

Common and Hindi name: Ashoka Tree

Botanical name and Family: Polyalthia longifolia (Annonaceae)

Adaptive features: The tree is native to Southern India and Sri Lanka, but has been widely introduced elsewhere in tropical Asia.

Life span and physical features: The tree is evergreen tree and known to grow over 20 m in height. It exhibits symmetrical pyramidal growth with willowy weeping pendulous branches and long narrow lanceolate leaves with undulate margins. Emerging leaves have a coppery brown pigmentation; as the leaves grow older, the color becomes a light green and, finally, a dark green. The leaves are lanceolate and have wavy edges. Fruit is borne in clusters of 10–20, initially green but turning purple or black when ripe.

Economic Importance: The wood of many members of Annonaceae is very pliable, and many of the edible fruits have commercial value. Although the wood of this tree is not very durable, it is utilized to some extent in making matches, boxes, and packing crates. The leaves are larval food plant of the tailed jay and the kite swallowtail butterflies. The leaves are used for ornamental decoration during festivals.

Ecological Importance: *Polyalthia longifolia* is also known as Buddha tree, mast tree, cemetery tree, false Ashoka or green Champa. Generally, *Polyalthia longifolia* is viewed as a street tree because of its effectiveness in combating noise pollution.

Medical benefits: The oil of the seed has been confirmed to possess anti- oxidant, anti-lipooxygenase and antimicrobial (against various microbe strains) activities. Methanolic extracts of this tree show cytotoxic properties. It has been commonly used in the treatment of fever, helminthiasis, diabetes and various cardiac problems.







Common and Hindi name: Indian Banyan Tree

Botanical name and Family: Ficus benghalensis (Moraceae)

Adaptive features: The tree is a native to the Indian

Subcontinent.

Life span and physical features: *Ficus benghalensis* is an evergreen, fast- growing tree found mainly in monsoon and rainforests, that can reach a height of up to 30 meters. Aerial roots that develop from its branches descend and take root in the soil to become new trunks. One tree may in time assume the appearance of a very dense thicket as a result of the tangle of roots and trunks.

Economic Importance: The leaves are used as fodder.

Ecological Importance: It is resistant to drought and mild frost. It produces propagating roots which grow downwards as aerial roots on the branches that grow downward like lianas. Once these roots reach the ground, they take root and become woody trunks and supportive. The figs produced by the tree are eaten by birds such as the Indian myna.

Medical benefits: A banyan tree is important to Indian society not only for its religious significance but also for the myriad of health benefits that you can derive from it. It can cure chronic diarrhoea, dysentery and piles. It eases leucorrhoea too.







Common and Hindi name: Jiya Putta

Botanical name and Family: Putranjiva roxburghii (Putranjivaceae)

Adaptive features: It is native to Indian Subcontinent (India, Pakistan, Bangladesh, Nepal, Sri Lanka), Indochina, Malaysia, Indonesia, New Guinea.

Life span and physical features: A dioecious, evergreen tree. Trees, 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; stipule small, lateral, caducous; petiole 5-7 mm long, slender and pubescent. