellipsoid or globose, yellow when ripe, 3-6 seeded; endocarp ligneous.

Uses : The leaf juice is anthelmintic, antilithic, diuretic and emmenagogue. The flowers and leaves are applied as a poultice in the treatment of neuralgia and nervous headache. The stem bark is anthelmintic, astringent and bitter tonic. A red dye is obtained from the bark. A fibre obtained from the bark is used to make rope. The fruits are a source of a flea powder and an insecticide.

120. Melia dubia Cav.

Family : Meliaceae



Origin : South India

Kannada Name : Hebbevu, Turukubevu, Bettabevu

Common name - Malabar neem tree

Species type : Indigenous



Conservation status : Not known

Phenology : Evergreen

Flowering period : January - March

Fruiting period : February - May

Description : Large deciduous trees, up to 20 m tall. Bark dark brown, rough, lenticellate, exfoliations rectangular. Young shoots and inflorescence scurfy tomentose. Leaves are 2-3 pinnate, imparipinnate, swollen at base, tomentose when young; pinnae 3-7 pairs; leaflets 2-11 on each pinnae, opposite, ovate-lanceolate, glabrous at maturity, coriaceous, base oblique, acute, obtuse, round or attenuate, apex acuminate, margin crenate. Inflorescence an axillary panicle. Flowers bisexual, greenish-white, pubescent. Fruit a drupe, globose, dosally compressed, longitudinal ridges, yellow when ripe, fleshy, seeds 3 to 4.

Uses : The bark is made into a paste with cumin seeds and given to cure fever. It is planted as a shade tree in coffee estates. A paste made out of the green fruits is used to treat scabies and sores.

121. Millettia peguensis Ali.

Family : Fabaceae



Origin : Burma, Siam

Kannada Name :

Common name : Moulmein rosewood

Species type : Exotic

Conservation status : Least concern

Phenology : Deciduous

Flowering period : December – May

Fruiting period : April – October

Description : Small to medium deciduous tree, 12-15 in height. Leaves imparipinnate, leaflets 5-7, ovate-elliptic, glabrous, base obtuse, apex acuminate, Flowers are pinkish-white in racemes or panical inflorescence, flowering during february-june. the fruits are oblong pod, compressed and woody; seed is solitary, reniform.

Uses : Ornamental tree planted along roads for its showy and fragrant flowers.

122. Millettia pinnata (L.) Pierre.



Family : Fabaceae

Origin : Tropical Asia, Australia, Pacific Island

Kannada Name : Honge mara

Common name - Pongamia oil tree



Species type : Indigenous

Conservation status : Least concern

Phenology : Deciduous

Flowering period : February - June

Fruiting period : February - May

Description : A medium sized, deciduous tree, up to . Leaves alternate, imparipinnate with long slender leafstalk, hairless, pinkish-red when young, glossy dark green above and dull green with prominent veins beneath when mature. Flowers are pinkish-white in racemes or panical inflorescence, flowering during february-june. the fruits are oblong pod, compressed and woody; seed is solitary, reniform.

Uses : The seed oil has been found to be useful in diesel generators, and along with Jatropha and castor, it is being explored in hundreds of projects throughout India and the third world as feedstock for biodiesel. pinnata as a biofuel is commercially valuable to the rural populations of places such as India and Bangladesh, where the plant grows abundantly, because it can support the socioeconomic development of these areas.

123. Millingtonia hortensis L.f.

Family : Bignoniaceae



Origin : South Asia

Kannada Name : Birate mara, Aakasha mallige

Common name : Indian Cork tree

Species type : Indigenous



Conservation status : Least concern

Phenology : Deciduous

Flowering period : October - December

Fruiting period : October - December

Description : Evergreen trees, 8-25 m tall. Bark corky. Leaves imparipinnately bipinnate, opposite; pinnae 2-3 pairs with 5-7 leaflets per pinna; leaflets elliptic, ovate, or ovate-oblong, glabrous, base rounded, oblique, apex acuminate, margin entire. Inflorescence a paniculate cyme. Flowers bisexual, white, tube shaped, pubescent adaxially. Fruit a capsule, linear, compressed. Seeds discoid-oblong, compressed, winged.

Uses : It is considered ornamental and the pleasant fragrance of the flowers renders it ideal as a garden tree. The wood is also used as timber and the bark is used as an inferior substitute for cork. The leaves are also used as a cheap substitute for tobacco in cigarettes.

Additional information : It is salinity tolerant and considered auspicious.

124. Mimusops elengi L.



Family : Sapotaceae

Origin : Southeast Asia, Northern Australia

Kannada Name : Ranjal

Common name : Spanish Cherry tree

Species type : Exotic



Conservation status : Not known

Phenology : Evergreen

Flowering period : April

Fruiting period : June - October

Description : Evergreen trees, 16-20 m tall. Bark dark grey, smooth, not deeply furrowed. Leaves simple, alternate, broadly ovate, glabrous, base cuneate, apex acuminate, entire or slightly wavy. Inflorescences 2-4 flowered fascicles or solaitary. Flowers bisexual, creamish-white, fragrant. Fruit a berry, ovoid, 2.5-4 cm long, orange, pubescent when young, persistent calyx.

Uses : The bark, flowers, fruits, and seeds are used in Ayurvedic medicine in which it is purported to be astringent, cooling, anthelmintic, tonic, and febrifuge. It is mainly used for dental ailments such as bleeding gums, pyorrhea, dental caries, and loose teeth.

125. Morus nigra L.

Family : Moraceae



Origin : Southwest Asia

Kannada Name :

Common name : Black mulberry

Species type : Exotic



Conservation status : Not known

Phenology : Deciduous

Flowering period : May - June

Fruiting period : August - September

Description : Small to medium, deciduous, monoecious or dioecious tree, up to 10 m tall. Bark dark brown, fissured, rough; twigs reddish-brown, densely hairy. Leaves simple, alternate, broadly ovate, unlobed, sometimes 2-5 lobed, abaxially pale green, shortly pubescent, and tomentose, adaxially dark green and coarse, base cordate, apex acute to shortly acuminate, margin regularly and coarsely serrate. Inflorescence a catkin. Male catkins cylindric, pubescent. Female catkins ellipsoid, short peduncle, pubescent. Fruit a sorosis, ovoid-oblong, dark purple to black, strongly acidic until mature.

Uses : The plant is analgesic, emollient, sedative. The leaves are antibacterial, astringent, diaphoretic, hypoglycaemic, odontalgic and ophthalmic. They are taken internally in the treatment of colds, influenza, eye infections and nosebleeds. The stems are antirheumatic, diuretic, hypotensive and pectoral. A tincture of the bark is used to relieve toothache.

126. Muntingia calabura L.



Family : Muntingiaceae

Origin : Mexico, Bolivia

Kannada Name : Gasagase hannina mara

Common name : Buah cherry tree



Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : July - October

Fruiting period : July - October

Description : Shrub or small evergreen tree, 2-12 m tall with spreading branches. Young branches densely tomentose. Leaves simple, alternate, oblong or lanceolate, pubescent, base inequilateral, apex acuminate, margin irregularly serrate. Inflorescence a supra-axillary 2 to 3 flowerd fascicle or solitary. Flowers bisexual, white. Fruit a subglobose berry, ca. 1 cm in diameter, slightly glabrous, yellowish to red when ripe, seeds numerous.

Uses : Its soft wood used for rural construction, while the bark is fibrous and used for making ropes. Traditional medicinal uses have been reported for the leaves (headaches, prostate problems, reduce gastric ulcers), bark (antiseptic), flowers (antiseptic, reduce swelling, antispasmodic), and fruits (respiratory problems; antidiarrheic).

127. Murraya paniculata (L.) Jack.



Family : Rutaceae

Origin : South Asia, India, Australia

Kannada Name : Kadu karibevu

Common name - Orange jasmine, Chinese box

Species type : Indigenous



Conservation status : Not known

Phenology : Evergreen

Flowering period : All year

Fruiting period : All year

Description : Evergreen shrubs or trees, 1.8-12 m tall. Bark greyish-white to pale yellowish-grey. Leaves imparipinnate, alternate; leaflets 3-7, suborbicular to ovate to elliptic, coriaceous, puberulent to glabrate, glandular punctate, base cuneate, apex rounded to acuminate, margin entire or crenulate. Inflorescences terminal or axillary panicle. Flowers bisexual, white, fragrant. Fruit a berry, orange to vermilion, narrowly ellipsoid, subglobose or rarely ovoid, glabrous, punctate. Seeds 1-2, villous.

Uses : The leaves are astringent, stimulant and tonic. They are used in the treatment of dropsy, diarrhoea and dysentery. The ground-up bark of the roots is both eaten and applied externally in the treatment of body aches. An essential oil is obtained from the flowers.

128. Neolamarckia cadamba

(Roxb.) Bosser



Family : Rubiaceae

Origin : Southeast Asia

Kannada Name : Kadamba

Common name : Burflower tree

Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period : December - July

Fruiting period :

Description : Large, deciduous trees, up to 30 m high. Bark thin, greyish to pale brown, fissured and scabrous when old; branches horizontally spreading. Leaves simple, opposite decussate, ovate or elliptic-oblong, glabrous above, pubescent beneath, base truncate or obtuse, apex acuminate, margin entire. Inflorescence a terminal solitary, globose head. Flowers bisexual, yellowish-white. Fruit a capsule on a fleshy globose receptacle, 3.5-5 cm across, orange yellow, capsule membranous. Seeds many, angular, minute.

Uses : The leaf extract has recently been used to produce silver nanoparticles for surface-enhanced Raman spectroscopy.

129. Pachira aquatica Aubl.



Family : Malvaceae

Origin : Central and South America

Kannada Name :

Common name : Guiana chestnut, Malabar chestnut

Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : All year

Fruiting period : All year

Description : Evergreen trees, 5–23 m tall, sometimes buttressed. Bark smooth, greyish to brownish. Leaves palmate, alternate; leaflets 5–9, oblong to obovate-oblong, abaxially ferruginous stellate tomentose, adaxially glabrous, base cuneate, apex acuminate, margin entire. Inflorescence solitary flowers. Flowers bisexual, yellowish; stamens numerous, pink-tipped white to yellowish. Fruit a capsule, subglobose, ellipsoid to oblong-ellipsoid, yellowish-brown puberulous, silky-villous inside. Seeds 4–5 angular, dark brown.

Uses : It is known as the best air-purifying plant, and it absorbs the toxic components present in the air. It purifies the air and makes home a safe place for family. With so many amazing benefits.

130. Parkia biglandulosa (Jacq.) R.Br. ex G.Don

Family : Fabaceae



Origin : Africa

Kannada Name :

Common name : African locust bean

Species type : Exotic

Conservation status : Least concern



Phenology : Deciduous

Flowering period : December - April

Fruiting period : December - April

Description : It is a deciduous perennial that grows to between 7 and 20 metres high. The pods of the tree, commonly referred to as locust beans, are pink in the beginning and turn dark brown when fully mature. The seeds are embedded in a sweet, powdery yellow pulp. The many flowers are either bisexual, sterile or nectar-bearing. Bisexual flowers are pentamerous, 1-1.4 cm long, and corolla lobes are fused at their base. Sterile flowers are shorter and are borne near the peduncle, in the upper part of the inflorescence, and their nectar is attractive to bats that pollinate the flowers.

Uses : The bark is used as a mouthwash, vapour inhalant for toothache, or for ear complaints. It is macerated in baths for leprosy and used for bronchitis, pneumonia, skin infections, sores, ulcers, bilharzia, washes for fever, malaria, diarrhoea, violent colic and vomiting, sterility, venereal diseases, guinea

worm, oedema and rickets, and as a poison antidote. Leaves are used in lotions for sore eyes, burns, haemorrhoids and toothache. Seed is taken for tension, and pulp for fevers, as a diuretic and as a mild purgative. Roots are used in a lotion for sore eyes.

Additional information : The fruit pulp, the leaves and the seeds are also used to feed livestock and poultry. The flowers are attractive to bees and a good source of nectar.

131. Peltophorum pterocarpum (DC.) K.Heyne

Family : Fabaceae



Origin : Southeast Asia

Kannada Name : Booruga

Common name : Copper pod tree

Species type : Exotic

Conservation status : Not known



Phenology : Evergreen

Flowering period : March - May and September - November

Fruiting period : December - April

Description : Evergreen trees, 12-24 m tall. Bark grey, smooth, lenticels present. Leaves bipinnate, pinnae 7-15 pairs, 7-21 pairs of leaflets per pinna; leaflets opposite, oblong-obovate, coriaceous, pubescent to glabrous, base oblique, apex rounded, mucronate, margin entire. Inflorescence a terminal or axillary panicle. Flowers bisexual, yellow, pubescent. Fruit a pod, copper-red, oblong, flat, thin, hard, narrowed at both the ends, 5-10 cm long. Seeds brown, 2-4.

Uses : In traditional medicine it is used as an astringent to cure or relieve intestinal disorders after pain at childbirth, sprains, bruises and swelling or as a lotion for eye troubles, muscular pains and sores. It is also used for gargles and tooth powders. An antifungal principle is present in the leaflets and buds. An alcoholic extract from the flowers has an anti-inflammatory effect and an antibacterial activity.

132. Persea americana Mill.

Family : Lauraceae

Origin : Mexico

Kannada Name :

Common name : Avocado



Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period : November - January

Fruiting period : January - March



Description : Small to medium sized evergreen trees, up to 20 m tall. Bark grey-green, longitudinally fissured, young branches pubescent. Leaves simple, alternate, narrowly elliptic, elliptic, ovate or obovate, coriaceous, glabrous or pubescent scattered on the underside, glaucous below, base cuneate or acute to subrounded, apex acute or obtuse or obtusely acuminate, margin entire. Inflorescence an axillary subterminal panicle, densely pubescent. Flowers small, fragrant, pubescent, greenish-yellow. Fruit a berry, large, pear-shaped, globose, or oval; pulp fleshy, thick, juicy, oily. Seed 1, large, globose.

Uses : The leaves are astringent, carminative, antitussive, emmenagogue and hypotensive. An oral infusion of the leaves is used to treat dysentery. The bark is astringent, carminative, antitussive and emmenagogue. The fruit pulp is emollient, carminative and helps lower blood cholesterol levels.

Additional information : The fruit of domestic varieties has a buttery flesh when ripe. Depending on the variety, avocados have green, brown, purplish, or black skin when ripe, and may be pear-shaped, egg-shaped, or spherical. Commercially, the fruits are picked while immature, and ripened after harvesting.

133. Persea macrantha *(Nees) Kosterm.*





Family : Lauraceae

Origin : Western Ghats, Sri Lanka

Kannada Name : Gulimaavu, Chittu thandri

Common name - Large-flowered bay tree

Species type : Endemic

Conservation status : Not known

Phenology : Evergreen

Flowering period : December - May

Fruiting period : December - May

Description : Evergreen trees, up to 30 m tall. Bark pale brown, mottles with dark blotches, thinly scaly, blaze pinkish. Leaves simple, alternate, clustered at the tip of brachlets, obovate or elliptic to elliptic-oblong, coriaceous, glabrous, glaucous beneath, base acute to rounded, apex rounded or acuminate or acute, margin entire, aromatic when crushed. Inflorescence a terminal or axillary panicle. Flowers bisexual, pale yellow. Fruit a berry, globose, up to 2 cm across, aromatic, green with white specs, red to black when ripe. Seed 1, globose.

Uses : The leaf as well as bark are used extensively by folklore practitioners in treating various ailments such as rheumatism, asthma, ulcer, bruise, mental upset, fractures, swellings, weakness and debility.

134. Phoenix sylvestris (L.) Roxb.



Family : Arecaceae

Origin : Pakistan, India, Bhutan, Myanmar, Bangladesh

Kannada Name : Ichalu, Kharjura

Common name – Wild date palm

Species type : Indigenous



Conservation status : Not known

Phenology : Evergreen

Flowering period : March – May

Fruiting period : September – October

Description : Medium sized, dioecious, soliatry tree palm, 10-16 m tall, with persistent leaf bases. Leaves pinnate, greyish-green, short spines at the base; leaflets numerous, alternate, opposite or fascicled, in several planes, linear, glabrous, apex almost sharply pointed. inflorescence a spadix. Male flowers white, fragrant. Female flowers greenish or creamy-white. Fruit a berry, oblong-ellisoid, 2.5-3.2 cm long, orange-yellow when ripe. Seed 1, deeply grooved.

Uses :

135. Phyllanthus acidus (L.) Skeels.



Family : Phyllanthaceae

Origin : Madagascar

Kannada Name : Arenelli, Kirunelli

Common name : Star gooseberry

Species type : Exotic

Conservation status : Not known

Phenology : Deciduous

Flowering period : April – May

Fruiting period : June – August

Description : A small deciduous, monoecious tree or shrub, reaching 2 to 9 m in height. The leaves are ovate or lanceolate, glabrous, base obtuse or rounded, apex acute, margin entire. Inflorescence an axillary cymule, rarely cauliflorous. Flowers male, female or bisexual, small and pinkish. Fruit a drupe, oblate, with 6 to 8 ribs, pale yellow to creamish-white, waxy, crisp, juicy and very sour. Seeds 4 to 6.

Uses : The root is an active purgative. An infusion of the root is taken to alleviate asthma. An extract from the root is used to cure skin diseases especially to bring relief from itching. A leaf decoction is applied to urticaria. The latex is credited with emetic and purgative activity. The bark is heated with coconut oil and spreads on eruptions on feet and hands. A decoction of the bark is used to treat bronchial catarrh. The fruit is used as a laxative. They are also taken as a liver tonic to enrich the blood. The juice of the fruit is instilled in the eyes to treat eye-troubles. The seeds are cathartic.

136. Phyllanthus emblica L.

Family : Phyllanthaceae

Origin : Indian subcontinent

Kannada Name : Bettada nellikayi

Common name : Indian gooseberry

Species type : Indigenous

Conservation status : Least concern

Phenology : Deciduous

Flowering period : March - May

Fruiting period : June - September





Description : Deciduous trees, to 15 m high, bark grey-brown, rough, irregularly flaking; blaze pink-red. Leaves simple, alternate, bifarious on short deciduous branchlets, closely overlapping, subsessile, linear, oblong or linear-oblong, glabrous, membranous, base round, apex obtuse and shortly apiculate, margin entire. Flowers unisexual, greenish-yellow, densely clustered in leaf axils. Fruit a drupe, subglobose, disc enlarged, fleshy yellowish-green, indehiscent. Seeds reddish, trigonous, 3, smooth.

Uses : The amla fruit is eaten raw or cooked into various dishes, such as dal (a lentil preparation) and amle ka murabbah, a sweet dish made by soaking the berries in sugar syrup until they are candied. It is traditionally consumed after meals. Commonly used in inks, shampoos and hair oils, the high tannin

content of Indian gooseberry fruit serves as a mordant for fixing dyes in fabrics.

Additional information : In the Buddhist tradition, half an amalaka fruit was the final gift to the Buddhist sangha by the great Indian emperor Ashoka.

137. Pimenta dioica Lindl.



Family : Myrtaceae

Origin : West Indies, Central America

Kannada Name :

Common name : Allspice, Jamaican pepper

Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : February - March

Fruiting period : April - June

Description : Evergreen tree, up to 20 m tall, with young branchlets glandular and pubescent. Leaves aromatic, oblong-elliptic, elliptic or elliptic-lanceolate, glabrous or glabrescent, base acute or rounded, rounded to obtusely acuminate at the apex, margin entire. Inflorescence a panicle. Flowers bisexual, white, 4-merous, small, pubescent. Fruit subglobose to oblate berry, densely covered with convex glands, aromatic on drying. Seeds 2, reniform.

Uses : Allspice is one of the most important ingredients of Caribbean cuisine. Under the name 'pimento', it is used in Jamaican jerk seasoning, though in principle the wood is used to smoke jerk in Jamaica. In the West Indies, an allspice liqueur is produced under the name "pimento dram".

138. Pithecellobium dulce (Roxb.) Benth.



Family : Fabaceae

Origin : Mexico

Kannada Name : Seeme hunase mara

Common name : Madras thorn tree

Species type : Exotic



Conservation status : Not known

Phenology : Evergreen

Flowering period : December – February

Fruiting period : February – March

Description : Evergreen trees, 10–15 m tall. Branches often pendulous; branchlets armed with spinescent stipules. Leaves pinnate, alternate, pinnae 1 pair; glands at junction of pinnae and leaflets; leaflets sessile, 1 pair per pinna, elliptic or obovate-elliptic, glabrous, base slightly oblique, apex obtuse or emarginate, margin entire. Inflorescence pedunculate heads, aggregated in terminal panicles. Flower bisexual, greenish-white. Fruit a pod, green or reddish-brown, curved into a circle, with white to pink pulpy aril. Seeds dark brown, shiny, 5–9, ovoid-ellipsoid, hard, with pleurogram.

Uses : The leaves can be used as a plaster to allay pain even from venereal sores, and can relieve convulsions. A paste made from the leaves is applied externally to treat muscular swellings caused by some inflammations. The bark

of the root is a good remedy for diarrhoea and dysentery. The fruit pulp is taken orally to stop blood flow in case of haemoptysis. The seed juice is inhaled into the nostrils against chest congestion and pulverised seeds are ingested for internal ulcers.

139. Plumeria alba L.

Family : Apocynaceae



Origin : West indies, Caribbean

Kannada Name :

Common name : White frangipani

Species type : Exotic



Conservation status : Not known

Phenology : Deciduous

Flowering period : April - June

Fruiting period :

Description : Evergreen and deciduous trees, up to 7.6 m. Upright branches thick and have milky sap. Leaves simple, oblong-lanceolate, usually clustered at ends. Inflorescence cyme. Flowers bisexual, fragrant, white, yellow throathed. Fruit a follicle.

Uses : The root bark is depurative and purgative, causing thirst. It is used in the treatment of blennorrhagia, herpes and syphilis. The root bark is used externally as a lotion on syphilitic ulcers, administered as powder macerated in sugar-water, wine or beer. The latex from the stem is caustic. It is used for treating ulcers, skin diseases and scabies. The flowers are bitter and caustic. They are an ingredient in a complex pectoral syrup for treating chest coughs and grippe. The seeds are used in the treatment of dysentery.

140. Plumeria obtusa L.

Family : Apocynaceae



Origin : Mexico, South America

Kannada Name :

Common name : Temple tree

Species type : Exotic



Conservation status : Least concern

Phenology : Evergreen

Flowering period : All year

Fruiting period :

Description : Nearly evergreen small tree, up to 6 m tall. Young branches terete. Leaves simple, obovate to oblong-obovate, coriaceous, glabrous, base acutely cuneate, sometimes acute or rounded, apex rounded to emarginate often short mucronate, margin entire. Inflorescence a cyme. Flowers bisexual, white with yellow throats, fragrant. Fruit a follicle, 10–22 cm long.

Uses : This plant is commonly used as an ornamental, grown for its flowers. In Cambodia the flowers are used to make necklaces and in offerings to the deities. In traditional medicine used in that country, a decoction of the bark is given in varying doses as a purgative or as a remedy against oedema.

Additional information : Plumeria can grow without water for a very longer period of time.

141. Plumeria rubra L.

Family : Apocynaceae

Origin : Mexico, Central America, Columbia

Kannada Name : Kempu kolabe



Common name : Red frangipani

Species type : Indigenous

Conservation status : Least concern

Phenology : Deciduous

Flowering period : March – May and July – October

Fruiting period :

Description : Deciduous shrub or small tree, 2–8 m. bark thin and grey. Leaves simple, oblong-lanceolate to ovate, glabrous to sparsely pubescent below, base acute, apex acute to acuminate, margin entire. Inflorescence a cyme. Flowers bisexual, white, yellow, rose or combinations of these colours. Fruit a follicle, 9–30 cm long.

Uses : The plant has also been shown to be an antifungal, antiviral, analgesic, antispasmodic, and hypoglycemic. The plant has been known to promote digestion and excretion, along with respiratory and immune functions. The sap of the plant is used as a laxative and is a remedy for bloating and stomach aches. The bark is said to be purgative and is also used for venereal sores. The flowers can be boiled in water or juice and made into a salad to promote bowel movement, urine flow, and to control gas and phlegm. The flowers are also used in the treatment of asthma.

Additional information : Plumeria rubra is the national flower of Nicaragua, where it is known under the local name "sacuanjoche". It is also the village flower of Asan-Maina on Guam.

142. Polyalthia longifolia (Sonn.) Thwaites ex

Family : Annonaceae

Origin : India, Sri Lanka



Kannada Name : Ubbina mara, Kambada mara

Common name : False Ashoka

Species type : Indigenous



Conservation status : Least concern

Phenology : Evergreen

Flowering period : March – May

Fruiting period : July – September

Description : Evergreen trees to 20 m tall; trunk straight. Branches finely striate, minutely puberulent when young, soon glabrous. Leaves simple, alternate, ovate-oblong to ovate-lanceolate, stiffly membranous to thinly leathery, glabrous, abaxially pale, adaxially dark glossy green, base cuneate, obtuse or rounded, apex acuminate, margin undulate. Inflorescence axillary, fasciculate and shortly pedunculate, racemose, or umbelliform. Flowers bisexual, greenish-yellow. Fruit a berry, globose or ellipsoid. Seed pale brown, ovoid, usually with a longitudinal groove.

Uses : The leaves are used for ornamental decoration during festivals. The tree is a focal point in gardens throughout India. The tree can be pruned into various shapes and maintained in required sizes. The flexible, straight and

light-weight trunks were used in the making of masts for sailing ships. 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 antioxidant, anti-lipoxygenase and antimicrobial (against various microbe strains) activities, among others.

Additional information : Methanolic extracts of Monoon longifolium have yielded 20 known and two new organic compounds, some of which show cytotoxic properties. The fatty acid composition of the seed has also been reported.

143. Pterocarpus marsupium Roxb.

Family : Fabaceae



Origin : India

Kannada Name :

Common name : Malabar kino

Species type : Indigenous

Conservation status : Near threatened

Phenology : Deciduous

Flowering period : September - October

Fruiting period : September - October

Description : Deciduous trees, to 30 m high, bark 10-15 mm, surface grey or greyish-black, rough, deeply vertically cracked, exfoliations small, irregular, fibrous; blaze pink; exudation blood-red. Leaves imparipinnate, alternate, pulvinate, leaflets 5-7, alternate, lamina elliptic-oblong, oblong-ovate or oblong, glabrous, base obtuse or acute, apex obtuse and emarginate, margin entire. Inflorescence a terminal or axillary cyme. Flowers bisexual, yellow. Fruit a pod, orbicular-reniform, broadly winged; seed one, subreniform.

Uses : The resin obtained from wounds in the bark is astringent. It is used in the treatment of chronic diarrhoea and the irritation caused by gastric infection and colitis. Although it has an unpleasant flavour, it makes a good mouthwash and gargle. It is commonly used in cases of toothache and also as a douche to treat vaginal discharge. The resin is applied topically in the treatment of skin conditions.

144. Pterocymbium tinctorium (Blanco) Merr.

Family : Malvaceae



Origin : Peru

Kannada Name : -

Common name - Winged boot tree

Species type : Exotic



Conservation status : Least concern

Phenology : Deciduous

Flowering period : January - May

Fruiting period : January - May

Description : Deciduous trees, to 20 m high, bark grey-brown. Leaves simple, alternate, ovate or ovate-oblong, glabrous above, pubescent beneath, coriaceous, base cordate, apex acute or acuminate, margin entire. Inflorescence a terminal umbellate panicle. Flowers polygamous, yellow. Fruit a follicle, boat shaped with a pouch-like bulging at base, glabrous, membranous, 2-lobed, lower broad, round, upper linear, obtuse, glabrous, dehiscing before maturity; seed 1, 1 cm long, basal, ellipsoid to ovoid.

Uses : A fibre obtained from the bark is used to make rope. The bark is used to improve black dyeing of cotton cloth.

145. Pterospermum acerifolium *(L.) Willd.*





Family : Malvaceae

Origin : Southeast Asia

Kannada Name : Kanaka champa

Common name : Bayur tree

Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period : January - April

Fruiting period : January - April

Description : Evergreen tree, 12-15 m tall; bark smooth, ash-coloured; branchlets ferruginous-tomentose. Leaves polymorphous, obovate to orbicular or oblong, cordate, grey-tomentose beneath, sometimes peltate at base, entire or sinuately lobed at apex, margin coarsely serrate. Inflorescence an axillary or solitary cyme. Flowers fragrant, pubescent, white. Fruit a capsule, oblong, 5-angled, woody and brown, tubercled. Seeds obliquely ovoid, compressed with a large membranous wing.

Uses : They can be used as actual dinner plates or as packaging and storage by wrapping materials inside. The pubescent under surface of the leaves is said to

stop bleeding and can be used as tinder for a means of sparking fires.

Additional information : The Bayur Tree even serves a cultural function. Local Hindu people employ the plant for religious purposes. Its bark is also supposed to be used in case of scabies and topical preparation in lipsticks.

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



Family : Malvaceae

Origin : Southeast Asia, India

Kannada Name : Kolugida, Tattale mara

Common name : Buddha Coconut tree

Species type : Indigenous



Conservation status : Not known

Phenology : Deciduous

Flowering period : April – May

Fruiting period : April – May

Description : Large deciduous trees, buttressed, up to 30 m tall. Bark grey, longitudinally arranged lenticels; blaze yellowish cream. Young branchlets stout, terete, dense golden-brown stellate pubescence, later glabrous. Leaves simple, alternate, spiral, clustered at twig ends, broadly ovate or oblong-ovate, thinly coriaceous, glabrous, base cordate or subtruncate, apex acute or slightly acuminate, margin entire or slightly undulate, Inflorescence short axillary panicle, on old wood, rusty brown tomentose. Flowers polygamous, pale orange to red. Fruit a follicle of 3-5, globose or ovoid, woody; seeds winged.

Uses : Alata fruits possess a narcotic like effect and are utilized as an alternative for opium in India. The bark juice was used traditionally in the management of hemorrhoids, dropsy, swelling oedema, gout, leprosy and pain.

147. Putranjiva roxburghii *Wall.*

Family : Putranjivaceae



Origin : Southeast Asia, Indian subcontinent

Kannada Name : Amani putranjiva

Common name – Putranjiva

Species type : Indigenous



Conservation status : Not known

Phenology : Evergreen

Flowering period : March – August

Fruiting period : March – August

Description : Evergreen trees, up to 20 m high, bark dark grey, whitish when young with horizontal lenticels; branches generally pendent; branchlets terete, brown or blackish, slender, pubescent. Leaves simple, alternate, elliptic-oblong, glabrous, dark green, shining, coriaceous, base oblique, apex shortly acuminate, acute or obtuse with retuse tip; margin serrate or serrulate. Male inflorescence an axillary spike, female flowers solitary. Flowers unisexual, small, yellow; Fruit a drupe, ovoid-ellipsoid, white tomentose; seed one, crustaceous; pedicels 6-25 mm long.

Uses : A decoction of leaves and fruit is taken for the treatment of liver complaints, colds, fevers and rheumatism.

148. Reutealis trisperma (Blco.) Airyshaw



Family : Euphorbiaceae

Origin : Philippines

Kannada Name :

Common name : Philippine tung

Species type : Exotic



Conservation status : Not known

Phenology : Evergreen

Flowering period : March - April

Fruiting period : March - April

Description : Evergreen trees, up to 15 m tall. Leaves simple, alternate, ovate or ovate-cordate, abaxial surface with hair-tufts in many vein-axils, base usually deeply cordate with rounded lobes, sometimes rounded or obtuse on old trees, apex gland-tipped, margin entire. Plants dioecious, sometimes monoecious. Male inflorescences flat-topped, with many cymelets. Female inflorescences flat-topped, racemose, or thyrsoid. Flowers unisexual, white. Capsule depressed globose to obtusely trigonous; pericarp, longitudinally 3-angular, rugose, densely velutinous-pubescent.

Uses : A drying oil is obtained from the seed. It was formerly made into a weak soap which was popular with sailors as it lathered with sea water. The oil is said to be an effective insecticide and can be applied as a wood preservative.

The wood can be made into tea boxes, matches, wooden shoes and light construction material. Medicinally, sap from the bark has been used to cure scurf and the seed as a strong purgative.

149. Roseodendron donnell-smithii

(Rose) Miranda



Family : Bignoniaceae

Origin : Central America, Mexico

Kannada Name : -

Common name - Primavera, Gold tree



Species type : Exotic

Conservation status : Not known

Phenology : Deciduous

Flowering period :

Fruiting period :

Description : Large deciduous trees, 7-13 m, occasionally up to 35 m. Leaves are simple, 1-foliolate or digitately 3-7-foliolate; leaflets oblong-elliptic, membranous to chartaceous, puberulus underside or glabrescent, lepidotes present, base truncate, apex acute to acuminate, margin entire to serrate. Inflorescence a terminal panicle. Flowers bisexual, tubular, bright yellow, scattered pubescent. Fruit a capsule, linear-elongated, puberulous. Seeds surrounded by hyaline membranous wing.

Uses : It is used for fine furniture, cabinetwork, decorative veneer, flooring etc. The wood is also used for fuel.

150. Roystonea regia (Kunth.) O.F.Cook

Family : Arecaceae



Origin : Mexico, Central America, Caribbean

Kannada Name :

Common name : Royal palm

Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period : March – April

Fruiting period : March – April

Description : Large palm, up to 40 m tall, usually displaying a distinct thickening towards the middle, greyish white, smooth. Crown roundish. Leaves pinnate, drooping, divided into numerous leaflets, pinnae in two rows on either side of rachis, linear, apex acuminate; petiole glabrous, unarmed, smooth, elongated into a leaf sheath forming a shining greenish elongated crown shaft, crown shaft reaching up to 120 cm; leaflets Inflorescence a spadix. Flowers unisexual, white, anthers pink. Fruit a drupe, globose to ellipsoid, fleshy, scar near the base of the fruit.

Uses : Leaves are used for thatching and the wood for construction. The roots are used as a diuretic. They are also used as a treatment for diabetes.

Additional information : In Roman Catholicism, R. regia plays an important role in Palm Sunday observances.

151. Samanea saman (Jacq.) Merr.



Family : Fabaceae

Origin : South America

Kannada Name :

Common name : Rain tree



Species type : Exotic

Conservation status : Least concern

Phenology : Deciduous

Flowering period : March - May

Fruiting period : March - May

Description : Evergreen or deciduous tree to 20 m tall with a broad crown; bark rough, grey. Leaves bipinnate, alternate, pinnae 2-6 pairs; leaflets 6-16 pairs, rhombic-elliptic, asymmetric, increasing in size towards top of pinna, glabrous above, pubescent below, base acute, apex obtuse or rounded, margin entire. Inflorescence umbelliform capitulae. Flowers bisexual, pink with green lobes. Fruit a pod, indehiscent, brown or blackish, somewhat fleshy with a raised border.

Uses : A decoction of the inner bark and fresh leaves is used as a treatment for diarrhoea. A brew of small sections of the bark is taken to treat stomach-ache. A crude aqueous or alcoholic extract of the leaves is observed to have an inhibiting effect on Mycobacterium tuberculosis. An infusion of the leaves is used as a laxative. The fruit decoction is used as a CNS-sedative. The seeds are chewed for treating a sore throat.

Additional information : Children eat the pods, which contain a brownish, sticky, liquorice-like, sweet-flavoured pulp. A lemon-like fruit drink is also made from the pulp.



152. Santalum album L.



Family : Santalaceae

Origin : India, Southeast Asia

Kannada Name : Chandana, Srigandha

Common name - Indian sandalwood tree

Species type : Indigenous



Conservation status : Vulnerable

Phenology : Evergreen

Flowering period : March - April

Fruiting period : June - September

Description : Evergreen trees, 4–10 m, occasionally up to 20 m high, bark surface dark grey to nearly black, rough with short vertical cracks. Leaves simple, opposite, ovate to lanceolate-elliptic, glabrous, base acute or round, apex obtuse or acute, margin entire. Inflorescence axillary and terminal paniculate cymes. Flowers bisexual, reddish-purple. Fruit a drupe, 8–12 mm across, globose, blackish-purple, annulate above, beaked with the basal part of the style; seed one.

Uses : The wood or essential oil is taken internally in the treatment of genito-urinary disorders, fever, sunstroke, digestive problems and abdominal pain. A paste of the wood is used externally to treat skin complaints.

Additional information - It is considered sacred in some religions like Hinduism, and some cultures place great significance on its fragrant and medicinal qualities.

153. Sapindus emarginatus Vahl.



Family : Sapindaceae

Origin : Western Ghats, Indian subcontinent

Kannada Name : Koogate kaayi, Arutaala

Common name - Notched-leaf soapnut



Species type : Endemic

Conservation status : Not known

Phenology : Deciduous

Flowering period : November - March

Fruiting period : November - March

Description : Evergreen trees, to 18 m high, bark dark-brown, rough; branchlets tomentose. Leaves paripinnate, alternate; leaflets 2-3 pairs, oblong-obovate, oblanceolate or oblong, glabrescent above, softly tomentose beneath, base cuneate or obtuse, apex obtuse, round and emarginate, margin entire. Inflorescence a terminal or axillary cyme. Flowers polygamous, greenish-white. Fruit a drupe of 3 indehiscent cocci, combined about half way up and then separating with saponaceous fibrous pericarp; smooth and slightly pubescent when young, later glabrous and wrinkled; seeds black, globose, smooth.

Uses : The fruits possess several medicinal properties and are widely used, for example in the treatment of asthma, colic and dysentery, and during childbirth.

154. Sapindus laurifolius Vahl.



Family : Sapindaceae

Origin : India

Kannada Name : Antuvala

Common name : South Indian soapnut



Species type : Indigenous

Conservation status : Not known

Phenology : Evergreen

Flowering period : November - January

Fruiting period :

Description : Large trees, up to 25 m, branchlets purplish brown, lenticellate. Leaves are compound, leaflets 1-4 pairs, subopposite, elliptic-oblong to elliptic-lanceolate or obovate, glabrous, pubescent on midrib, acute to truncate or rounded at the base, emarginate to acuminate at the apex. Inflorescence a terminal panicle. Flowers bisexual, greenish-white. Fruit is 2-3 lobed, velvety when young, hard and smooth when mature. Each cell has a 6-9 mm black, round seed, which is what is popular as a traditional washing soap.

Uses : Kernel extracts of soapnut disrupt the activity of enzymes of larvae and pupae and inhibits the growth of the mosquito ***Aedes aegypti***, an important vector of viral diseases.

155. Saraca asoca (Roxb.) Willd.

Family : Fabaceae



Origin : Indian Subcontinent

Kannada Name : Achange, Ashoka, Eliyaala

Common name : Ashoka tree

Species type : Indigenous



Conservation status : Not known

Phenology : Evergreen

Flowering period : February - March

Fruiting period : July - October

Description : Small evergreen trees, 7-10 m tall; Trunk often tubercled; bark lenticellate, dark, shallowly fissured; blaze purplish. Branchlets terete, glabrous. Leaves paripinnate, alternate; leaflets 4-6 pairs, narrow elliptic-oblong or lanceolate, subcoriaceous, glabrous, base acute to rounded or subcordate, apex acute to acuminate, margin undulate, young leaves red. Inflorescence dense corymbs. Flowers bisexual, orange, sometimes white; fragrant. Fruit a pod, flat, oblong, apiculate; seeds obovate-orbiculate.

Uses : The bark is also useful in dyspepsia, fever, and burning sensation. It is also used to treat menorrhagia, leucorrhoea, internal bleeding, hemorrhoids, and hemorrhagic dysentery.

156. Schefflera actinophylla (Endl.) Lowry & G.M.Plunkett



Family : Araliaceae

Origin : Australia

Kannada Name :

Common name : Australian umbrella tree

Species type : Exotic



Conservation status : Not known

Phenology : Evergreen

Flowering period : July - September

Fruiting period :

Description : Evergreen tree, up to 12 m high, bark greenish. Leaves alternate; leaflets 7-16, oblanceolate, glabrous, glossy, apex acute, margin entire or dentate when young. Inflorescence a raceme. Flowers bisexual, red. Fruit a drupe, purplish-black when ripe, up to 7 mm in diameter.

Uses : It is planted as an ornamental tree as it attracts different birds.

157. Schotia brachypetala Sond.

Family : Fabaceae

Origin : Africa





Kannada Name :

Common name : Weeping boer-bean, Fuschia tree

Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : March - June

Fruiting period :

Description : Evergreen to semi-deciduous tree up to 16 m high with a somewhat rounded crown. Bark greyish-to reddish-brown, rough or smooth; young branchlets glabrous to shortly pubescent. Leaves paripinnate, leaflets 3-6 pairs, opposite, oblong or obovate, coriaceous, glabrous to shortly pubescent, base cuneate, apex rounded or retuse, margin entire. Inflorescence a dense subglobose panicle, usually cauliflorous on older branches but occasionally terminal. Flowers bisexual, deep red or scarlet or crimson. Fruit a pod, oblong, flattened, glabrous, with numerous small resin-filled vesicles in the pod wall, several-seeded, tardily dehiscent leaving the dorsal and ventral sutures attached to the pedicel. Seeds light brown, ovoid, oblong or oblique with a large yellow basal aril.

Uses : It is used to treat heartburn. Mixtures of bark are used to purify the blood and diarrhoea.

158. Senegalia polyacantha (Willd.) Seigler & Ebinger



Family : Fabaceae

Origin : Africa, India, Asia

Kannada Name : -

Common name - White thorn tree



Species type : Indigenous

Conservation status : Not known

Phenology : Deciduous

Flowering period : June - September

Fruiting period : June - September

Description : Deciduous tree up to 21 m. high; trunk with fissured bark and knobby persistent prickles. Young branchlets pubescent or puberulous, rarely subglabrous, grey to brown. Prickles in pairs just below each node, straw-coloured to brown or blackish. Leaves paripinnate, alternate, pinnae 15-25 pairs; leaflets 30-50, opposite, elliptic, densely pubescent, chartaceous, base truncate, apex subacute or obtuse, margin ciliate. Inflorescence an axillary spike, solitary or paired. Flowers bisexual, cream or white. Fruit a pod, dehiscent, glabrous or nearly so, oblong, straight, venose. Seeds subcircular to elliptic-lenticular.

Uses : The roots are tonic and also used as an antidote for snake bites. They are also used in the treatment of venereal diseases. A decoction of the bark is used in the treatment of dysentery and gastro-intestinal disorders.

Additional Information : The presence of the tree in the wild is said to be a good indicator that the land is suitable for growing tobacco and cotton.

159. Senna montana (Roth.) V.Singh



Family : Fabaceae

Origin : India

Kannada Name : -

Common name – Mountain cassia



Species type : Indigenous

Conservation status : Not known

Phenology : Evergreen

Flowering period : November – January

Fruiting period : November – January

Description : Large shrubs to small trees, up to 4 m tall, young shoots yellow tomentose. Leaves paripinnate, alternate; leaflets oblong or elliptic, base rounded, apex obtuse to mucronate, margin entire. Inflorescence an axillary or terminal corymbose panicle. Flowers bisexual, yellow. Fruit compressed, beaked, ovoid, longitudinal.

Uses :

160. Senna siamea (Lam.) Irwin et Barneby







Family : Fabaceae

Origin : South Asia

Kannada Name : Hiretangedi, Simethangadi

Common name : Siamese cassia

Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : August - May

Fruiting period : August - May

Description : IEvergreen tree, 12-15 m tall, bark greyish brown, smooth, fissured at age, branchlets greenish brown, sparsely puberulent. Leaves pinnate, alternate; leaflets 6-10 pairs, oblong or ovate-oblong, coriaceous, abaxially finely pubescent, adaxially smooth and glabrous, base rounded, apex obtusely rounded, often emarginate, mucronate, margin entire. Inflorescence a raceme. Flowers bisexual, complete, bright yellow, sub persistent bract. Fruit a pod, numerous, long, narrow, flat dark, brown, strap shaped, stipitate, terete to compressed, dehiscent, with septae between the numerous seeds; seeds are bean shaped, shiny, dark.

Uses : In traditional medicine, the fruit is used to charm away intestinal worms and to prevent convulsions in children. The heartwood is said to be a laxative, and a decoction is used against scabies.

161. Senna spectabilis (DC.) Irwin & Barneby

Family : Fabaceae



Origin : South and Central America

Kannada Name :

Common name : Golden wonder tree

Species type : Exotic

Conservation status : Least concern



Phenology : Evergreen

Flowering period : June – August

Fruiting period : December – February

Description : Small evergreen trees, 5–10 m tall, with long, spreading branches. Bark greyish brown, smooth, fissured at age. Young branches, petioles, and rachises of leaves densely yellowish brown velutinous. Leaves pinnate, alternate; leaflets 8–19 pairs, elliptic or oblong-lanceolate, abaxially densely yellowish brown velutinous, adaxially glabrous or puberulent, base subrounded and slightly oblique, apex acute, cuspidate. Flowers in terminal panicles or axillary racemes. Flowers bisexual, yellow. Fruit a pod, black, narrowly cylindric, slightly compressed, slightly contracted between seeds, annulate-septate, glabrous. Seeds 50–70, suborbicular.

Uses : The plant has been used to treat ringworm and skin disease. A leaf extract in alcohol has shown significant antifungal activity and suggests a potential use in infections caused by ***Candida albicans***.

162. Simarouba glauca DC.



Family : Simaroubaceae

Origin : Florida, South America, Caribbean

Kannada Name : -

Common name - Paradise tree



Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period :

Fruiting period :

Description : Small to medium-sized evergreen, dioecious tree growing up to 15 m in height, straight, cylindrical bole, bark brown with irregular superficial fissures. Leaves imparpinnate, alternate; leaflets 5-15, oblong, elliptic, rounded, paler and puberulous beneath, often notched or smooth at the apex. Inflorescence a terminal or axillary panicle. Flowers unisexual, occasionally bisexual flowers are borne, yellowish-white. Fruit a drupe, purple or black at maturity, about 1.5 cm long.

Uses : The bark is taken as a decoction or tea for diarrhoea and fever. Leaves are used for rheumatism or are applied in the form of a lotion for body pain, bruises or skin itch.

163. Spathodea campanulata P.Beauv.

Family : Bignoniaceae



Origin : Africa

Kannada Name : Jeerkolavi kaayi, Neeru kaayi

Common name : African tulip tree



Species type : Exotic

Conservation status : Not known

Phenology : Deciduous

Flowering period : June - August

Fruiting period : December - February

Description : Large, evergreen or semi-deciduous tree, up to 25 m tall. Trunk sometimes buttressed, bark lenticellate. Leaves imparipinnate, usually 9-15-foliolate, the leaflets more or less elliptic, slightly puberulous along main veins, base asymmetrically subtruncate or widely cuneate, apex acute to acuminate. Inflorescence a terminal raceme. Flowers bisexual, bright vermillion or scarlet, with yellow-orange margin. Fruit a capsule, erect, slightly woody, fusiform, compressed, angular (like a flat-bottomed boat when dehisced), lenticellate, glabrous or densely tomentose when young, glabrescent when older. Seeds compressed, wings hyaline.

Uses : The bark has laxative and antiseptic properties. The bark is chewed and sprayed over swollen cheeks. The bark may also be boiled in water used for bathing newly born babies to heal body rashes. Extracts of the bark, leaves

and flowers are used to treat malaria, HIV, diabetes mellitus, oedema, dysentery, constipation, gastrointestinal disorders, ulcers, skin diseases, wounds, fever, urethral inflammation, liver complaints and as a poison antidote.

164. Stenocarpus sinuatus R.Br.

Family : Proteaceae



Origin : Australia

Kannada Name :

Common name : Firewheel tree

Species type : Exotic

Conservation status : Not known



Phenology : Evergreen

Flowering period : February - March

Fruiting period : January - July

Description : It is a medium to large tree. The bark is greyish brown, not smooth and irregular. The base of the cylindrical trunk is flanged. Leaves alternate and variable in shape, simple or pinnatifid, the leaf margins wavy. Leaf venation is clearly seen above and below the leaf. The ornamental flowers are bright red in umbels, in a circular formation. Flowers form mostly between February to March. The fruit is a follicle, in a boat shape. Fruit matures from January to July.

Uses : It is used as an ornamental tree.

165. Sterculia balanghas L.

Family : Malvaceae

Origin : India, Sri Lanka

Kannada Name : -

Common name - Nawa

Species type : Indigenous

Conservation status : Not known

Phenology : Deciduous

Flowering period :

Fruiting period :





Description : Deciduous trees, to 18 m high, bole buttressed; bark grey, smooth, exfoliating in thin round flakes; branchlets tomentose. Leaves simple, alternate, pulvinate leaf base, elliptic, obovate, oblong, elliptic-ovate or oblong-ovate, stellate hairy to velvety beneath, base subcordate or round, apex acuminate, margin entire. Inflorescence a terminal or axillary panicles. Flowers unisexual or polygamous, yellow or greenish-purple. Fruits woody follicles, horizontally spreading, orange-red, oblong, rusty tomentose; seeds oblong, black, shiny.

Uses : The fibre obtained from the bark is used to make cottages.

166. Sterculia foetida L.



Family : Malvaceae

Origin : South Africa

Kannada Name : -

Common name - Bastard poon tree, Java olive tree



Species type : Exotic

Conservation status : Not Known

Phenology : Deciduous

Flowering period : February - August

Fruiting period : February - August

Description : Deciduous trees, to 25 m high, bole buttressed; bark grey, smooth, irregularly flaking off in thin scales; blaze reddish-yellow; branches horizontal, whorled. Leaves palmately compound, alternate, clustered at the end of branchlets; leaflets 3-9, elliptic, elliptic-lanceolate or elliptic oblanceolate, glabrous, coriaceous, base cuneate, apex acuminate, margin entire. Inflorescence a terminal or axillary raceme. Flowers unisexual or polygamous, dull-orange red, foetid smell. Fruit an aggregate of follicle of 1-5, scarlet, boat shaped, 5-lobed, woody, glabrous; seeds black, numerous, ellipsoid, smooth, with a small yellow aril.

Uses : The bark is aperient, diaphoretic and diuretic. It is used in the treatment of dropsy and rheumatism. The leaves are aperient.The fruit is astringent and mucilaginous. It is used in the treatment of gonorrhoea.

167. Stereospermum tetragonum DC.



Family : Bignoniaceae

Origin : India, Sri lanka

Kannada Name : Kalladri, Kalludure

Common name - Yellow snake tree

Species type : Indigenous



Conservation status : Not known

Phenology : Deciduous

Flowering period :

Fruiting period :

Description : Deciduous trees, 15-20 m tall. Leaves pinnate, leaflets 3-6 pairs; leaflets opposite, elliptic-ovate, pubescent or glabrous, base oblique or cunaeate, apex acute or acumiante. Inflorescence a terminal panicle. Flowers bisexual, pale yellow, tube terete, tomentose at mouth. Fruit a capsule, terete, 4-angular. Seeds ovoid, white membranous winged at apices.

Uses : An infusion of the pleasant tasting root, as well as the fragrant flowers, is used as a cooling drink in the treatment of fevers. The juice of the bark is used to treat indigestion.

168. Swietenia macrophylla King



Family : Meliaceae

Origin : Central America

Kannada Name : Dal, Davala, Hebbaevu, Mahaagani.

Common name : Honduran mahogany

Species type : Exotic



Conservation status : Least concern

Phenology : Deciduous

Flowering period : March – April

Fruiting period : September – December

Description : Deciduous trees, to 30 m high; bark brown. Leaves paripinnate, alternate, glabrous; leaflets 4-10, opposite, obliquely ovate-lanceolate, glabrous, shining above, dull beneath, coriaceous, base oblique, apex acuminate or caudate-acuminate, margin entire. Inflorescence an axillary panicle. Flowers bisexual, pale yellow. Fruit a capsule, oblong-globose, woody, rusty outside; seeds many, winged.

Uses : The bark is astringent, bitter and febrifuge. An infusion is used to treat diarrhoea and fevers. The bark is used for dyeing and tanning leather.

169. Swietenia mahagoni (L.) Jacq.



Family : Meliaceae

Origin : North America

Kannada Name :

Common name : Small - leaved mahogany, Cuban mahogany



Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period : March - April

Fruiting period : September - November

Description : Semi-evergreen trees to 30 m tall, base buttressed. Bark slightly red, scalelike. Branches gray, expanding, smooth. Leaves pinnate, alternate; leaflets 5 pairs, ovate to lanceolate, leathery, glabrous to sparsely pubescent, abaxially light green, adaxially dark green, base oblique, apex long acuminate, margin entire or with 1 or 2 serrations. Inflorescence a panicle. Flowers small, bisexual, cream-yellow, glabrous. Fruit a capsule, brown, ovoid, Seeds apically winged.

Uses : The stem bark is considered to be antiseptic, astringent and febrifuge. It is taken orally as a decoction for diarrhoea and dysentery, as a source of vitamins and iron, and as a medicine to induce haemorrhage. When the bark is steeped to a red liquid, it is taken to clear the blood, increase appetite, and restore strength in cases of tuberculosis. A decoction of the bark is used externally to dress wounds caused by firearms.

170. Syzygium cumini (L.) Skeels.



Family : Myrtaceae

Origin : Indian subcontinent, South east Asia

Kannada Name : Nerale hannu mara

Common name : Java plum



Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : March – April

Fruiting period : May – June

Description : Evergreen trees, 6–20 m tall. Branchlets greyish white when dry, terete. Leaves simple, opposite broadly elliptic to narrowly elliptic, leathery, both surfaces with small glands, glabrous, base cuneate to obtuse, apex acuminate, margin entire. Inflorescences axillary on flowering branches or occasionally terminal, paniculate cymes. Flowers bisexual, greenish-white, stamens many. Fruit a berry, red to black, ellipsoid to oblong, juicy, seed 1.

Uses : Medicinally, the fruit is stated to be astringent, stomachic, carminative, antiscorbutic and diuretic and have antidiabetic properties.

171. Tabebuia aurea (Manso) Benth. & Hook.f. ex S.Moore

Family : Bignoniaceae



Origin : Tropical America

Kannada Name :

Common name : Silver trumpet tree

Species type : Exotic



Conservation status : Not known

Phenology : Evergreen

Flowering period : February - April

Fruiting period :

Description : Semi-deciduous tree, up to 16 m tall. Young branches often thick and corky, subterete to subtetragonous, lepidote. Palmate leaves with 5-7 leaflets; leaflets oblong-elliptic to narrowly oblong-lanceolate, coriaceous, light olive green when dry, lepidote or glabrous. Inflorescence a terminal panicle, showy, the branches densely lepidote, base rounded to subcordate, rounded apex or retuse, margin entire. Inflorescence a panicle. Flowers bisexual, tubular, yellow. Fruit a capsule, oblong, greyish, densely lepidote, tapering towards both ends. Seeds with two hyaline-membranous wings on the edges, irregularly brownish at the base, rather continuous with the seed body.

Uses : The wood is used for tool handles, objects that need to be curved, flexible rulers, furniture, frames, construction etc.

172. Tabebuia pallida (Lindley) Miers

Family : Bignoniaceae



Origin : Caribbean

Kannada Name :

Common name : Cuban trumpet tree

Species type : Exotic



Conservation status : Not known

Phenology : Evergreen

Flowering period : January - February

Fruiting period :

Description : Semi-deciduous or small tree, up to 15 m. Leaves 1-5-foliolate, the leaflets elliptic to elliptic-oblong, obtuse, basally rounded, chartaceous, lepidote. Inflorescence a few-flowered terminal panicle, often reduced to one or 2 flowers. Flowers bisexual, pinkish- lavender to almost white, the throat opening yellow, tubular. Fruit a capsule, linear-cylindric, attenuate at both ends, seeds bialate, the wings hyaline-membranaceous, sharply demarcated from the seed body.

Uses : It is used in traditional medicine in the form of herbal or medicinal tea to manage cancer, fever, and pain. Moreover, extracts from the leaves of T. pallida showed anticancer activity.

173. Tabebuia rosea (Bertol) DC.



Family : Bignoniaceae

Origin : Mexico, Ecuador, Venezuela

Kannada Name : -

Common name - Rosy trumpet tree



Species type : Exotic

Conservation status : Least concern

Phenology : Deciduous

Flowering period : January - February

Fruiting period : February - April

Description : It is a medium to big deciduous tree. Leaves are oppositely arranged, palmately compound with 5 leaflets on each stalk. Flowering occurs mainly in January and February, and is generally associated with dry periods; although flowering has also been observed in August, September, April and May. Flowers are trumpet-shaped, large, in various tones of pink to purple, and appear while the tree has none, or very few, leaves. The long and slender fruit capsules appear from February through April.

Uses : Preparations of the bark of the tree are consumed to eliminate intestinal parasites, malaria and uterine cancer. A decoction of the bark is recommended for anemia and constipation. A decoction of the flowers, leaves and roots has been used to reduce fevers and pain, cause sweating, to treat tonsil inflammation and various other disorders.

174. Tamarindus indica L.

Family : Fabaceae



Origin : Tropical Africa

Kannada Name : Hunase mara

Common name : Tamarind tree

Species type : Exotic



Conservation status : Not known

Phenology : Deciduous

Flowering period : April - June

Fruiting period : October - December

Description : Evergreen trees, up to 20 m high, bark brown to brownish-black, rough with vertical fissures; branchlets warty, tomentose. Leaves paripinnate, alternate; leaflets oblong, glabrous, chartaceous, base unequal, apex obtuse, margin entire. Inflorescence a terminal raceme. Flowers bisexual, yellow with reddish-pink dots. Fruit a pod oblong, fruit wall crustaceous, mesocarp pulpy, endocarp septate, leathery, indehiscent; seeds obovoid-orbicular, compressed, brown..

Uses : Leaf extracts exhibit antioxidant activity in the liver, and are a common ingredient in cardiac and blood sugar reducing medicines. A sweetened decoction of the leaves is good against throat infection, cough, fever, and even intestinal worms. The fruit is aperient and laxative. A syrup made from the ripe fruit is drunk in order to keep the digestive organs in good condition, and also as a remedy for coughs and chest colds. The flesh of the fruit is eaten to cure fevers and control gastric acid.

175. Tecoma stans (L.) Juss. ex Kunth





Family : Bignoniaceae

Origin : South America

Kannada Name : Koranechellar

Common name : Yellow trumpet bush

Species type : Exotic

Conservation status : Not known

Phenology : Deciduous

Flowering period : October - May

Fruiting period : June - August

Description : Shrub or small evergreen tree, glabrous. Leaves imparipinnate, opposite, 3-9-foliolate; leaflets lanceolate, apex acute to acuminate, puberulent especially on the main veins, base oblique, apex acuminate, margin serrate. Inflorescence a terminal raceme of up to 20 yellow flowers. Flowers bisexual, tubular, bright yellow, fragrant. Fruit a capsule, dehiscent. Seeds orbicular-compressed, winged.

Uses : A leaf infusion can be taken orally for treating diabetes and stomach pains. A strong leaf and root decoction is taken orally as a diuretic, to treat syphilis or for intestinal worms. The flowers are diuretic.

176. Tectona grandis L.f.

Family : Lamiaceae



Origin : Bangladesh, India, Sri Lanka, Myanmar

Kannada Name : Tegu, Saagavaani

Common name - Teak wood tree

Species type : Indigenous

Conservation status : Not known

Phenology : Deciduous

Flowering period : June - August

Fruiting period : November - January

Description : Large deciduous tree, up to 40 m tall, younger parts densely pubescent with stellate hairs. Leaves simple, opposite, broadly elliptic, glabrescent, shining-green above, paler and tomentose beneath, coriaceous, base attenuate, apex acute or shortly acuminate, margin entire to repand-dentate. Inflorescence a terminal cyme. Flowers white, rarely pinkish, bisexual. Fruit a drupe, subglobose to tetragonally flattened, tomentose, usually slightly 4-lobed at the apex, epicarp spongy, endocarp stony; seeds 1-4, oblong.

Uses : The bark has been used as an astringent and in the treatment of bronchitis. The flowers are diuretic. They are used to treat biliousness, bronchitis and urinary disorders. It is used in the manufacture of outdoor furniture and boat decks. It is also used for cutting boards, indoor flooring, countertops and as a veneer for indoor finishings.

177. Terminalia arjuna (Roxb.) Wight & Arn.



Family : Combretaceae

Origin : Indian subcontinent

Kannada Name : Neeru matti, Tore matti

Common name : Arjuna tree



Species type : Indigenous

Conservation status : Least concern

Phenology : Evergreen

Flowering period : March – June

Fruiting period : September – November

Description : A large, evergreen or deciduous tree, up 25 m tall with smooth, pale greenish to whitish grey bark. Leaves simple, alternate to opposite, oblong-elliptic or somewhat sub-orbicular, obtuse, rarely subacute, glabrous to subglabrous above, partially pubescent beneath, rounded or cordate base, apex obtuse, margin entire or crenate-serrate. Inflorescence axillary or terminal paniculate spikes. Flowers bisexual, yellowish white, sessile, hypanthium broadly campanulate, Fruit a drupe, 5-angled, ovoid-oblong, brown with wings.

Uses : The bark of Arjun is astringent, sweet, acrid, cooling, aphrodisiac, urinary astringent, and expectorant, but chiefly used as cardio tonic as it improves blood supply to heart. It is also useful in ulcer treatment, fractures, cirrhosis of liver, ischaemic heart disease, and hypertension.

178. Terminalia bellirica (Gaertn.) Roxb.

Family : Combretaceae



Origin : India, South Asia

Kannada Name : Taarekaayi, Shanthikayi

Common name : Baheda tree

Species type : Indigenous



Conservation status : Least concern

Phenology : Evergreen

Flowering period : April – May

Fruiting period : November – February

Description : Deciduous trees, up to 35 m high, bole often buttressed; bark surface blackish-grey, smooth, vertically shallowly fissured, exfoliations small, semi-fibrous; blaze yellow; branches sympodial; branchlets terete, thinly fulvous-hairy, leaf scars prominent. Leaves simple, opposite or alternate, clustered at the tip of branchlets, obovate, elliptic or obovate-elliptic, glabrous, base obliquely cuneate, attenuate or acute; apex obtusely acuminate, margin entire. Inflorescence an axillary spike. Flowers bisexual, greenish-yellow. Fruit a drupe, obovoid, obscurely 5-ridged, yellowish-brown, honed, not winged, softly tomentose; seed one, ellipsoid.

Uses : The fruit is anthelmintic, astringent, digestive, tonic and laxative. It is used internally principally in the treatment of digestive and respiratory

problems. In Indian herbal medicine the ripe fruit is used in cases of diarrhoea and indigestion, whilst the unripe fruit is used as a laxative in cases of chronic constipation. The fruit is often used to treat upper respiratory tract infections that cause symptoms of sore throats, hoarseness and coughs. Externally, the fruit is used to make a lotion for sore eyes.

179. Terminalia catappa L.

Family : Combretaceae



Origin : Asia, Australia

Kannada Name : Kaadu badami

Common name : Indian almond tree

Species type : Exotic



Conservation status : Least concern

Phenology : Deciduous

Flowering period : March – June

Fruiting period : July – September

Description : TDeciduous or semievergreen trees up to 20 m tall. Bark brownish black, longitudinally peeling. Branches spreading, forming tiers. Branchlets densely brownish yellow tomentose near apex, densely covered with conspicuous leaf scars. Leaves alternate, crowded at apices of branchlets; leaf blade obovate to oblanceolate, narrowed in proximal half, both surfaces glabrous or abaxially sparsely softly hairy when young, base narrow, cordate or truncate, apex obtuse or mucronate, margin entire. Inflorescences axillary, simple, long, slender spikes. Flowers bisexual, fragrant, white to greenish. Fruit a drupe, red or blackish green when ripe, ellipsoid, slightly to strongly compressed, pericarp woody, rigid.

Uses : The red leaves act as a vermifuge, while the sap of young leaves, cooked with oil from the kernel, is used to treat leprosy. The juice of the leaves

is ingested for coughs. An infusion of the leaves is used to treat jaundice. Externally, the leaves may be rubbed on breasts to cure pain or, when heated, may be applied to numb parts of the body. They may be used as a dressing for swollen rheumatic joints. The leaves, applied to the head and sides, are refreshing and sudorific.



180. Terminalia mantaly H.Perrier



Family : Combretaceae

Origin : Madagascar

Kannada Name : Kaadu badami

Common name : Madagascar almond tree



Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period :

Fruiting period :

Description : It is a small to medium Evergreen tree, 10-20 m tall. Bark pale grey, smooth and rather mottled. Its crown is layered in symmetrical tiers. Leaves simple, in rosettes of 4-9 equal leaves on short thick stems, spathulate, glabrous, base tapered, apex broadly rounded, margin wavy to crenate. Inflorescence a spike. Flowers small, greenish. Fruit a drupe, small, oval; seeds 1.5 cm long, wingless.

Uses : The bark and wood are astringent. They are used in the treatment of dysentery.

181. Thespesia populnea (L.) Sol. ex Corr.

Family : Malvaceae



Origin : Tropical Africa, Asia

Kannada Name : Adavi bende mara, Huvarasi mara

Common name : Portia tree, Pacific rosewood, Indian tulip tree

Species type : Exotic

Conservation status : Not known



Phenology : Evergreen

Flowering period : All year

Fruiting period : All year

Description : Evergreen or dry deciduous trees, up to 15 m high, bark dark brown; blaze yellowish-pink; branchlets densely covered with minute scales, glabrescent. Leaves simple, alternate, orbicular or ovate, coriaceous, with peltate scales above, glabrescent or stellate-tomentose beneath, base cordate or truncate, apex acute or acuminate, margin entire or dentate. Inflorescence solitary or terminal and axillary cyme. Flowers bisexual, yellow, showy. Fruit a capsule, globose, indehiscent, depressed, scaly, ultimately glabrescent; seeds many, ovoid, channeled along the back, pubescent.

Uses : The fruit juice is used to treat herpes. The crushed fruit is used in a treatment for urinary tract problems and abdominal swellings. An extract of the fruit is applied to swollen testicles. A decoction of the leaves is used in treating coughs, influenza, headache and relapses in illnesses. The stem is employed in treating breast cancer.

182. Toona ciliata M. Roem.



Family : Meliacea

Origin : Australia, Papua New Guinea

Kannada Name :

Common name : Red cedar tree



Species type : Exotic

Conservation status : Least concern

Phenology : Deciduous

Flowering period : February – May

Fruiting period : September – November

Description : Semi-deciduous trees, up to 30 m high, bark reddish-brown, rough, exfoliating in large flakes; fibrous; blaze pink red with white streaks and strong smell. Leaves paripinnate, alternate, clustered at the tips of branchlets; leaflets 10-14 pairs opposite or subopposite, ovate, ovate-lanceolate or oblong-lanceolate, chartaceous, glossy above, pale beneath, base oblique, apex acuminate, margin entire or serrate. Inflorescence an axillary or terminal panicle. Flowers bisexual, white. Fruit a capsule, 5-valved; seeds many, oblong, thin, winged at both ends.

Uses : The bark is a powerful astringent, febrifuge, tonic, and antiperiodic. It is used to treat chronic dysentery and wounds. A resinous gum obtained from the bark is used to treat boils. The flowers are an emmenagogue.

183. Triplaris weigeltiana (Rchb.) Kuntze



Family : Polygonaceae

Origin : South America

Kannada Name : -

Common name - Ant tree

Species type : Exotic



Conservation status : Not known

Phenology : Evergreen

Flowering period :

Fruiting period :

Description : It is a tree growing up to 5 m tall or more. Leaves subsessile, acute apically, wedge-shaped at the base, entire, longitudinally lined, and with numerous pairs of prominent lateral veins. Flower spikes are 6-10 cm long, bearing numerous ovate to ovate-lanceolate, hirtellous bracts, pistillate perianth accrescent and enclosing the fruit, three of the sepals much enlarged, 2.8-3.2 cm long, 4-5 mm wide, suffused red purple, showy.

Uses : A decoction of the bark is used in the treatment of dysentery, diarrhoea and piles. It is used for furniture components, boxes and crates, interior construction, joinery, fibreboard and particleboard.

184. Vachellia leucophloea (Roxb.) Willd.

Family : Fabaceae



Origin : South and Southeast Asia

Kannada Name : Bili jaari mara, Naayi bela

Common name - White bark acacia

Species type : Indigenous



Conservation status : Not known

Phenology : Deciduous

Flowering period : July - November

Fruiting period : April - June

Description : Deciduous trees, up to 20 m high; bark yellow to yellowish-brown, rough, exfoliating in irregular scales; blaze light red; branchlets yellowish-velvety, spines present. Leaves bipinnate, alternate, pinnae 5-15 pairs; leaflets 30-54, opposite, sessile, linear, glabrous above, pubescent below, chartaceous, base oblique, truncate, apex subacute, margin ciliate. Inflorescence a head in terminal panicle. Flowers yellow or yellowish-white. Fruit a pod, flat, strap-shaped, straight or sometimes curved, somewhat bullate along seeds, thin walled, round or often mucronate at apex, minutely brown tomentose, sessile to subsessile, tardily dehiscent; seeds ovate.

Uses : The bark extracts are used in Pakistani traditional medicine as an astringent, a preventive of infections, an anthelmintic, a vulnerary, a demulcent, an expectorant, an antipyretic, an antidote for snake bites and in the treatment of bronchitis, cough, vomiting, wounds, ulcers, diarrhea, dysentery and skin diseases.

185. Vitex altissima L.f.

Family : Lamiaceae



Origin : Bangladesh, India, Myanmar

Kannada Name : Myrole, Nevaladi, Navuladi, Balgay

Common name : Peacock chaste tree

Species type : Exotic

Conservation status : Least concern



Phenology : Deciduous

Flowering period : April – May

Fruiting period : July – August

Description : Deciduous trees, up to 30 m high, bark greyish-yellow, scaly; blaze yellow; branchlets, quadrangular, lenticellate, minutely tomentose. Leaves compound, trifoliate, rarely up to 5, opposite, rachis slender, pubescent, winged in sapling leaves, wings auriculate at base; leaflets sessile, lanceolate, elliptic-lanceolate, or oblanceolate, glabrous above and pubescent or glabrescent along the nerves below, chartaceous, base cuneate or acute, apex acuminate, margin entire. Inflorescence a terminal panicle. Flowers bisexual, white, tinged with blue. Fruit a drupe, smooth, globose, glabrous, blue, supported by enlarged calyx; seeds 4, obovate.

Uses : The bark is used as a fomentation in treating rheumatic swellings. The leaves and roots are used in Ayurvedic medicine. The plant is believed to pacify vitiated kapha, vata. It is used to treat inflammations, wounds, ulcers, allergies, eczema, pruritus, worm infestations, urinary system diseases, stomatitis, emaciation, and ailments after parturition.

186. Vitex negundo L.



Family : Lamiaceae

Origin : Eastern and Southern Africa and Asia

Kannada Name : Karilakki, Lakkigida

Common name - Chaste tree

Species type : Indigenous



Conservation status : Not known

Phenology : Evergreen

Flowering period : April - August

Fruiting period : February - July

Description : Shrubs or small evergreen trees, whitish to greyish tomentose except the upper surface of leaves and fruits, branchlets quadrangular. Leaves compound, 3-5 foliate, opposite-decussate, leaflets usually narrowly oblong or elliptic to lanceolate, chartaceous, dark green sparsely pubescent above, paler grayish pubescent beneath, base acute, apex acuminate, margin entire or serrate. Inflorescence a terminal panicle. Flowers bisexual, small, usually blue or violet, subsessile to shortly pedicelled. Fruit is a drupe subglobose or somewhat ovoid, usually 4-celled, with 1 seed in each cell.

Uses : It is used for treating stored garlic against pests and as a cough remedy. It is also used in traditional herbal medicine for women's health, including treatments for regulating the menstrual cycle, fibrocystic breast disease and post-partum remedies.

187. Wodyetia bifurcata A.K.Irvine



Family : Arecaceae

Origin : Australia

Kannada Name : -

Common name - Foxtail Palm



Species type : Exotic

Conservation status : Conservation dependent

Phenology : Evergreen

Flowering period : December - February

Fruiting period : October - December

Description : Stem light grey, slightly bottle-shaped, 6-15 m tall, monoecious palm, closely ringed with leaf-scars. Leaves pinnate, appearing plumose; sheaths tubular, forming a prominent crownshaft, covered with greyish-white tomentum; primary pinnae 90-107, divided into several linear segments or deeply lobed, glabrous, base slightly cuneate, apex coarsely praemorse. Inflorescence infrafoliar, decompound. Flowers in widely spaced triads, 1 female between 2 males, white. Fruit a berry, globose-ovoid, orange-red on ripening. Seed beaked.

Uses : It is used as an ornamental tree.

188. Ziziphus mauritiana Lam.

Family : Rhamnaceae



Origin : Southeast Asia

Kannada Name : Bore, Elachi

Common name : Indian jujube

Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : July - October

Fruiting period : December - March

Description : Evergreen or deciduous trees, up to 10 m high; bark dark grey or nearly black, with deep vertical cracks, reddish and fibrous inside; branchlets, petiole and underside of leaves white buff, tomentose, with stipular spines. Leaves simple, alternate, ovate, elliptic-ovate, elliptic-orbicular or suborbicular, glabrous above, coriaceous, base oblique, subcordate or round, apex round, margin glandular-denticulate or serrate. Inflorescence a cymose axillary fascicle. Flowers bisexual, greenish-yellow. Fruit a drupe, oblong-globose, yellow or orange when ripe; seeds 1 or 2, compressed.

Uses : It aids weight gain, improves muscular strength and increases stamina. In Chinese medicine it is prescribed as a tonic to strengthen liver function. The fruits are anodyne, anticancer, antidote, expectorant, pectoral, refrigerant, sedative, stomachic, styptic and tonic. They are considered to purify the blood

and aid digestion, and are used internally in the treatment of a range of conditions including chronic fatigue, loss of appetite, diarrhoea, pharyngitis, bronchitis, anaemia, irritability and hysteria.











189. Parmentiera cereifera Seem.

Family : Bignoniaceae

Origin : Panama

Kannada Name : -

Common name : Candle tree

Species type : Exotic

Conservation status : Endangered

Phenology : Evergreen

Flowering period : April-June

Fruiting period : April-June

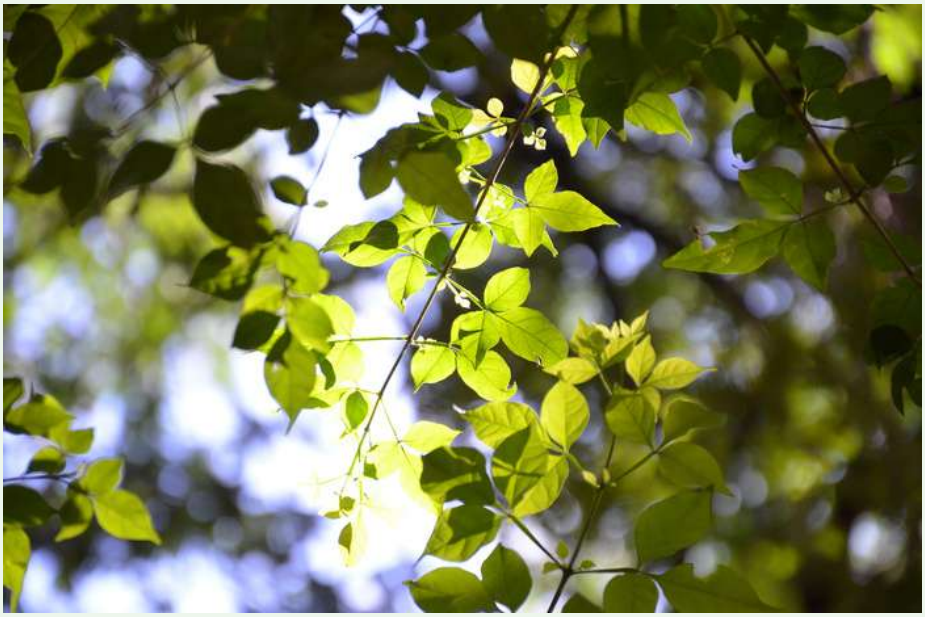


Description : Evergreen tree, 7-20 tall, usually multibranched at the base. Leaves opposite, trifoliate; leaflets elliptic to elliptic-rhomboid, membranous, base attenuate, apex acute to accuminate. Inflorescence a fascicle of 2 to 3 flowers or solitary, cauliflorous. Flowers bisexual, tubular, white to greenish-white. Fruit a berry, waxy, yellow when ripe, linear oblong, fruits surrounding a fibrous column and fleshy part surrounding the seeds. Seeds small with thin, narrow and mucilaginous wing.

Uses : Fruits are edible. Methanolic extracts exhibited Anti-inflammatory, anti-hyperglycemic and gastroprotective.


5613





190. Clerodendrum pleiosciadium Gürke



Family : Lamiaceae

Origin : Africa

Kannada Name : -

Common name : Sandveld tinderwood

Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period :

Fruiting period :

Description : Shrub upto 3 m high, angular stems. Leaves opposite, subopposite or 3-4 whorled, ovate or ovate-oblong, punctate below, truncate rounded or slightly cordate at the base, abruptly acuminate or cuspidate or attenuate at the apex, entire or sometimes dentate to irregularly dentate. Inflorescence a terminal composite cyme. Flowers bisexual, white or cream, sweet-scented, minute sessile glands present. Fruit subglobose, deep red or purplish-black. Seeds compressed, rugulose.






5748

191. Ceodes grandis (R.Br.) D.Q.Lu



Family : Nyctaginaceae

Origin : Throughout Pacific and Indian Ocean

Kannada Name :

Common name : Grand devil's-claws

Species type : Native

Conservation status : Not known

Phenology : Evergreen

Flowering period :

Fruiting period :

Description : Evergreen tree, up to 28 m tall. Leaves opposite or subopposite, elliptic, oblong or ovate, puberulous, glabrescent, membranous, base rounded or slightly cordate, mostly oblique, apex acute to acuminate, margin entire. Inflorescence a terminal cyme. Flowers bisexual, funnel shaped. Fruit cylindrical to clavate, 8–12 mm. long, ribbed; ribs with soft viscid, prickle-like glandular hairs.

Uses : Leaves edible. Traditionally used as antifungal and anti-rheumatic. Further studied for its anti-oxidant, anti-microbial, anti-inflammatory, anti-diabetic, diuretic, analgesic and wound healing properties.


5761





192. Cananga odorata (Lam.) Hook.f. & Thomson



Family : Annonaceae

Origin : Australia, Southeast Asia

Kannada Name : Apoorva champaka,
Kamalada mara

Common name : ylang-ylang,
cananga tree

Species type : Exotic

Conservation status : Not known

Phenology : Evergreen

Flowering period : All year

Fruiting period : All year

Description : Evergreen tree, up to 20 m tall. Bark pale grey, branchlets pubescent when young, later glabrous, striate. Leaves simple, alternate, ovate-lanceolate, oblong-lanceolate or broadly elliptic, coriaceous, base obtuse or rounded, apex acute or shallow acuminate, margin entire. Inflorescence an axillary, drooping raceme. Flowers fragrant, bisexual, petals 6, green when young, yellow when mature, minutely pubescent. Fruit a fascicle of stipulate berries; monocarps ovoid, globose or oblong, pulpy, glabrous, black when ripe. Seeds 2-12 per monocarp.

Uses : Essential oil is used in treatment of aromatherapy, used in treatment of blood pressure, depression and anxiety. Also used in treatment of malaria, asthma, gout and rheumatism.




5668



193. Spondias L.



Family : Anacardiaceae

Origin : Tropical Americas,
including the West Indies

Kannada Name :

Common name : Mombins

Species type : Exotic

Conservation status : Least concern

Phenology : Deciduous

Flowering period : January to May

Fruiting period : July to September

Description : Small to large deciduous or semi-deciduous trees. Leaves alternate, imparipinnate; leaflets opposite to sub-opposite, membranous or sub coriaceous, margins entire, crenate or serrate. Inflorescence an axillary or terminal panicle. Flowers small, bisexual, sometimes unisexual; cream, white, orange or red. Fruit a drupe; oblong, globose, obovoid or ellipsoid, green, yellow, orange or red drupe, mesocarp fleshy, edible, acidic, bony endocarp with a fibrous matrix.

Uses : The fruit pulp is either eaten fresh or made into juice, concentrate, jellies, and sherbets.







194. Diospyros montana Roxb.



Family : Ebenaceae

Origin : Tropical Asia

Kannada Name : Jagalaganti

Common name : Mountain persimmon, mottled ebony

Species type : Native

Conservation status : Least concern

Phenology : Deciduous

Flowering period : March to April

Fruiting period : October

Description : Deciduous, dioeceous trees upto 20 m tall. Bark smooth, grey or yellowish-grey in color, yellow inside, exudate watery. Leaves simple, alternate, ovate, ovate-oblong or elliptic-oblong, margin entire, apex obtuse, subacute or obtusely accuminate. Flowers yellowish green or green to greenish-white, unisexual. Male flowers in axillary umbel, tetramerous. Female flowers solitary, axillary, tetramerous. Fruit a berry, 1.5-2 cm across, ovoid to obconical, yellow to orange, glaucous; calyx foliaceous, slightly enlarged; seeds 3-6, rough, black.

Uses : Used medicinally; especially unripe fruits are used in traditional medicine. Tender shoots are cooked and eaten.


9007





195. Conocarpus lancifolius Engl.



Family : Combretaceae

Origin : Somalia

Kannada Name :

Common name : Lanceleaf buttonwood

Species type : Exotic

Conservation status : Near threatened



Phenology : Evergreen

Flowering period : -

Fruiting period : -

Description : Medium to large evergreen tree. Leaves lanceshaped, narrowing towards the base, in dense spirals. Flowers yellow-green, in round heads on branched stalks, slightly fragrant. Fruits dry, round, greenish heads, cone like, containing tiny, scale-like hard seeds.

Uses : The tree's wood is dense and suitable for charcoal. A gum obtained from the tree is used to treat chest and bowel complaints.

196. Ficus altissima Blume.



Family : Moraceae

Origin : Southeast Asia

Kannada Name :

Common name : Council tree, Lofty fig

Species type : Exotic

Conservation status : Least concern

Phenology : Evergreen

Flowering period : -

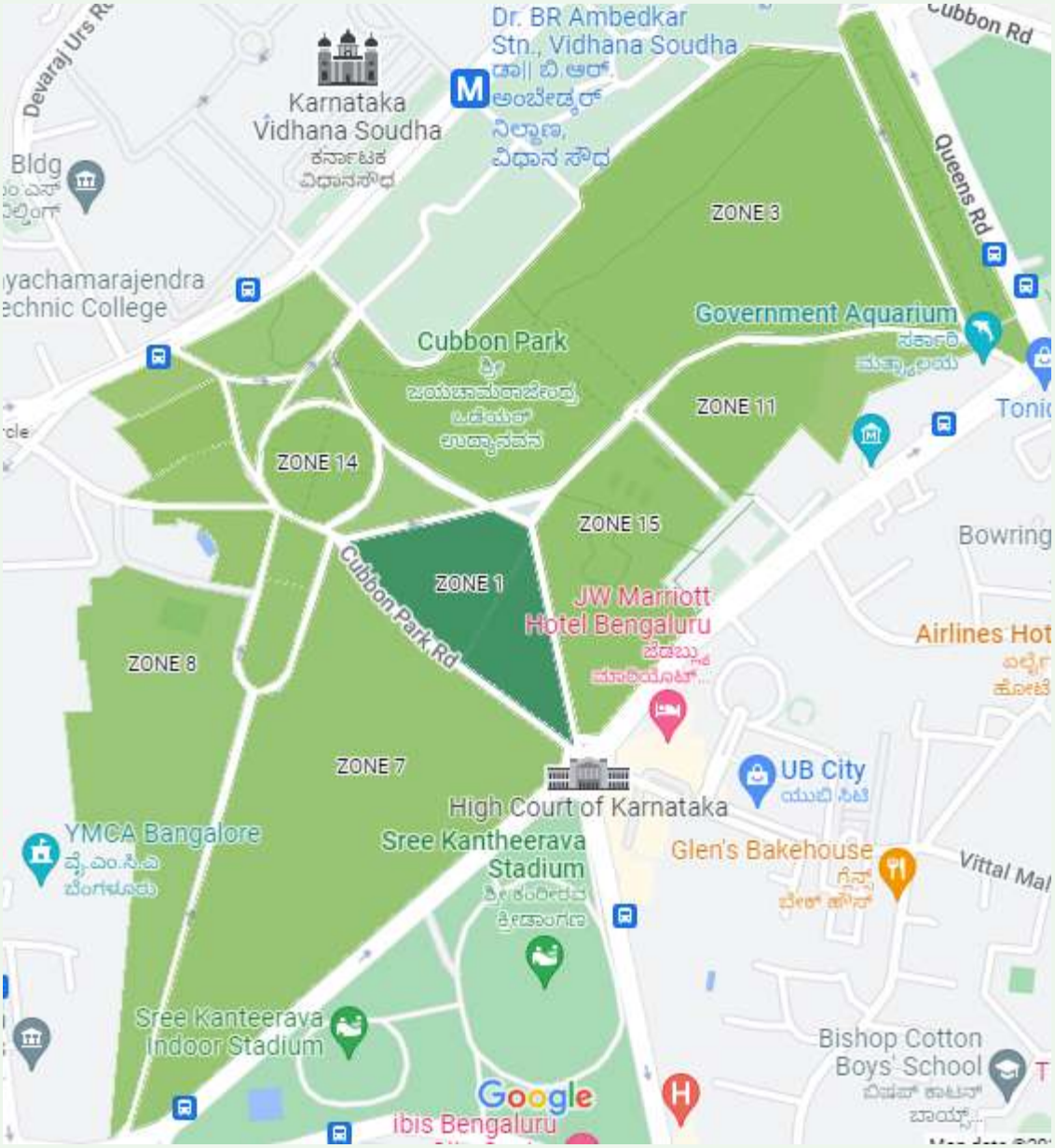
Fruiting period : -

Description : Large semi-evergeen trees, 25-30 m tall, with aerial roots. Bark grey and rough. Leaves simple, broadly ovate to broadly ovate-elliptic, glabrous above, glabrescent beneath, coriaceous, base broadly cuneate, apex obtuse, margin entire. Inflorescence a syconium. Figs axillary on leafy branchlets, paired, red or yellow when mature, ellipsoid-ovoid; involucral bracts hoodlike, covering young fig, caducous, apex broadly obtuse, scar ringlike. Male, gall, and female flowers within same fig. Fruit a achenes, tuberculate.

Uses : The tree is planted as a pioneer species in northern Thailand in reforestation projects to restore native woodland. The fibrous bark is used for cordage.

ZONE-WISE ANALYSIS OF CUBBON PARK

ZONE 1



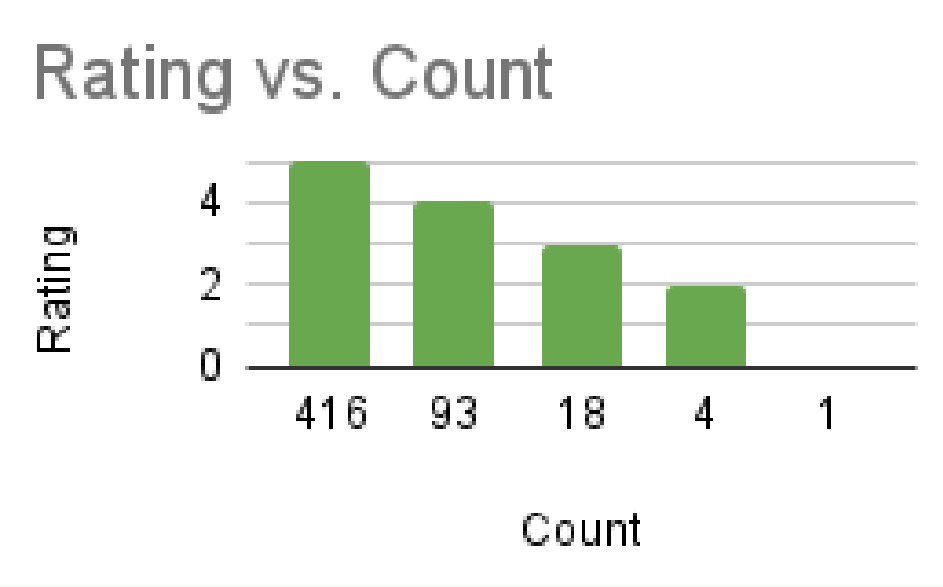
Location - Near KSLTA

Total number of trees present - 532

Top 5 dominant species in the park -

1	***Plumeria rubra***
2	***Spathodea campanulata***
3	***Delonix regia***
4	***Millettia pinnata***
5	***Samanea saman***

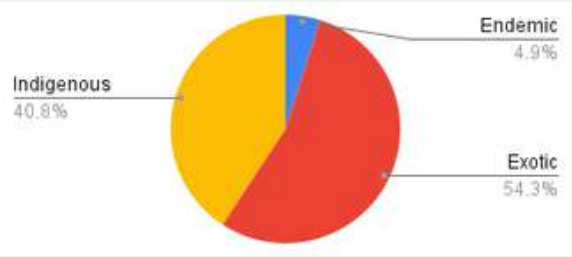
Health rating



Tree with largest girth - ***Enterolobium cyclocarpum*** 5.12m (tree number - 147)

Tallest tree and which species - ***Casuarina equisetifolia*** 38.38m (tree number - 219)

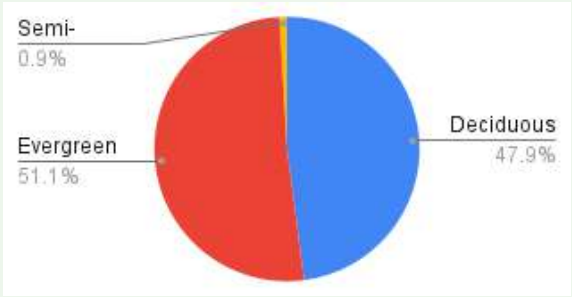
Origin



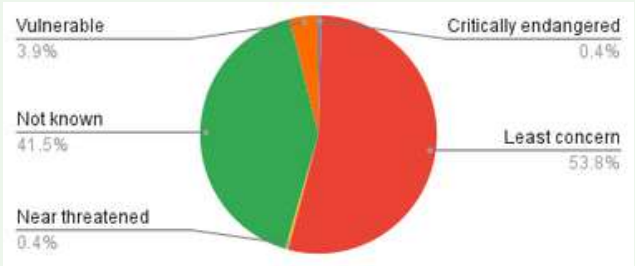
Number of Exotic trees	289
Number of Endemic Trees	26
Number of Indigenous trees	217

Phenology

Number of deciduous trees	255
Number of evergreen trees	272
Number of semi deciduous trees	5

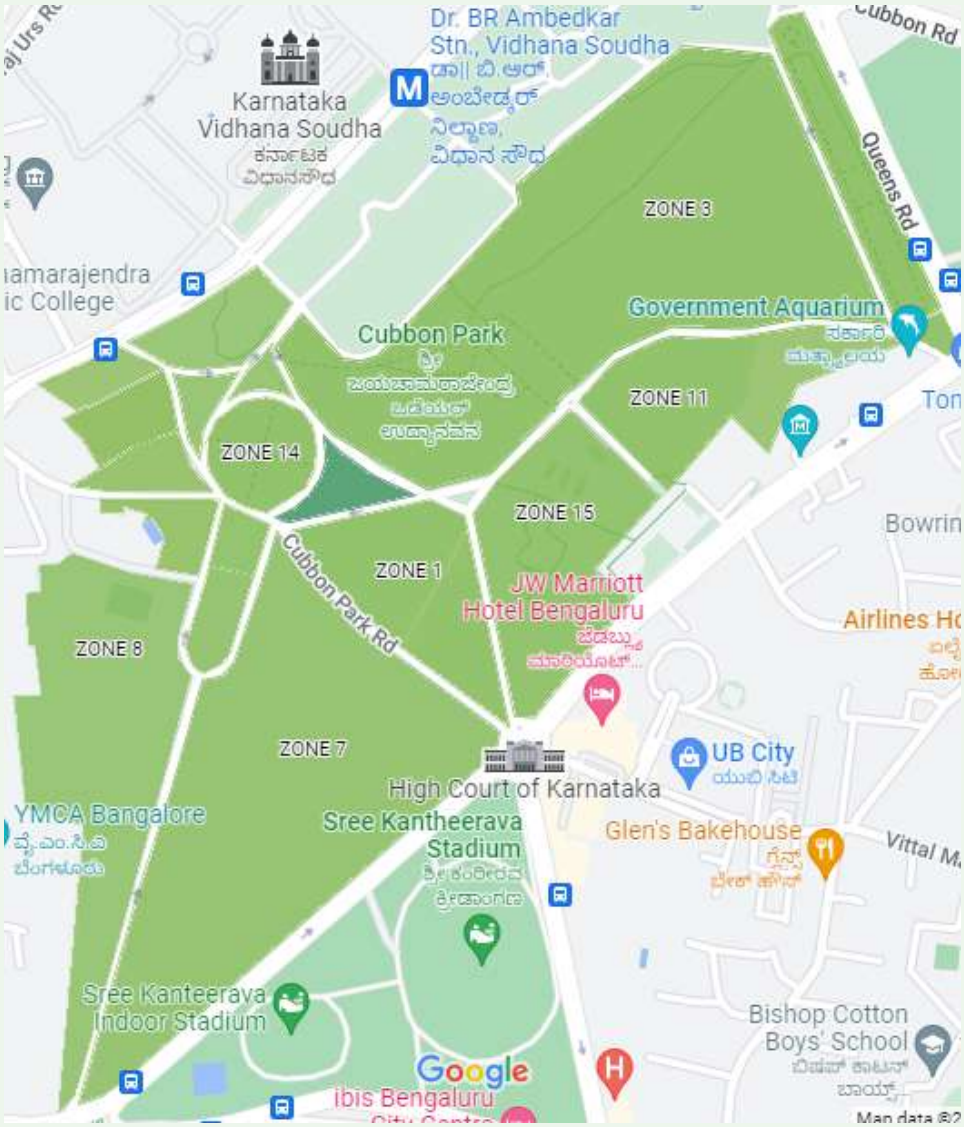


Conservation status



Not known	221
Least concern	286
Near Threatened	2
Vulnerable	21
Critically endangered	2

ZONE 2



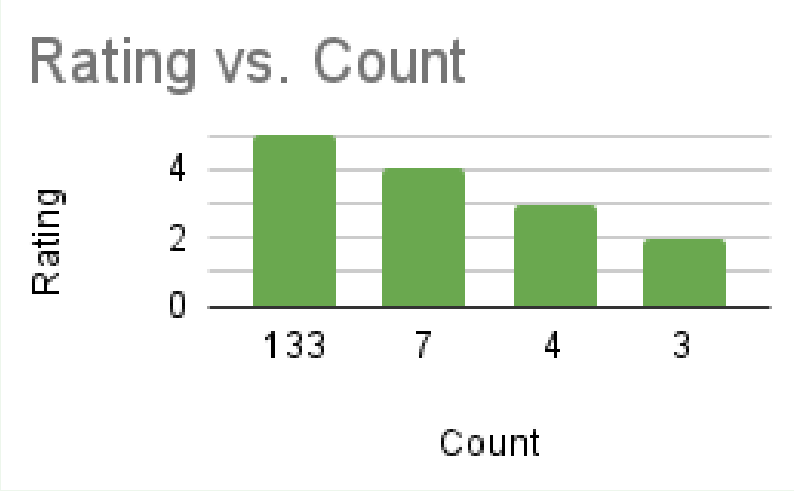
Location - Diagonally opposite to Statue of Sri Chamarajendra Wodeyar, adjacent to Zone 1

Total number of trees present - 147

Top 5 dominant species in the park -

1	***Delonix regia***
2	***Artocarpus heterophyllus***
3	***Caryota urens***
4	***Scheffelera actinophylla***
5	***Albizia odoratissima***

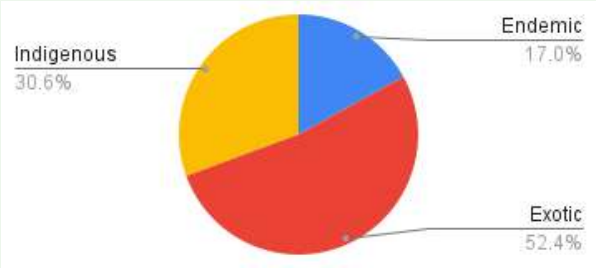
Health rating



Tree with largest girth - ***Ficus benjamina*** 3.75m (tree number - 701)

Tallest tree and which species - ***Ficus benjamina*** 16.607 m (tree number - 701)

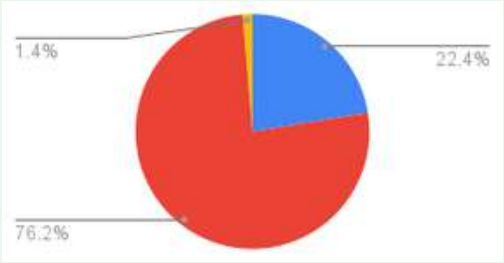
Origin



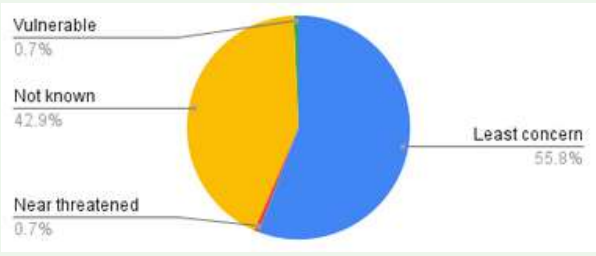
Number of Exotic trees	77
Number of Endemic Trees	25
Number of Indigenous trees	45

Phenology

Number of deciduous trees	33
Number of evergreen trees	112
Number of semi deciduous trees	2

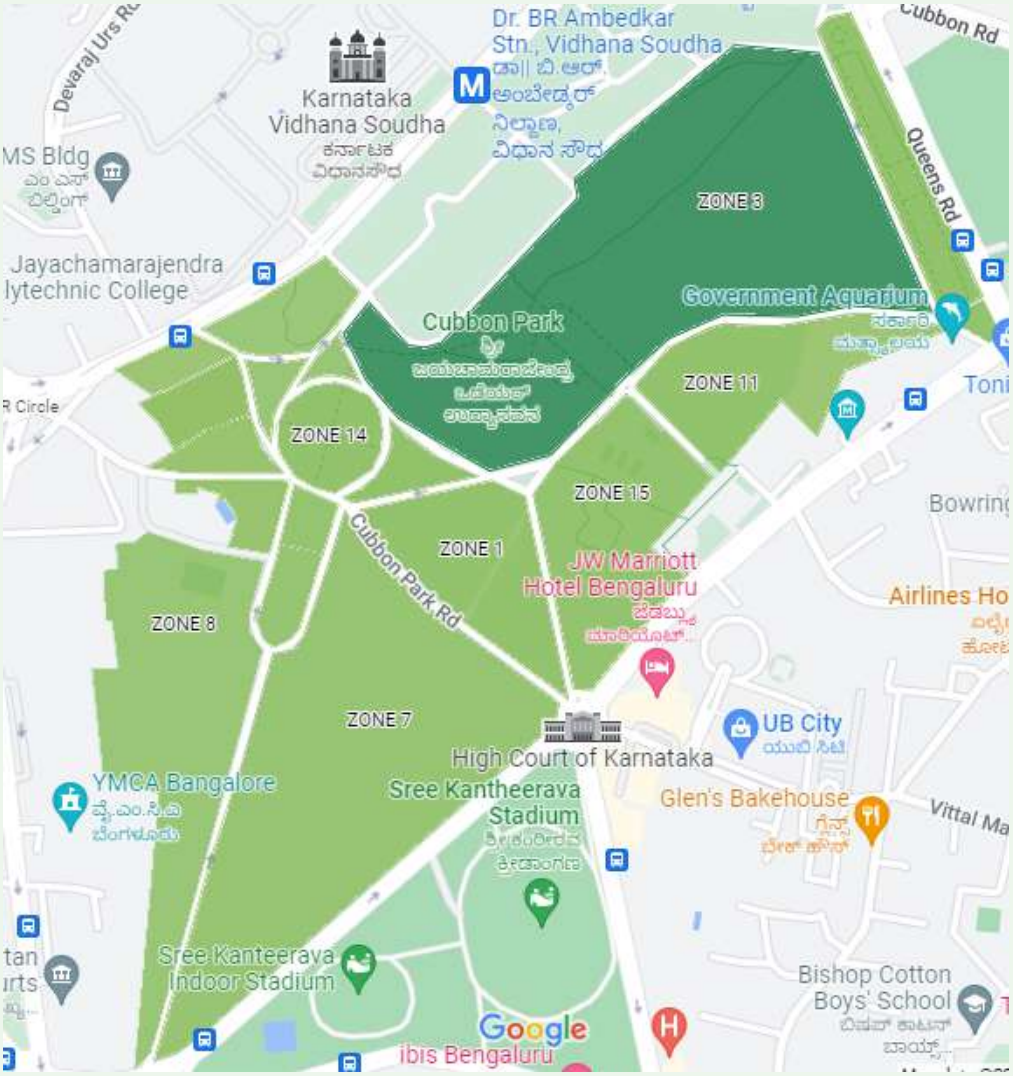


Conservation status



Not known	63
Least concern	82
Near threatened	1
Vulnerable	1

ZONE 3



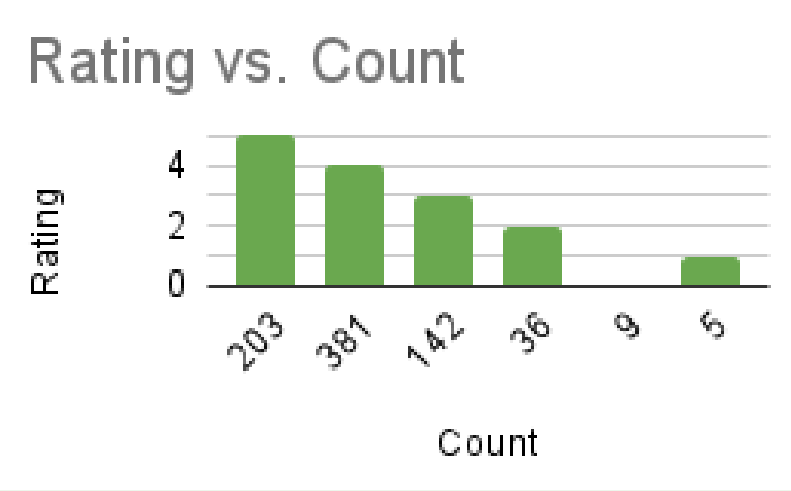
Location - Park behind the statue of Sri Chamarajendra Wodeyar, Cubbon Park Bandstand

Total number of trees present - 2604

Top 5 dominant species in the park -

1	***Swietenia macrophylla***
2	***Millettia pinnata***
3	***Bauhinia purpurea***
4	***Peltophorum pterocarpum***
5	***Delonix regia***

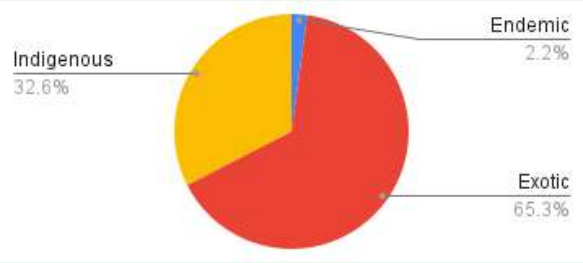
Health rating



Tree with largest girth - ***Ficus benghalensis*** 6.99 m (tree number - 2589)

Tallest tree and which species - ***Araucaria columnaris*** 34.124 m (tree number - 2319)

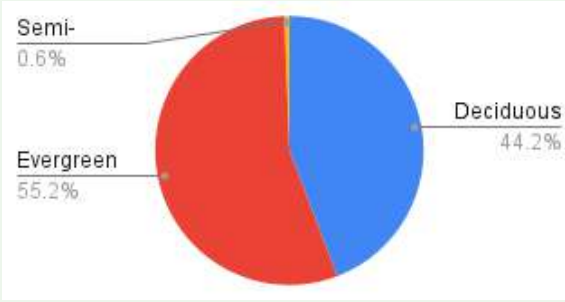
Origin



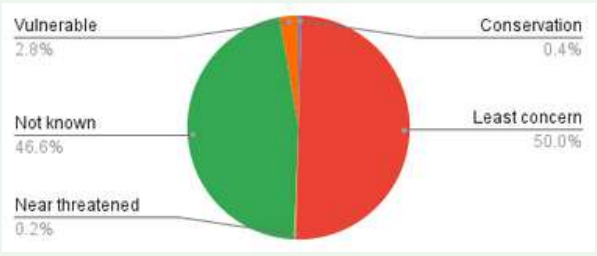
Number of Exotic trees	1700
Number of Endemic Trees	56
Number of Indigenous trees	848

Phenology

Number of deciduous trees	1151
Number of evergreen trees	1437
Number of semi deciduous trees	16



Conservation status



Not known	1214
Least concern	1302
Conservation dependant	11
Near threatened	5
Vulnerable	72

LOTUS POND

Location – Inside Zone 3

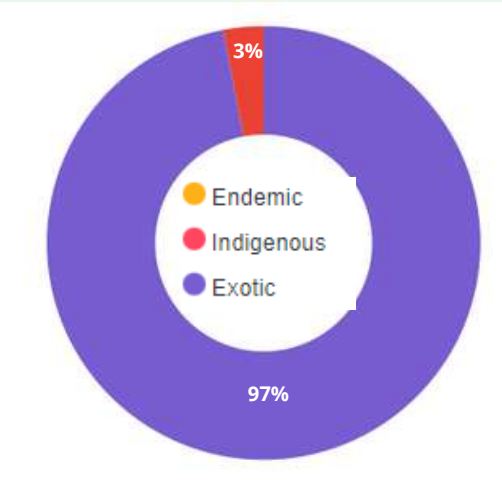
Range of numbers present – 9001 – 9079

Total number of trees present – 73



There are several areas in the Lotus Pond that are unapproachable.

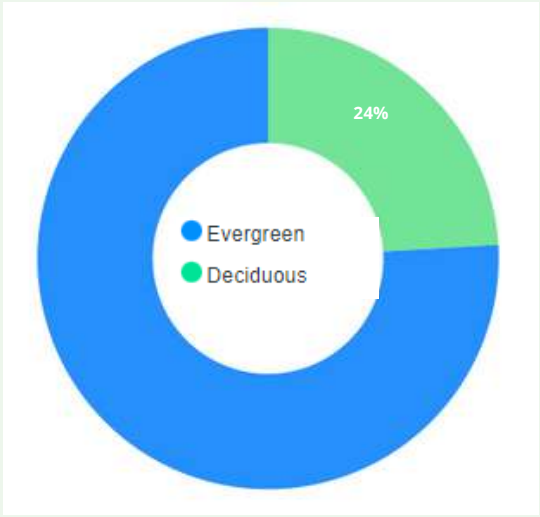
Origin



Number of Exotic trees	71
Number of Indigenous trees	2

Phenology

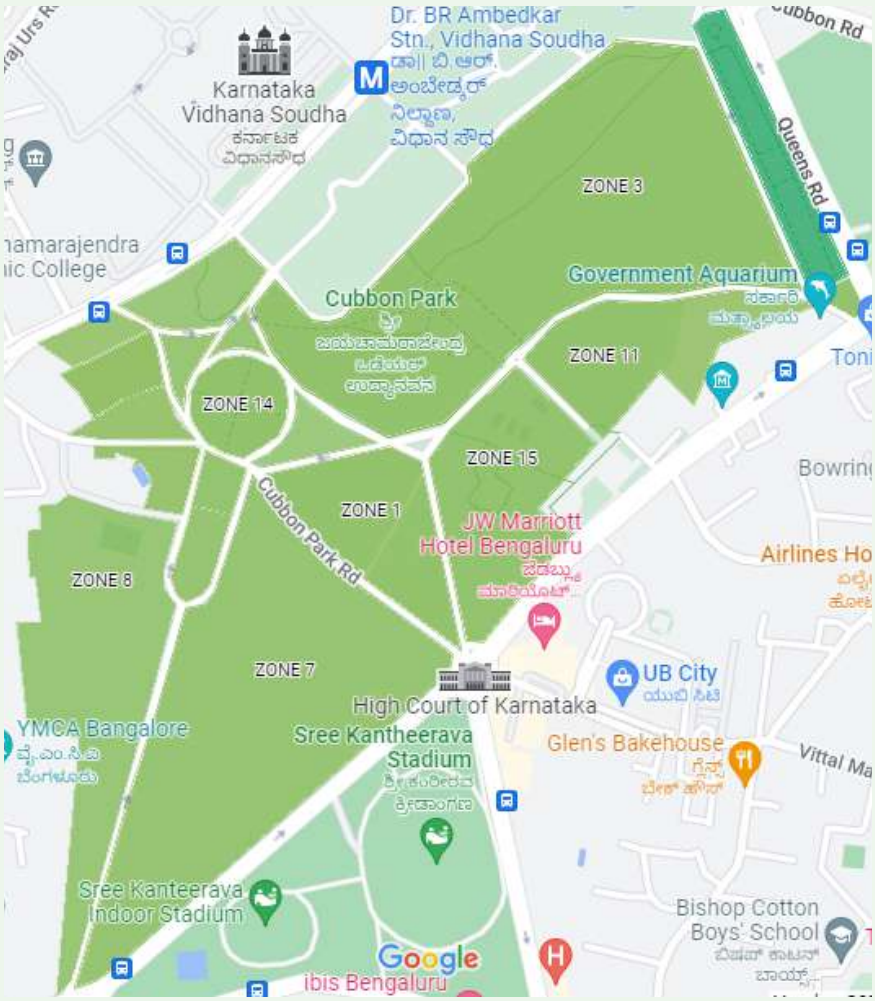
Number of deciduous trees	19
Number of evergreen trees	54



Conservation status

Least concern	24
Not known	48

ZONE 4



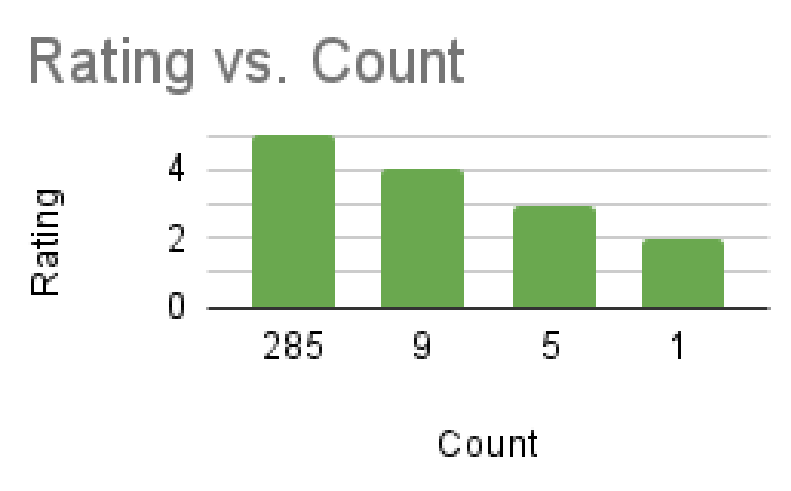
Location - Statue of King Edward Statue VII, next to Queen's Road

Total number of trees present - 300

Top 5 dominant species in the park -

1	***Polyalthia longifolia***
2	***Swietenia macrophylla***
3	***Millettia pinnata***
4	***Peltophorum pterocarpum***
5	***Syzygium cumini***

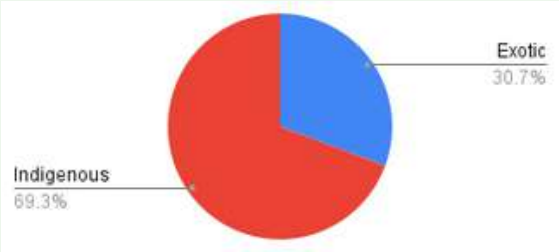
Health rating



Tree with largest girth - ***Swietenia macrophylla*** 4.58 m (tree number - 3972)

Tallest tree and which species - ***Swietenia macrophylla*** 32.30 m (tree number - 3866)

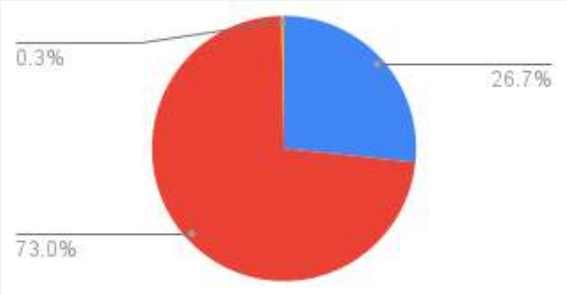
Origin



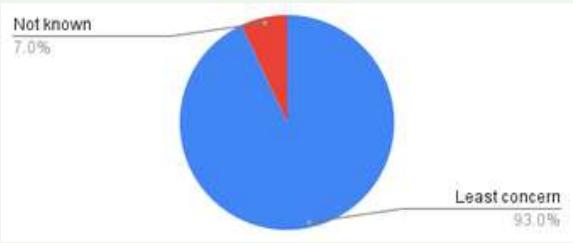
Number of Exotic trees	92
Number of Endemic Trees	0
Number of Indigenous trees	208

Phenology

Number of deciduous trees	80
Number of evergreen trees	219
Number of semi deciduous trees	1

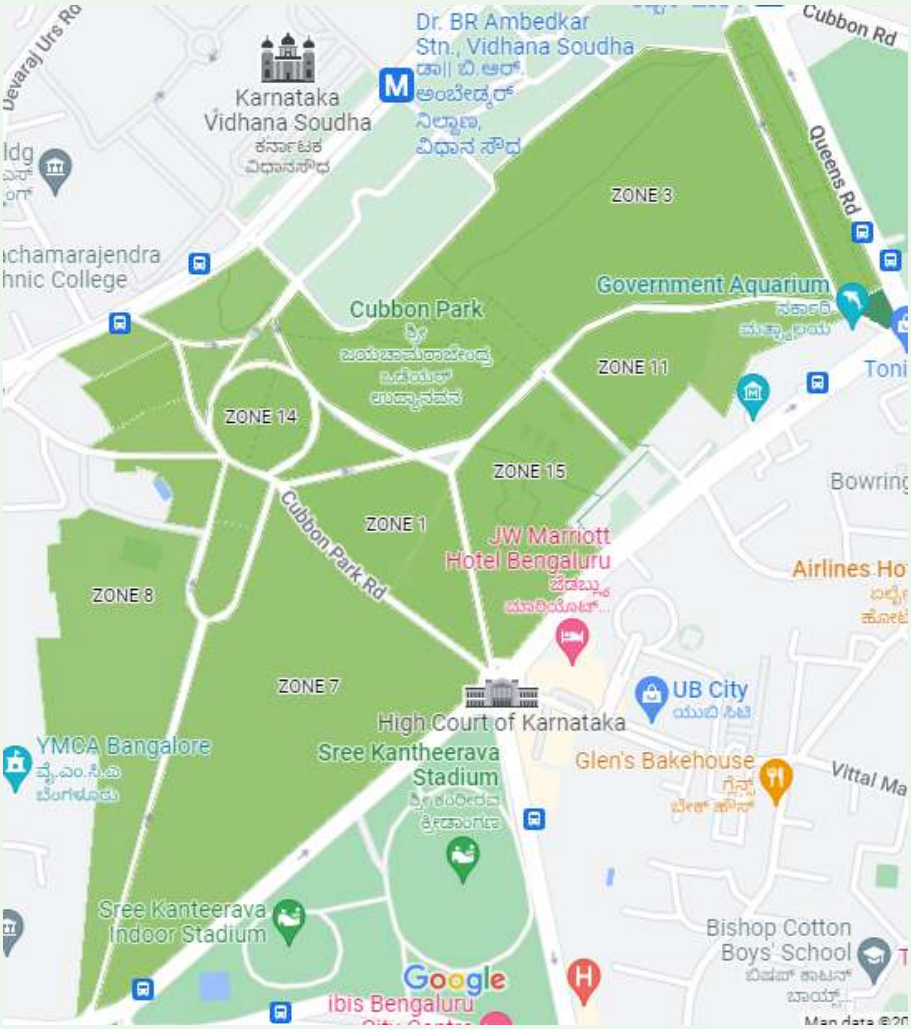


Conservation status



Not known	21
Least concern	279

ZONE 5





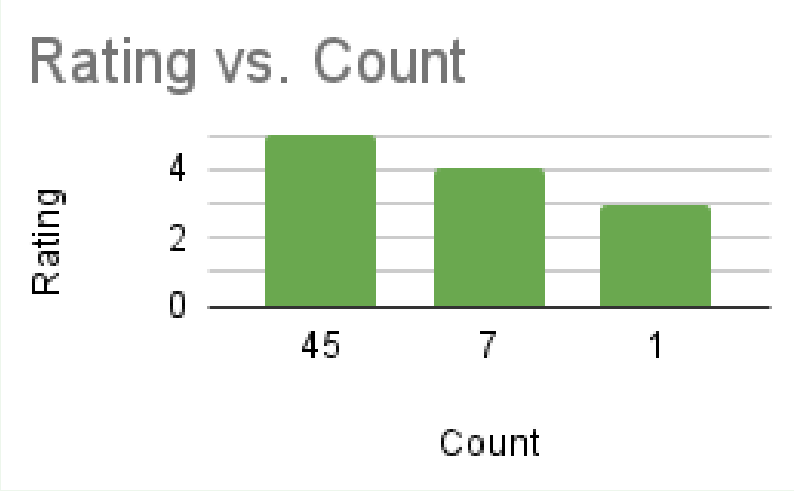
Location - Queen Victoria's Statue , opposite to Government Aquarium

Total number of trees present - 53

Top 4 dominant species in the park -

1	**Delonix regia**
2	***Tabebuia pallida***
3	***Samanea saman***
4	***Araucaria columnaris***
5	***Swietenia macrophylla***

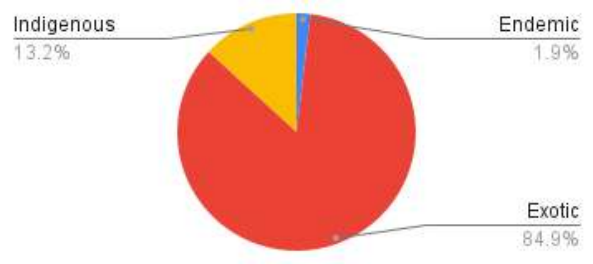
Health rating



Tree with largest girth - ***Samanea saman*** 2.5 m (tree number - 4233)

Tallest tree and which species - ***Peltophorum pterocarpum*** 22.92 m (tree number - 4260)

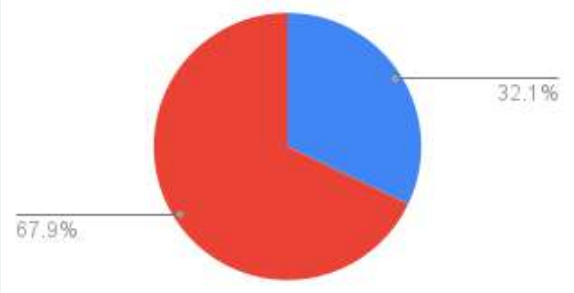
Origin



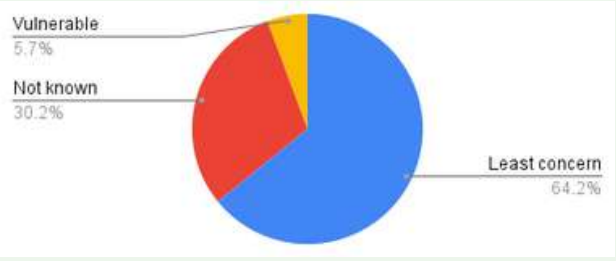
Number of Exotic trees	45
Number of Endemic Trees	1
Number of Indigenous trees	7

Phenology

Number of deciduous trees	17
Number of evergreen trees	36



Conservation status



Not known	16
Least concern	34
Vulnerable	3

ZONE 6





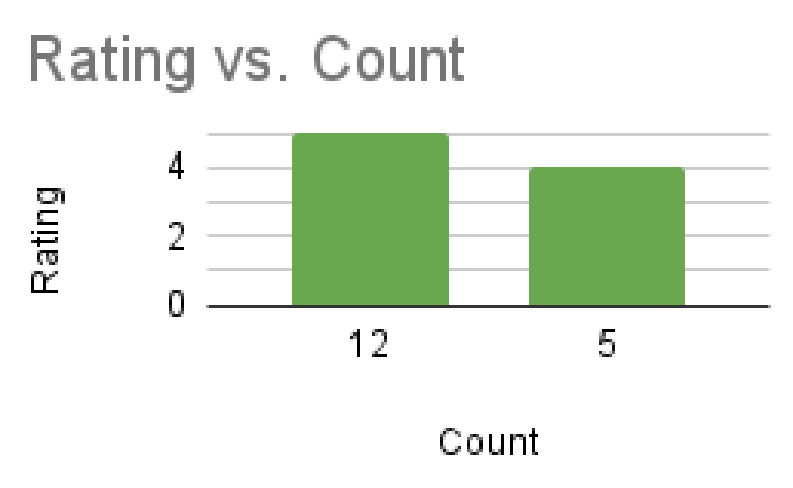
Location – small triangular park diagonally opposite to the Karnataka Wine Board

Total number of trees present – 17

Dominant species in the park -

1	***Jacaranda mimosifolia***
2	***Mangifera indica***
3	***Delonix regia***

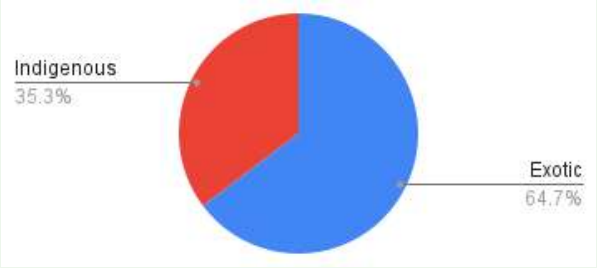
Health rating



Tree with largest girth - ***Mangifera indica*** 3.2 m (tree number - 758)

Tallest tree and which species - ***Bauhinia purpurea*** 15.37m (tree number - 928)

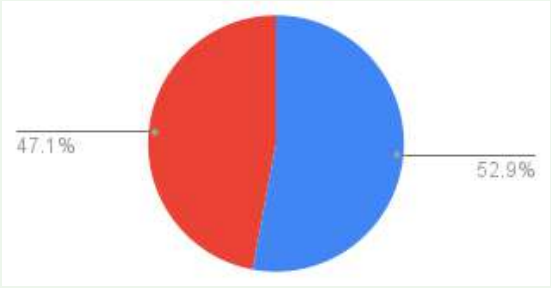
Origin



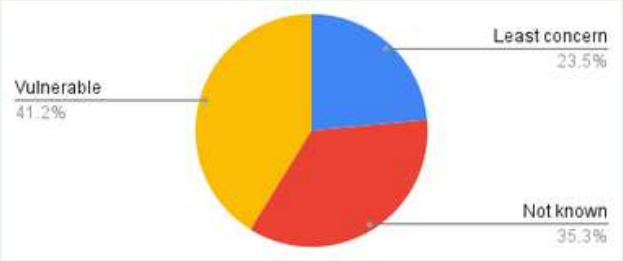
Number of Exotic trees	11
Number of Indigenous trees	6

Phenology

Number of deciduous trees	9
Number of evergreen trees	8

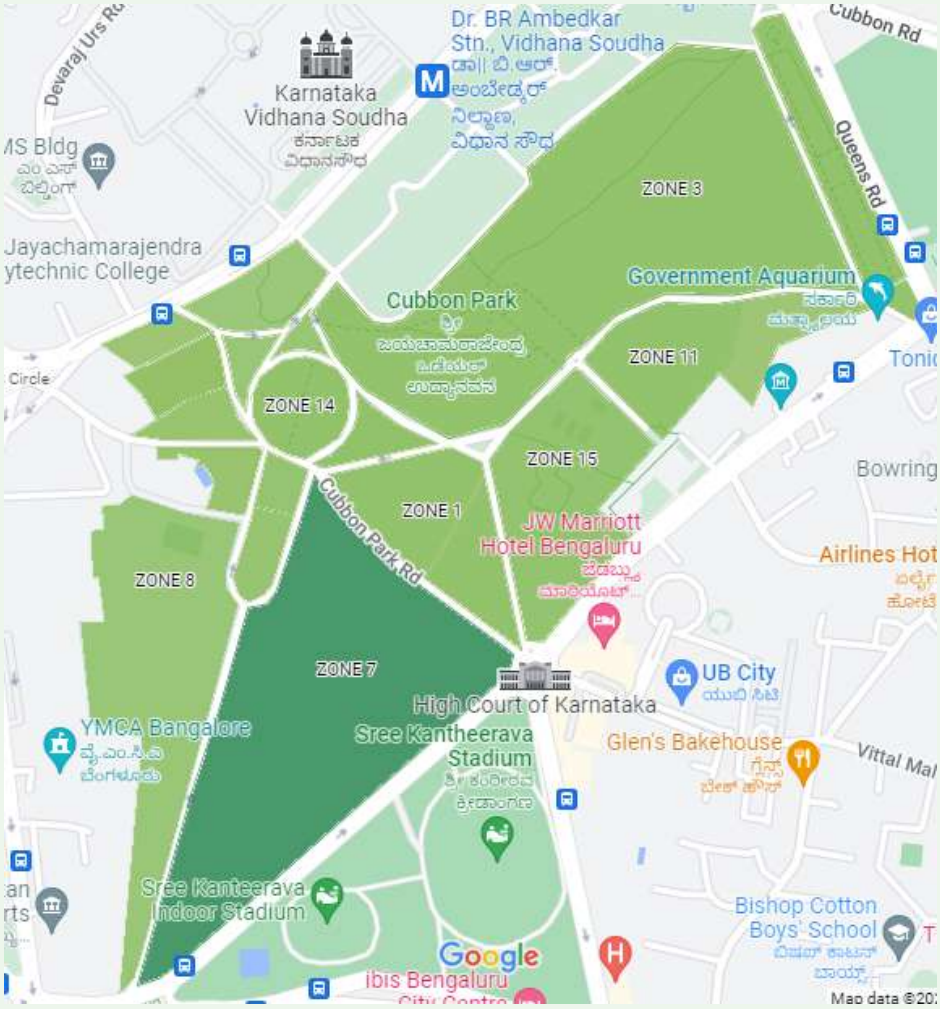


Conservation status



Not known	**6**
Least concern	4
Vulnerable	7

ZONE 7



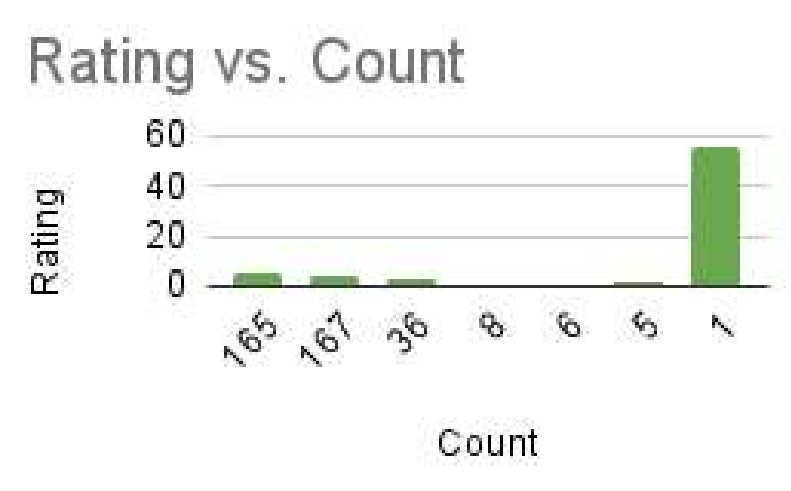
Location - On the right of Hudson Circle Gate, located near Bangalore Water Supply and Sewerage Board, alongside the Kasturba Road

Total number of trees present - 1878

Top 5 dominant species in the park -

1	**Samanea saman**
2	***Spathodea campanulata***
3	***Markhamia lutea***
4	***Grevillea robusta***
5	***Millettia pinnata***

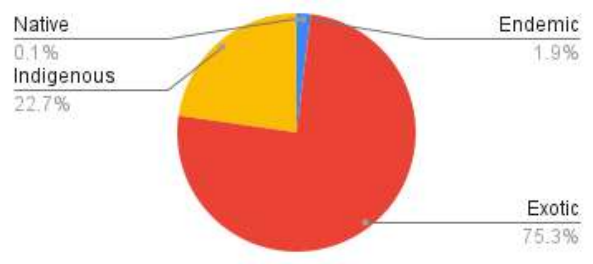
Health rating



Tree with largest girth - ***Ficus religiosa*** 7.85m (tree number - 7421)

Tallest tree and which species - ***Swietenia macrophylla*** 34.88m (tree number - 7278)

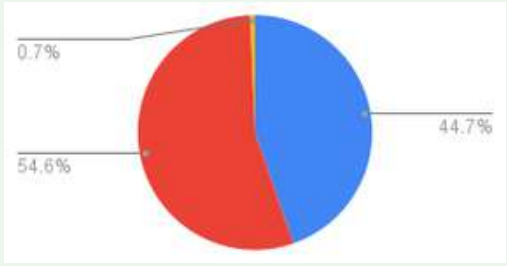
Origin



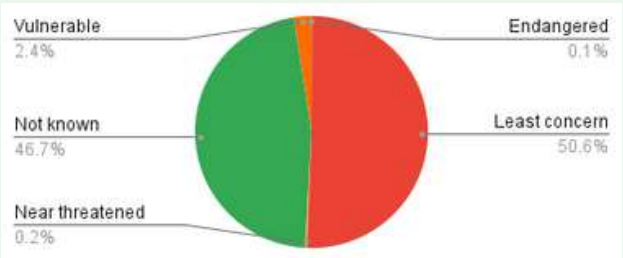
Number of Native trees	1
Number of Exotic trees	1415
Number of Endemic Trees	36
Number of Indigenous trees	426

Phenology

Number of deciduous trees	839
Number of evergreen trees	1026
Number of semi deciduous trees	13



Conservation status



Not known	877
Least concern	950
Near threatened	4
Vulnerable	46
Critical	1

KARGADHAKUNTE

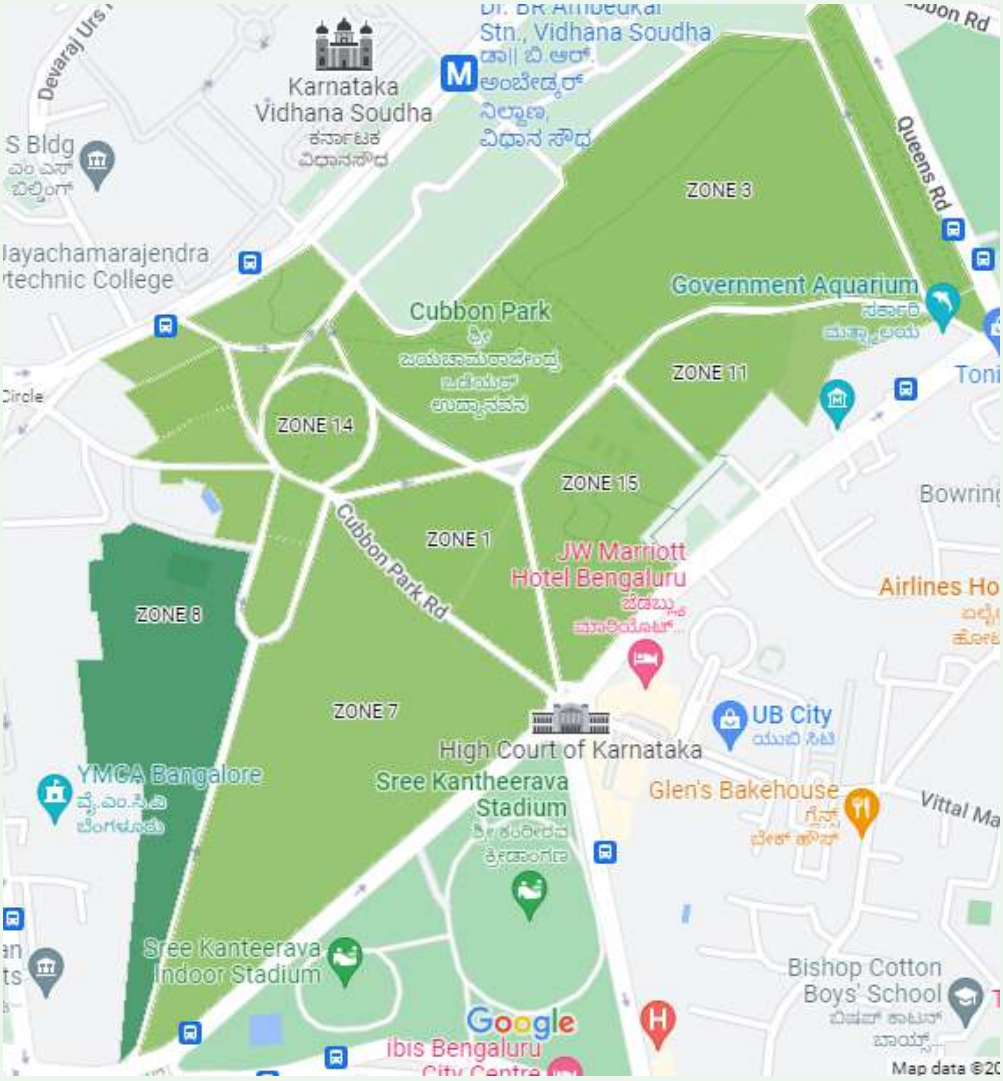
Location - Inside Zone 7

Approximate number of trees present - 15



The trees present in this region have been identified from far. They haven't been mapped or painted because they are unapproachable. The trees in this region are exotic species.

ZONE 8



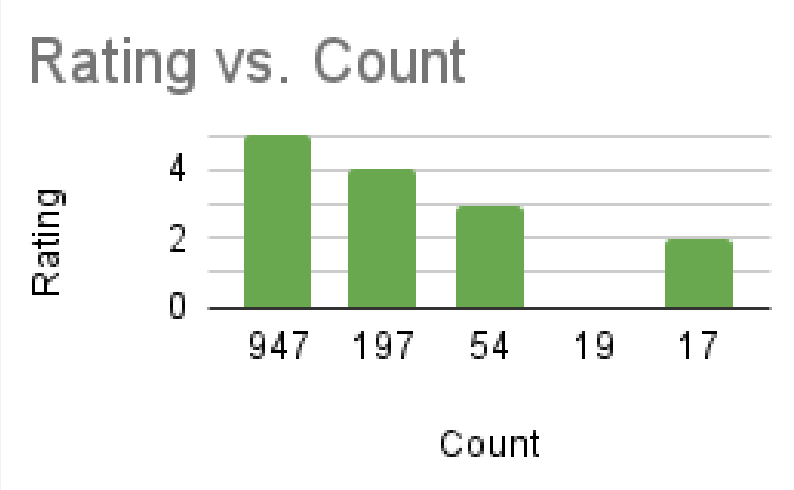
Location - On the left of Hudson Circle Gate, Fern House

Total number of trees present - 1234

Top 5 dominant species in the park -

1	***Markhamia lutea***
2	***Grevillea robusta***
3	***Spathodea campanulata***
4	***Peltophorum pterocarpum***
5	***Eucalyptus globulus***

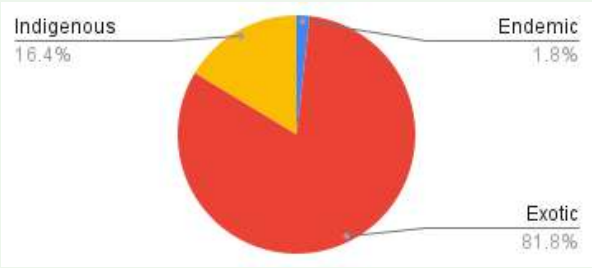
Health rating



Tree with largest girth - ***Delonix regia*** 7.2m (tree number - 8949)

Tallest tree and which species - ***Eucalyptus globulus*** 35.678m (tree number - 8506)

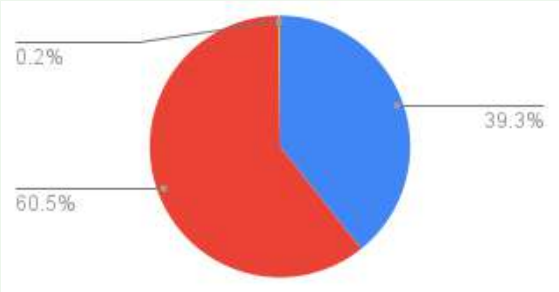
Origin



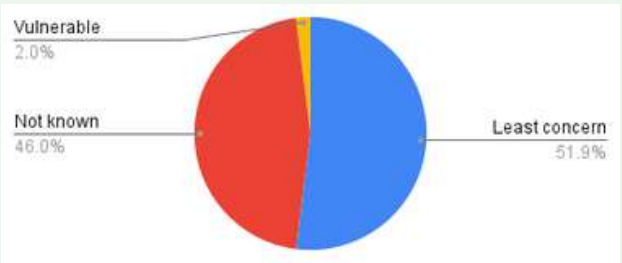
Number of Exotic trees	1010
Number of Endemic Trees	22
Number of Indigenous trees	202

Phenology

Number of deciduous trees	485
Number of evergreen trees	746
Number of semi deciduous trees	3



Conservation status



Not known	568
Least concern	641
Vulnerable	25

ZONE 9





Location - Karnataka Wine Board

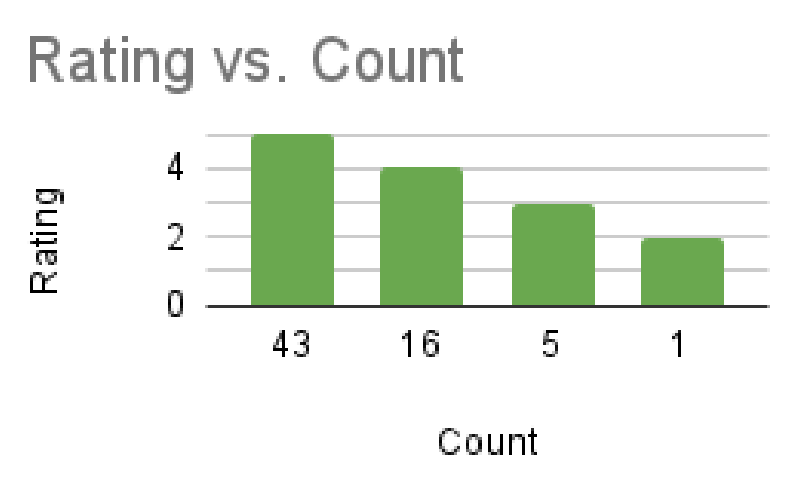
Range of numbers present - 6653-6657, 6660-6664, 6687, 6688, 6690-6697, 6699-6733, 6879-6881, 6883-6889

Total number of trees present - 65

Top 5 dominant species in the park -

1	***Peltophorum pterocarpum***
2	***Caryota urens***
3	***Bauhinia purpurea***
4	***Lagerstroemia speciosa***
5	***Mangifera indica***

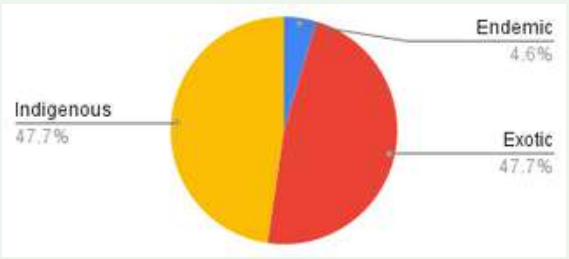
Health rating



Tree with largest girth - ***Peltophorum pterocarpum*** 3.72 m (tree number - 6883)

Tallest tree and which species - ***Peltophorum pterocarpum*** 29.134 m (tree number - 6883)

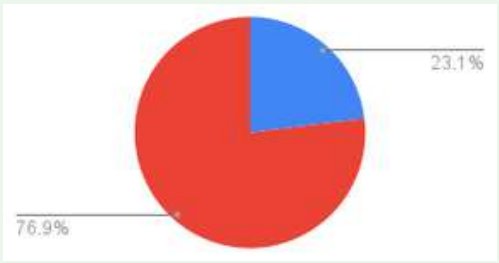
Origin



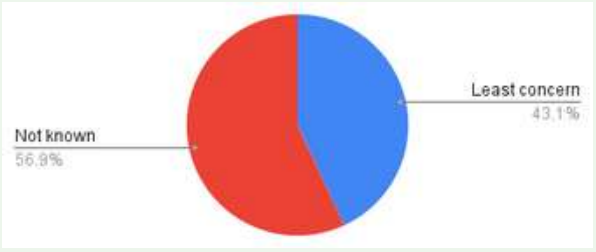
Number of Exotic trees	31
Number of Endemic Trees	3
Number of Indigenous trees	31

Phenology

Number of deciduous trees	15
Number of evergreen trees	50



Conservation status



Not known	37
Least concern	28

ZONE 10





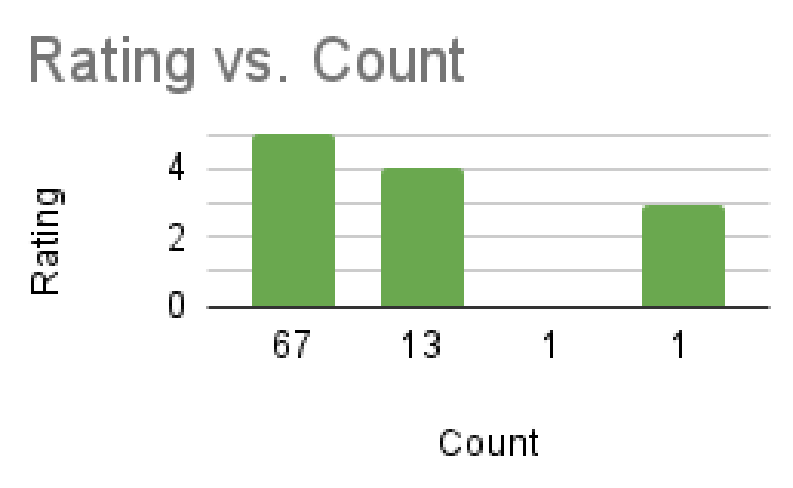
Location - Park opposite to Karnataka Wine Board

Total number of trees present - 82

Top 5 dominant species in the park -

1	***Peltophorum pterocarpum***
2	***Enterolobium cyclocarpum***
3	***Spathodea campanulata***
4	***Millingtonia hortensis***
5	***Lagerstroemia speciosa***

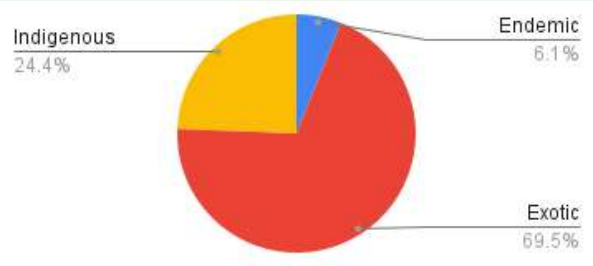
Health rating



Tree with largest girth - ***Ficus religiosa*** 5.2 m (tree number - 4356)

Tallest tree and which species - ***Ficus benjamina*** 24.56m (tree number - 6898)

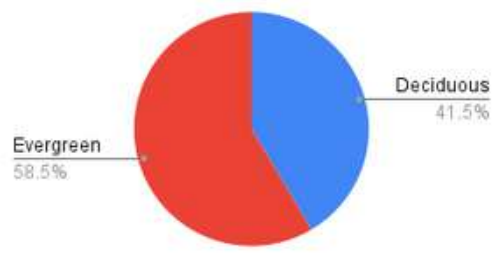
Origin



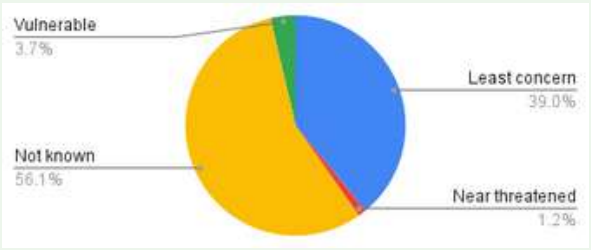
Number of Exotic trees	57
Number of Endemic Trees	5
Number of Indigenous trees	20

Phenology

Number of deciduous trees	34
Number of evergreen trees	48



Conservation status



Not known	46
Least concern	32
Vulnerable	3
Near Threatened	1

ZONE 11



Location – Jawahar Bal Bhavan

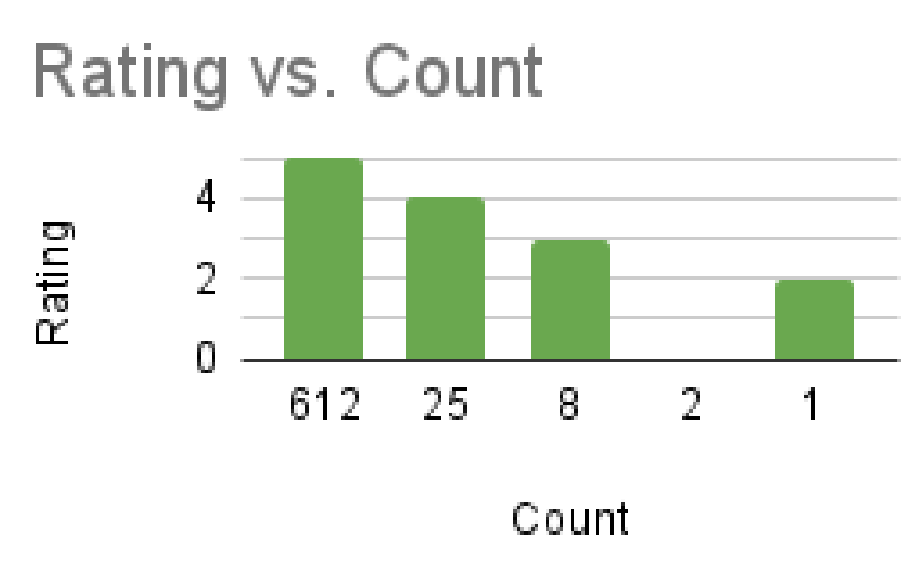
Location – Jawahar Bal Bhavan

Total number of trees present – 648

Top 5 dominant species in the park -

1	***Eucalyptus globulus***
2	***Polyalthia longifolia***
3	***Grevillea robusta***
4	***Peltophorum pterocarpum***
5	**Caryota urens**

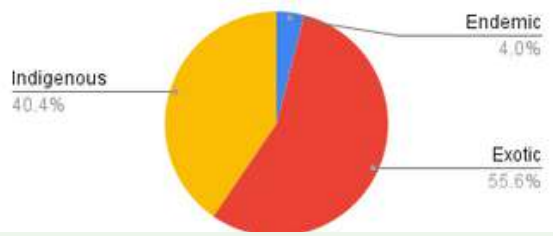
Health rating



Tree with largest girth - ***Tamarindus indica*** 6.15 m (tree number - 5314)

Tallest tree and which species - ***Eucalyptus globulus*** 22.51 m (tree number - 7723)

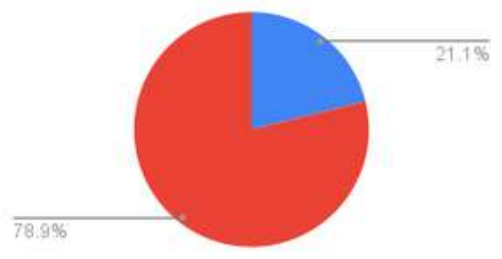
Origin



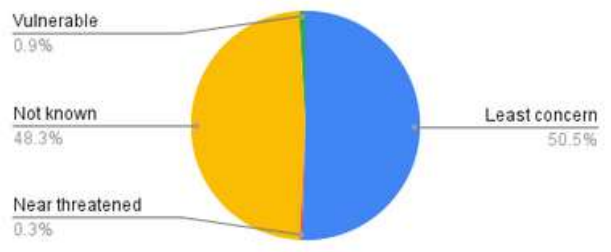
Number of Exotic trees	360
Number of Endemic Trees	26
Number of Indigenous trees	262

Phenology

Number of deciduous trees	137
Number of evergreen trees	511



Conservation status



Least concern	327
Near threatened	2
Not known	313
Vulnerable	6

ZONE 12





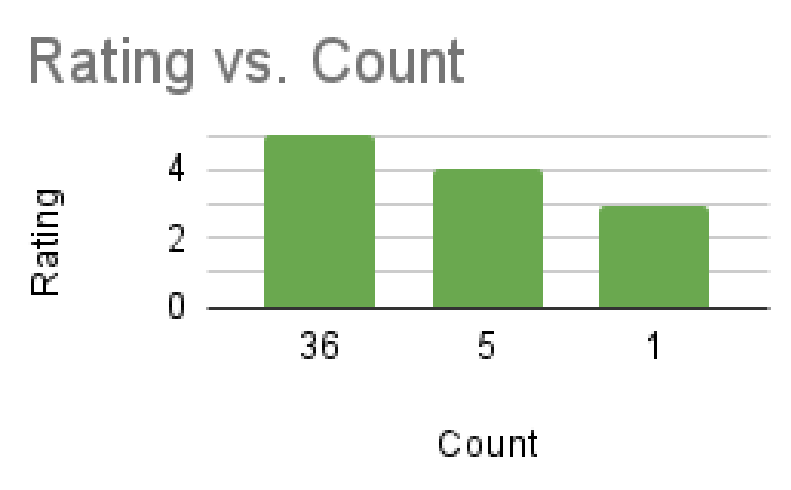
Location – Rose Garden

Total number of trees present - 42

Dominant species in the park -

1	***Wodyetia bifurcata***

Health rating



Tree with largest girth - ***Wodyetia bifurcata*** 0.88 m (tree number - 4812)

Tallest tree and which species - ***Wodyetia bifurcata*** 9.26 m (tree number - 4810)

Origin



Number of Exotic trees	42

Phenology

Number of evergreen trees	42



Conservation status



Conservation dependant	42

ZONE 13





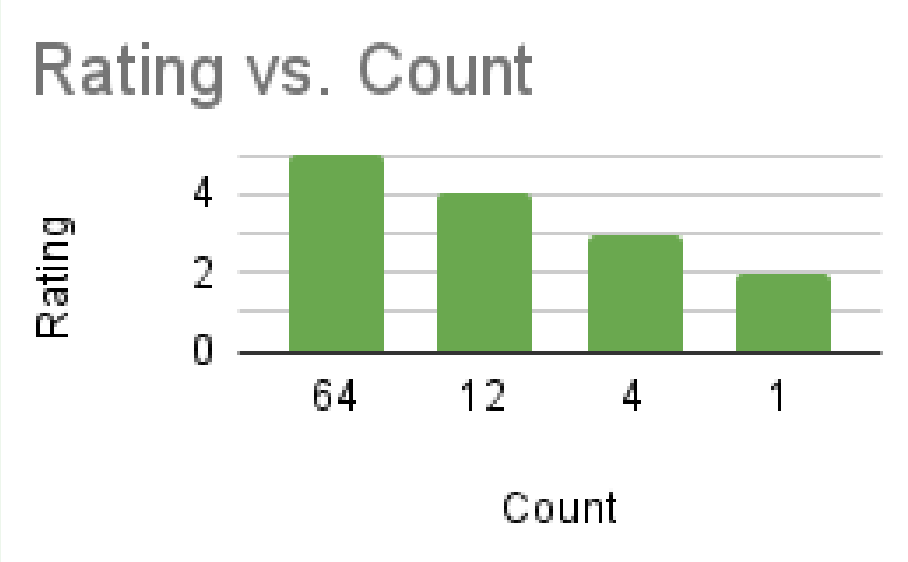
Location – The Weekend Dog Park

Total number of trees present – 81

Top 5 dominant species in the park -

1	***Peltophorum pterocarpum***
2	***Bauhinia purpurea***
3	***Spathodea campanulata***
4	***Caryota urens***
5	***Eucalyptus globulus***

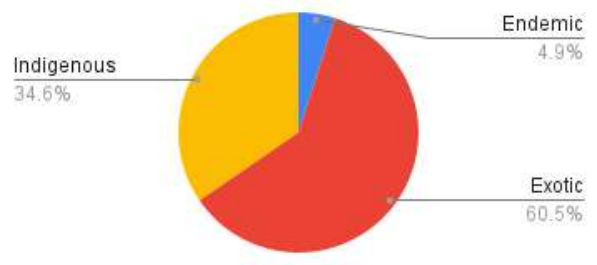
Health rating



Tree with largest girth - ***Peltophorum pterocarpum*** 3.12 m (tree number - 6581)

Tallest tree and which species - ***Araucaria columnaris*** 16.13 m (tree number - 6609)

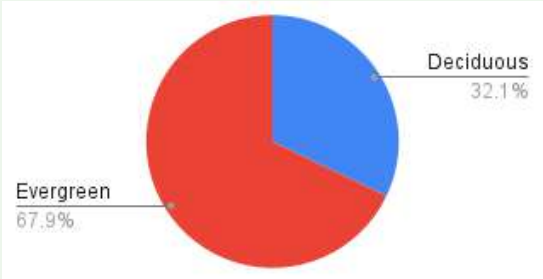
Origin



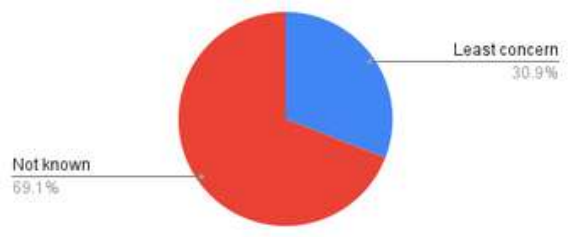
Number of Exotic trees	49
Number of Endemic Trees	4
Number of Indigenous trees	28

Phenology

Number of deciduous trees	26
Number of evergreen trees	55

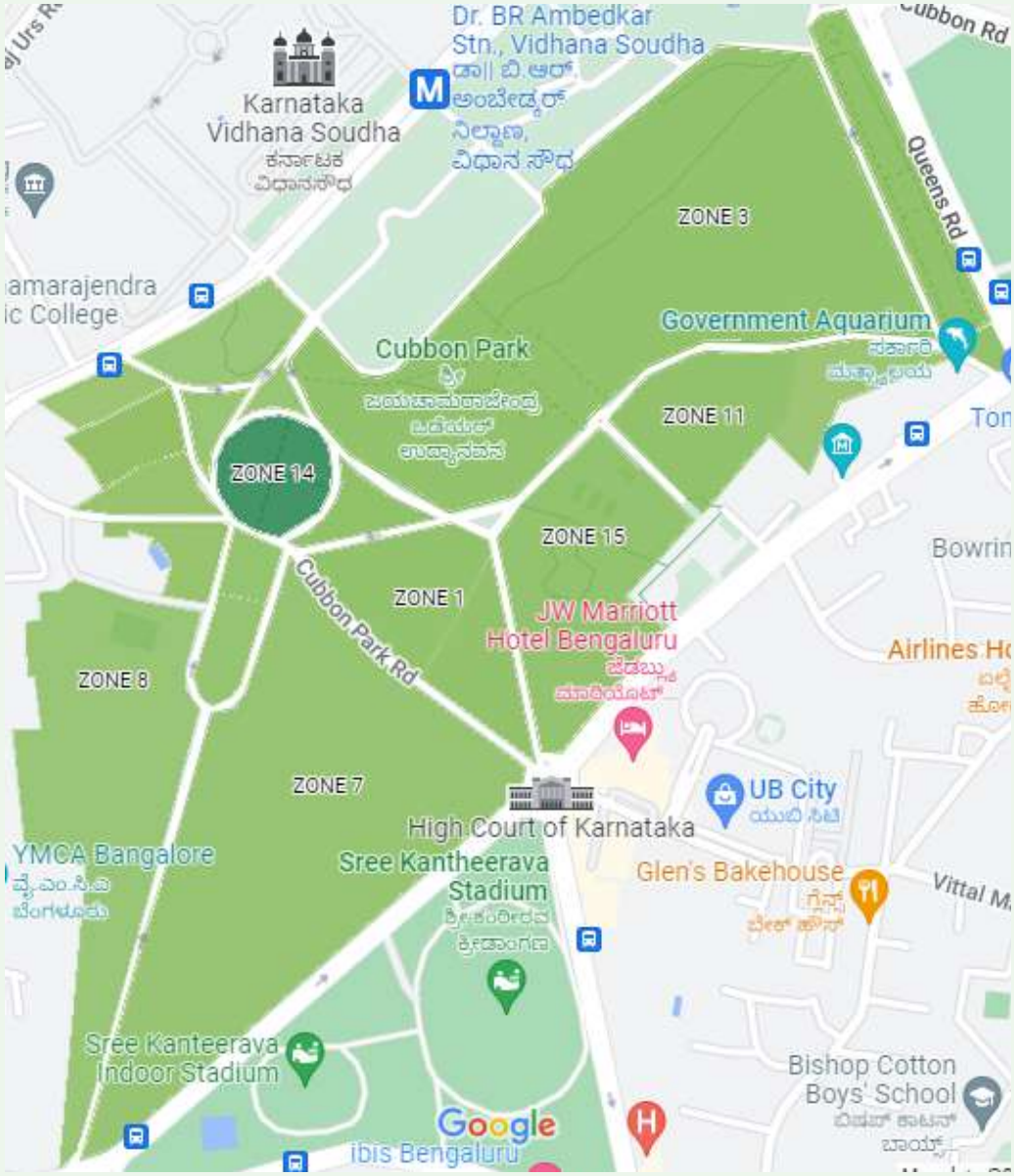


Conservation status



Not known	56
Least concern	25

ZONE 14



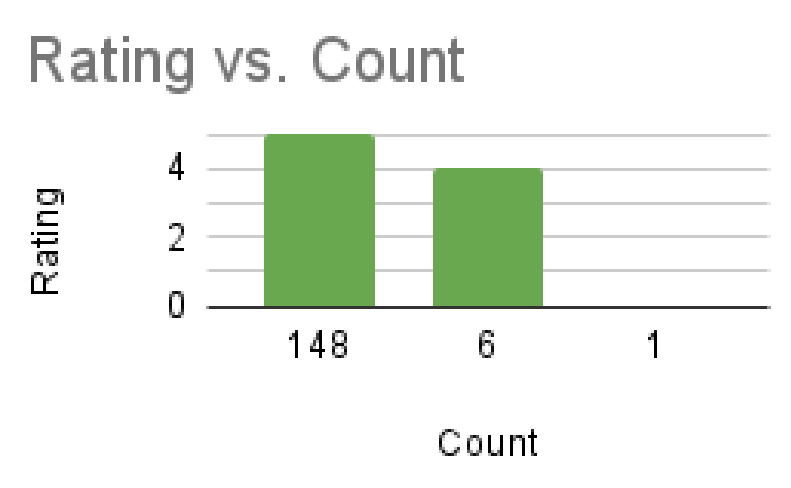
Location - Ringwood Circle Park

Total number of trees present - 155

Top 3 dominant species in the park -

1	***Plumeria rubra***
2	***Handroanthus impetiginosus***
3	***Casuarina equisetifolia***

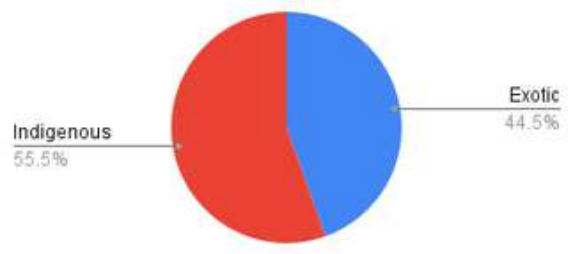
Health rating



Tree with largest girth - ***Mangifera indica*** 5.45 m (tree number - 4183)

Tallest tree and which species - ***Araucaria columnaris*** 16.73 m (tree number - 5300)

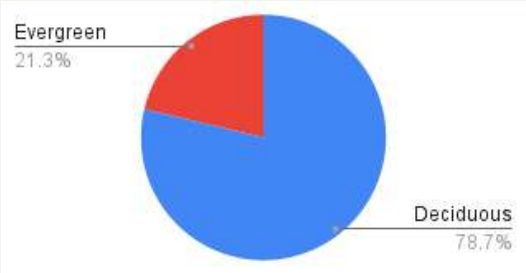
Origin



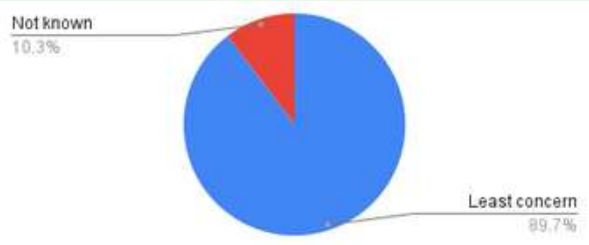
Number of Exotic trees	69
Number of Indigenous trees	86

Phenology

Number of deciduous trees	122
Number of evergreen trees	33



Conservation status



Not known	16
Least concern	139

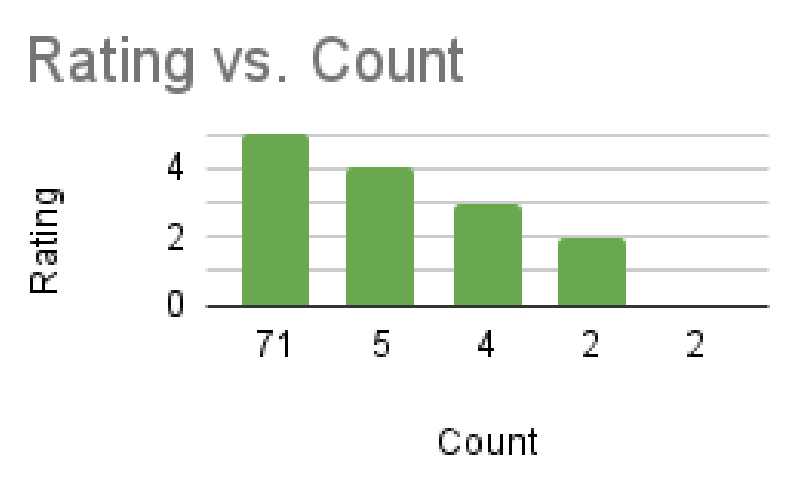
AVENUE TREES

Total number of trees present - 84

Top 3 dominant species in the park -

1	***Castanospermum australe***
2	***Ficus benjamina***
3	***Polyalthia longifolia***

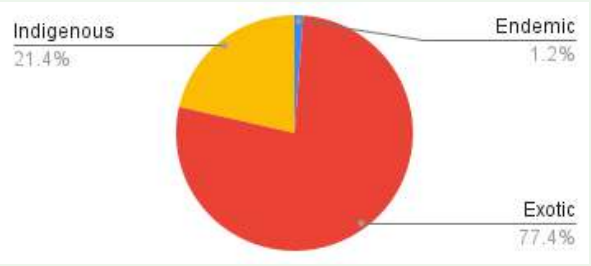
Health rating



Tree with largest girth - ***Castanospermum australe*** 2.45 m (tree number - 5479)

Tallest tree and which species - ***Peltophorum pterocarpum*** 15.65 m (tree number - 4275)

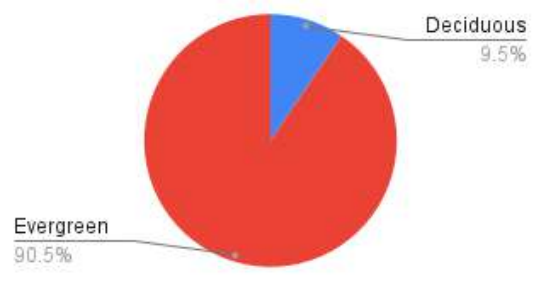
Origin



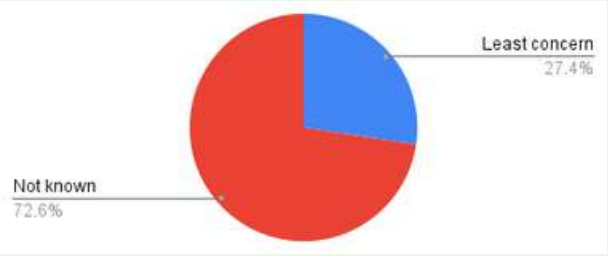
Number of Exotic trees	65
Number of Endemic Trees	1
Number of Indigenous trees	18

Phenology

Number of deciduous trees	8
Number of evergreen trees	76



Conservation status



Not known	61
Least concern	23

ZONE 15



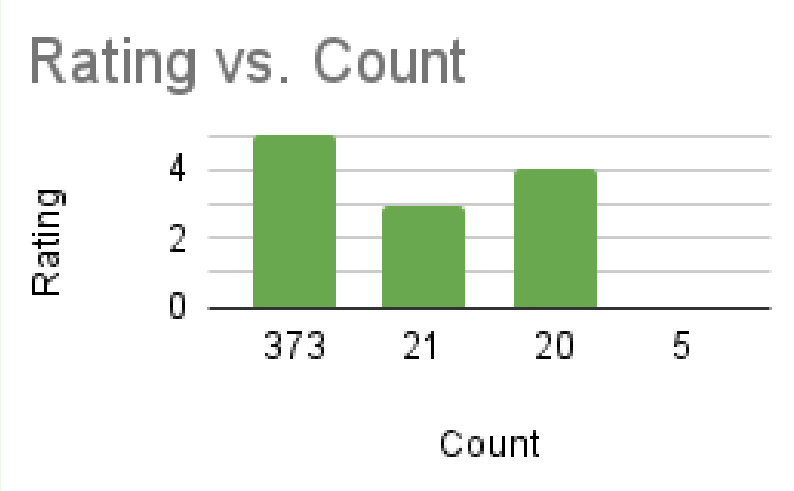
Location - KSLTA, Nursery, near the office of Deputy Director of Department of Horticulture

Total number of trees present - 419

Top 5 dominant species in the park -

1	***Grevillea robusta***
2	***Caryota urens***
3	***Delonix regia***
4	***Guazuma ulmifolia***
5	***Samanea saman***

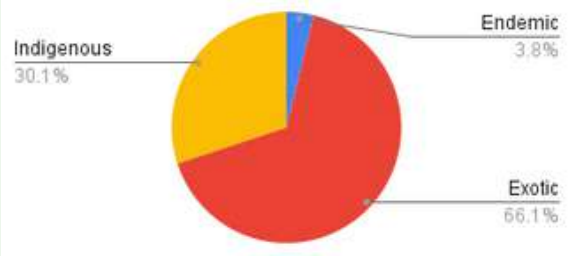
Health rating



Tree with largest girth - ***Ficus religiosa*** 6.25 m (tree number - 5045)

Tallest tree and which species - ***Grevillea robusta*** 28.73m (tree number - 5400)

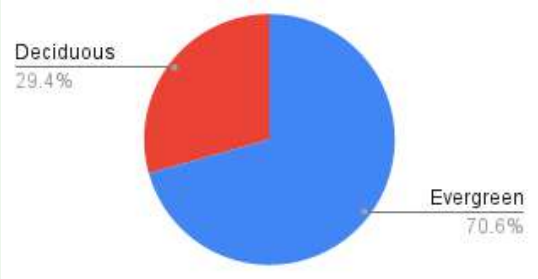
Origin



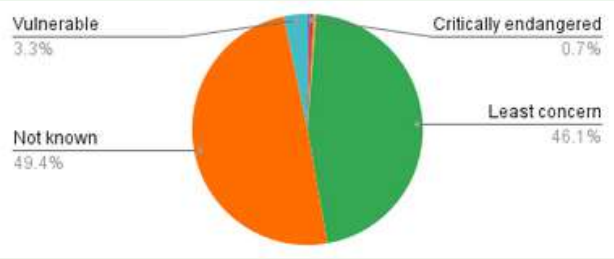
Number of Exotic trees	277
Number of Endemic Trees	16
Number of Indigenous trees	126

Phenology

Number of deciduous trees	123
Number of evergreen trees	296

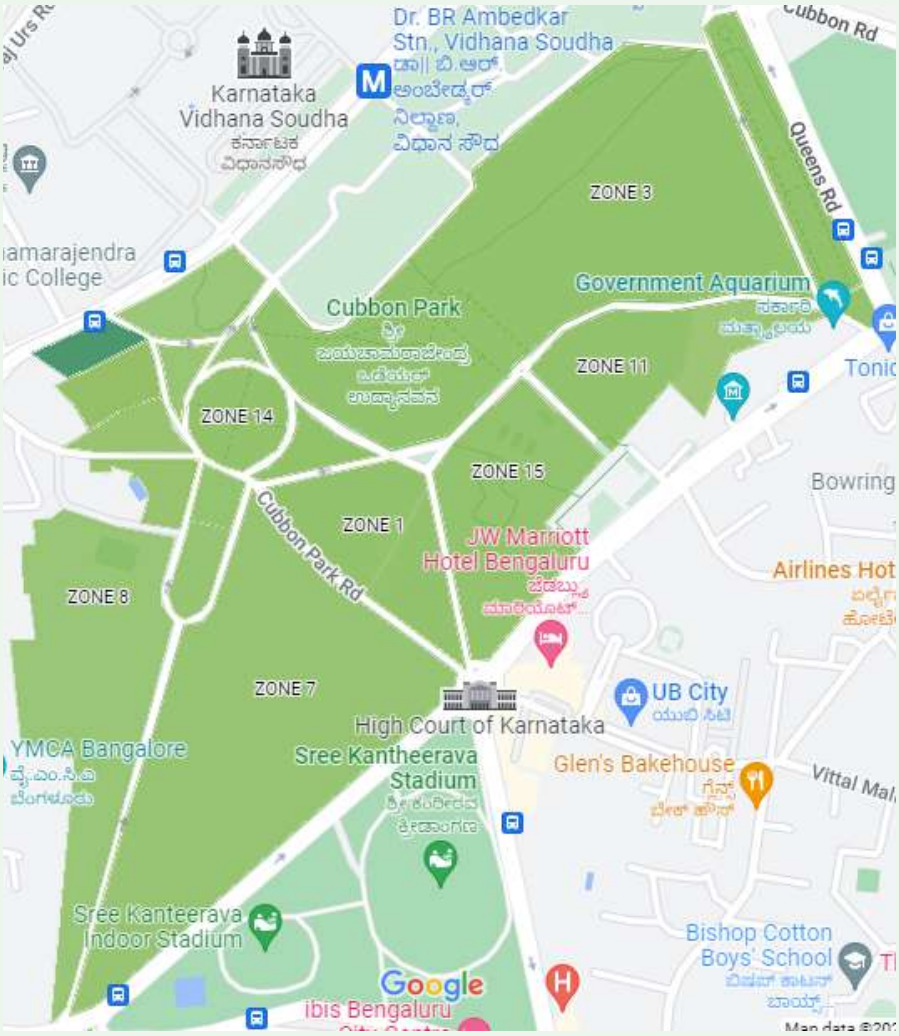


Conservation status



Not known	207
Least concern	193
Conservation dependant	1
Vulnerable	14
Critically endangered	3
Endangered	1

ZONE 16





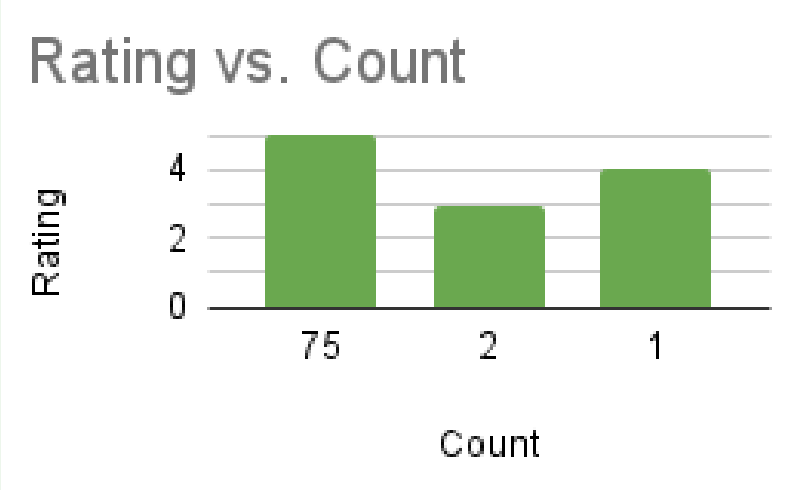
Location - Karnataka State Government Employees Association (KSG Social Club)

Total number of trees present - 78

Top 3 dominant species in the park -

1	***Spathodea campanulata***
2	***Samanea saman***
3	***Guazuma ulmifolia***

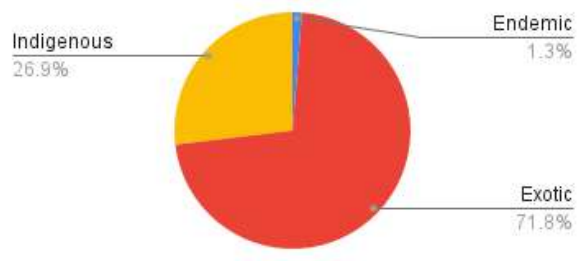
Health rating



Tree with largest girth - ***Ficus racemosa*** 7.1 m (tree number - 2463)

Tallest tree and which species - ***Ceiba pentandra*** 16.11 m (tree number - 8938)

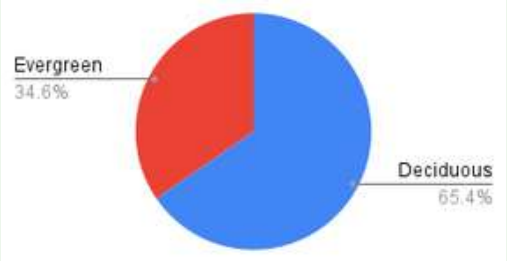
Origin



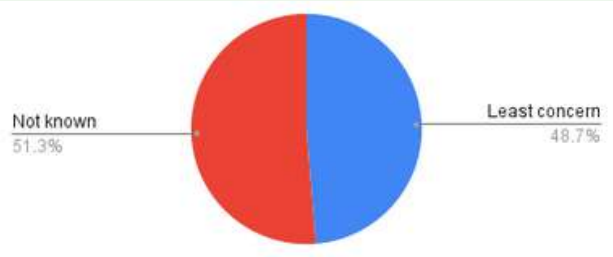
Number of Exotic trees	56
Number of Endemic Trees	1
Number of Indigenous trees	21

Phenology

Number of deciduous trees	51
Number of evergreen trees	27



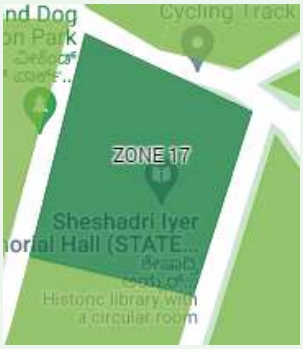
Conservation status



Not known	40
Least concern	38

ZONE 17





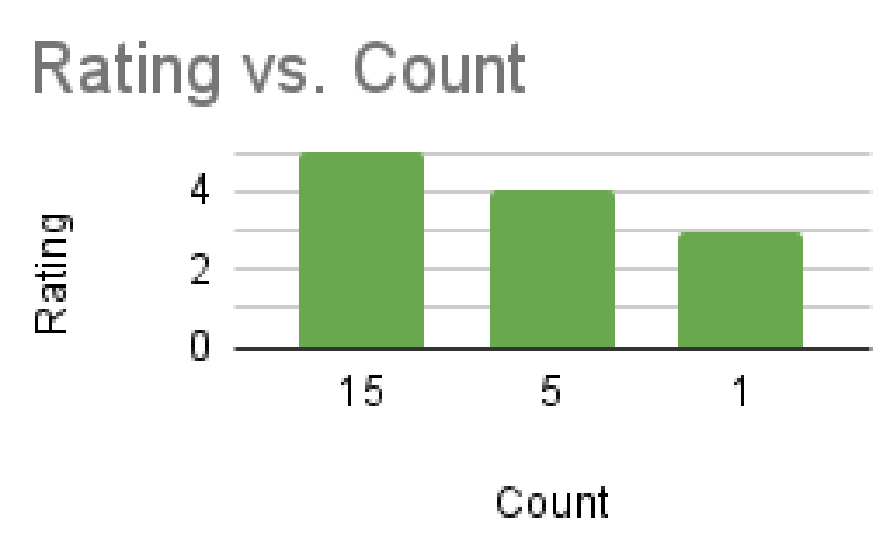
Location – Seshadri Iyer Memorial Hall (State Central Library)

Total number of trees present – 21

Dominant species in the park -

1	***Wodyetia bifurcata***
2	***Calophyllum inophyllum***
3	***Artocarpus heterophyllus***

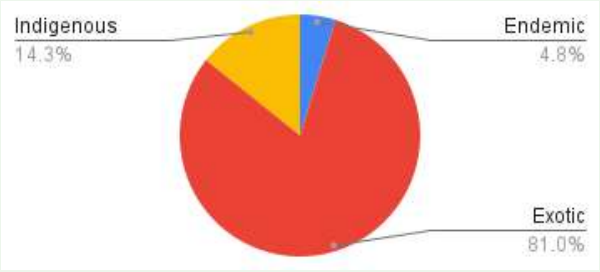
Health rating



Tree with largest girth - ***Wodyetia bifurcata*** 0.95m (tree number - 5121)

Tallest tree and which species - ***Wodyetia bifurcata*** 14.78m (tree number - 5435)

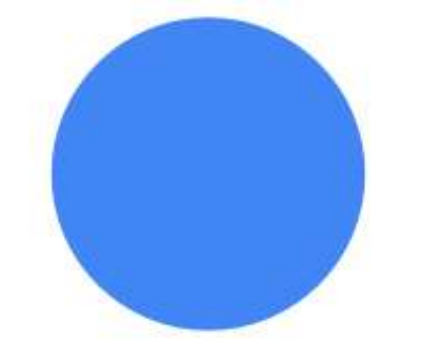
Origin



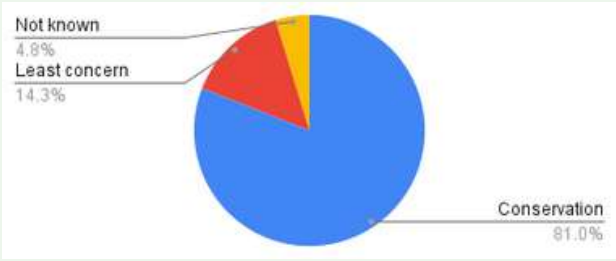
Number of Exotic trees	17
Number of Endemic Trees	1
Number of Indigenous trees	3

Phenology

Number of evergreen trees	21



Conservation status



Not known	1
Least concern	3
Conservation dependant	17

ZONE 18



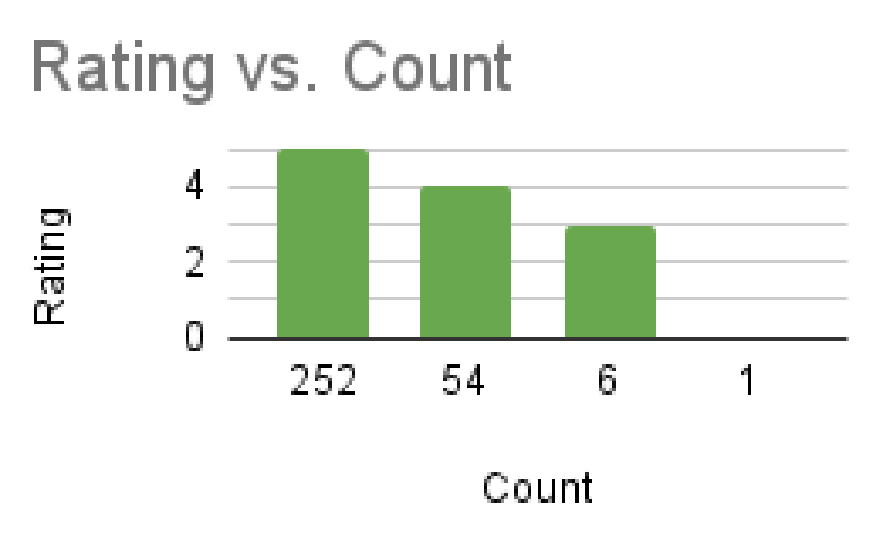
Location - Park opposite to Karnataka State Government Employees Association (KSG Social Club)

Total number of trees present - 313

Top 5 dominant species in the park -

1	***Polyalthia longifolia***
2	***Cassia javanica***
3	***Markhamia lutea***
4	***Spathodea campanulata***
5	***Millettia pinnata***

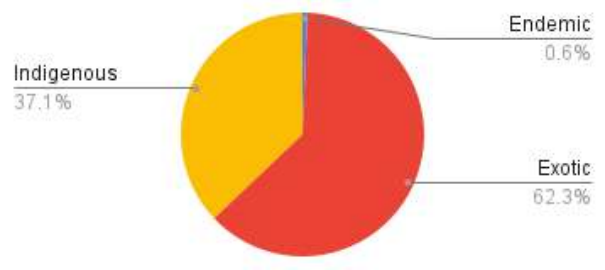
Health rating



Tree with largest girth - ***Ceiba pentandra*** 8.23m (tree number - 4542)

Tallest tree and which species - ***Spathodea campanulata*** 26.57 m (tree number - 4407)

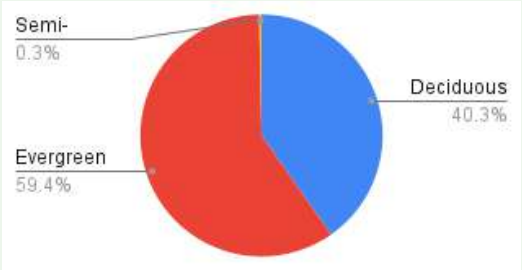
Origin



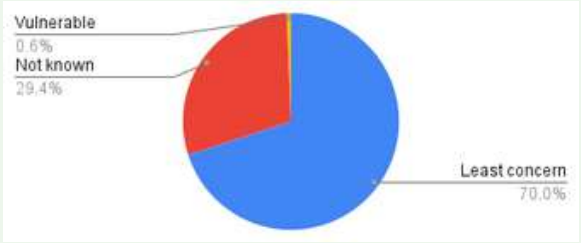
Number of Exotic trees	195
Number of Endemic Trees	2
Number of Indigenous trees	116

Phenology

Number of deciduous trees	126
Number of evergreen trees	186
Number of semi deciduous trees	1



Conservation status



Not known	92
Least concern	219
Vulnerable	2

ZONE 19



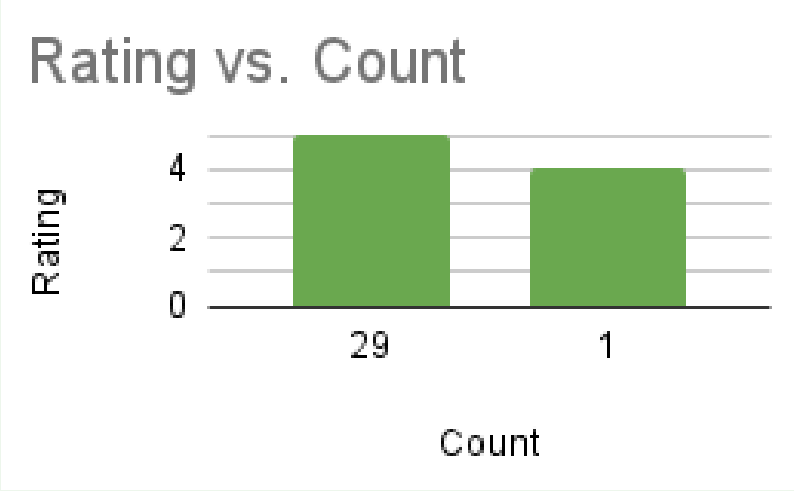
Location - Karnataka State Secretariat Club

Total number of trees present - 30

Top 5 dominant species in the park -

1	***Polyalthia longifolia***
2	***Mangifera indica***
3	***Artocarpus heterophyllus***
4	***Peltophorum pterocarpum***
5	***Cocos nucifera***

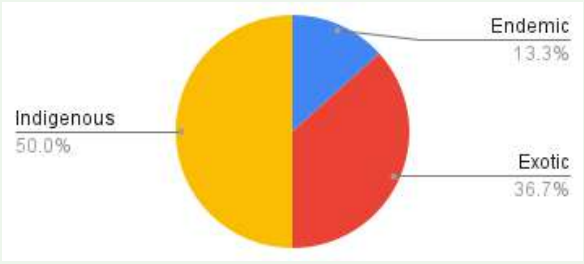
Health rating



Tree with largest girth - ***Mangifera indica*** 3.17m (tree number - 8747)

Tallest tree and which species - ***Araucaria columnaris*** 14.70m (tree number - 8842)

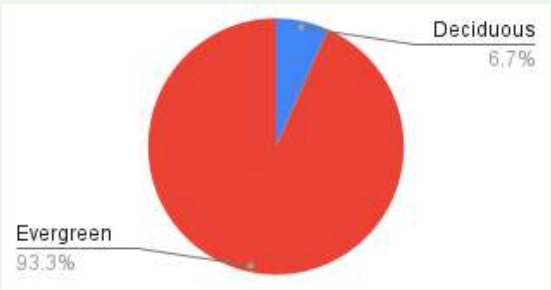
Origin



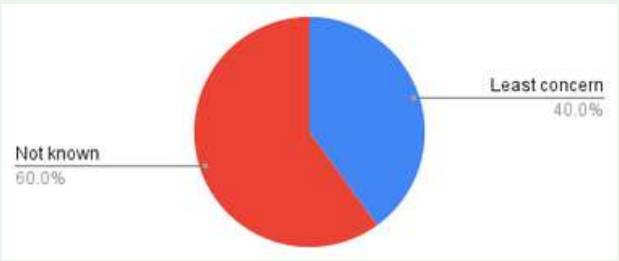
Number of Exotic trees	11
Number of Endemic Trees	4
Number of Indigenous trees	15

Phenology

Number of deciduous trees	2
Number of evergreen trees	28



Conservation status



Not known	18
Least concern	12

CUBBON PARK ANALYSIS



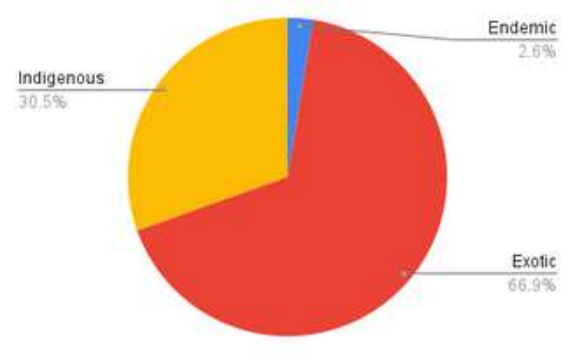
Range of numbers present - 1 - 9079

Total number of trees present - 8866

Total number of tree species found in Cubbon Park - 196

Total number of unidentified trees - 11 (this is included in the total count). The trees do not have any leaves or fruits for identification. The trees from Kargadhakunte have not been included, since it is completely inaccessible. Approx trees would be around 10.

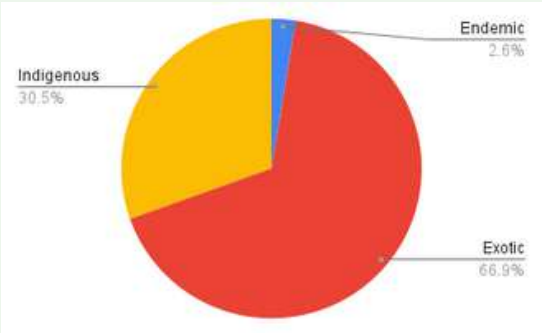
Origin



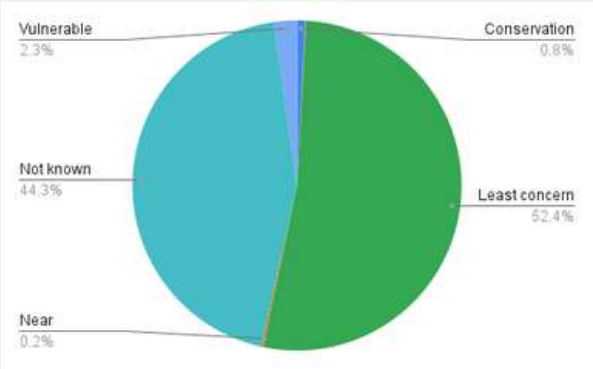
Number of Exotic trees	5928
Number of Endemic trees	229
Number of Indigenous trees (includes 2 native)	2698

Phenology

Number of deciduous trees	3533
Number of evergreen trees	5281
Number of semi deciduous trees	41



Conservation status



Not known	3921
Least concern	4641
Conservation dependant	71
Near threatened	15
Vulnerable	200
Endangered	2
Critically endangered	5

Dominant species in the park -

SL. NO.	SPECIES	TOTAL NUMBER OF TREES
1	***Polyalthia longifolia***	489
2	***Peltophorum pterocarpum***	420
3	***Markhamia lutea***	402
4	***Spathodea campanulata***	395
5	***Millettia pinnata***	390
6	***Swietenia macrophylla***	384
7	***Grevillea robusta***	343
8	***Delonix regia***	334
9	***Samanea saman***	301
10	***Eucalyptus globulus***	244

Tree with largest girth - ***Ceiba pentandra*** 8.23m (tree number 4542)

Tallest tree - ***Eucalyptus globulus*** 50.67m (tree number - 8506)

Total Number of dead trees - 69 (not considered fo any calculations)

Number of cut down trees - 19

Discussion

The entire park has been divided into 19 different zones and a detailed zone wise analysis has been done for each one of them. The analysis has been done based on the species type (endemic to Western Ghats, exotic, indigenous), their phenology (evergreen, deciduous, semi-deciduous) and their conservation status (Least concern, conservation dependent, near threatened, vulnerable, endangered, critically endangered) and for those species which haven't been evaluated under the conservation criteria yet, it has been mentioned as 'not known'. The analysis presents us with details about the top five dominant species present in each zone and the tree with the largest girth and the tallest tree present in that particular zone as well. The analysis also features the details of the total number of trees with a good and poor health rating, and number of trees that are dead or cut down (if any) zone wise as per our knowledge.

There are about 196 different tree taxa belonging to 48 different families and 144 different genera recorded in the Cubbon Park, out of which 71 species are indigenous, 8 species are endemic to Western Ghats and 117 species are exotic. Out of these species, 118 are evergreen, 74 are deciduous and 4 are semi-deciduous. Cubbon park promotes biodiversity as it is a home for over 196 different tree taxa belonging to 48 different families and 144 different genera. As an ecosystem, it can be considered stable due to the diversified species present there, due to which it is more productive and has the ability to withstand environmental stresses like drought or invasive infestations. Due to its greater species richness and productivity, as an ecosystem it makes it more sustainable and stable.

Exotic species are quite dominant in the park, few of them recorded to be introduced during colonial rule.

Exotic species are generally introduced due to their higher growth rates in comparison to native species and their capability to adapt in different environmental conditions. Although the introduction of new species is not always considered to be nuisance or invasive, it can sometimes cause great deal of harm to the native species because of their invasive nature. ***Broussonetia papyrifera*** (L) Vent, popularly known as paper mulberry, was found in different regions across the park and is a highly invasive weed. There are other such invasive species present in the park as well , like ***Ricinus communis*** (L) which pose a threat to the native species as they strongly compete with them for food and other resources.There should be periodic checks to monitor the growth of these species, and if spotted growing anywhere should be removed immediately due to their invasive nature. More efforts can be implemented towards planting more native species within the park, especially endemic species as they are often endangered.

Out of the 196 species present in the park, 118 are evergreen, 74 are deciduous and 4 are semi deciduous. The total number of evergreen trees in the park is much higher than the deciduous trees, which is advantageous as various studies have shown that the evergreens should be the preferred choice in urban green spaces. This is because soils with evergreen trees have the highest carbon content compared to soils with deciduous trees and those with lawns. They cling on to their resilient foliage throughout the year unlike the deciduous trees, which shed all their leaves - especially in winters. When cold air prevents the pollutants from escaping the atmosphere, the evergreens help in purifying the air.

The conservation status for many of the species has been put as 'not known' because of lack of data on their current status of conservation. This might be due to the reason that the conservation status of these species hasn't been comprehensively assessed yet. There are 3921 number of trees in total whose conservation status is

not known yet, 4727 number of trees which are at lower risk (includes species that are of least concern, conservation dependent and near threatened) and 207 number of trees which are at an elevated risk or are threatened (includes species that are vulnerable, endangered and critically endangered). The species that are threatened need to be monitored periodically to track any immediate threat. To aid in their conservation, the seeds of these trees should be collected and stored with utmost care, and planted by following a few important conservation strategies to reinforce their populations.

Over 83% of all the trees in the park that are in excellent health, and 4.5% that are in need of immediate care. These trees can be shown to an arborist, so that they can diagnose and successfully treat the tree problems. There has to be periodic monitoring and regular maintenance conducted for all the trees across the park to prevent them from falling prey to diseases or infestations.

According to a 2016 study by the Centre of Ecological Science (CES), Indian Institute of Science (IISc), Bengaluru's carbon dioxide (CO_2) emissions is fourth in the list of CO_2-emitting cities. Bengaluru's CO_2 emission is 19,796.5 Gg (Gg, a unit of mass equal to one million kg). Breathing this air can cause some serious health concerns for the people residing here. One of the solutions to reduce the CO_2 emissions naturally, is by planting trees, as trees are known to naturally sequester carbon dioxide. Cubbon Park, which is the lung area of the Bangalore city, sequesters over 492 megatonnes of (491590709.1 tonne calculted value from the trees that were mapped) carbon dioxide in total. Apart from helping in keeping the air clean, they also help in keeping our city cool by reducing the urban heat island effect.

Conclusion

Cubbon park as an ecosystem is sustainable and stable with a rich biodiversity, hence providing various plants and animals with favorable habitat, food and protection. Measures to increase the number of native species are recommended in order to increase the biodiversity of the park. Efforts should be taken in order to increase the population of the threatened species in the park due to the ecosystem services they provide and their invaluable economic and medicinal importance. Periodic monitoring and maintenance should be conducted in the park for all the trees and special care needs to be catered to those trees that have poor health, and to those whose conservation status is threatened.

Bangalore is witnessing an alarming depletion of vegetation cover due to intense urbanization and it is adversely affecting the health of the citizens due to increase in the air pollution levels. A study from the Center of Ecological Sciences has shown an increase of 1 to 1.5 degrees in temperature in certain pockets of Bangalore. Hence protecting the urban trees is of utmost importance because apart from providing various ecosystem services, the trees in Cubbon park help in improving the air quality and help in reducing the urban heat island effect. They are also known for having a significant impact on improving the overall physical and mental health of people. By sequestering over 492 megatonnes of carbon dioxide, the trees of the park play a crucial role in climate changes mitigation.

APPENDIX

- The entire park has been divided into zones and they have been numbered as Zone 1, Zone 2, etc accordingly. The zoning has been done in the order of mapping of the trees. There are totally 19 different zones and along with that the avenue trees, which are present along the roadside within the park. Zone wise analysis has been carried to out for each of these zones and also the avenue trees.
- Invasive species like ***Broussonetia papyrifera*** (L) Vent, ***Ricinus communis*** (L) have not been considered in the count because they are to be removed eventually. However, their geographical locations have been noted down, so that these species can be removed from those particular zones in order to prevent any threat they pose to the native species.
- The presence of these species – ***Bixa orellana, Libidibia ferrea, Senna montana*** and ***Ficus altissima*** needs to cross checked again. There is only tree belonging to this species in the entire park.
- Obtaining the pictures of leaves/fruits/flowers of some trees was challenging due to overlapping canopies or because they were really tall.

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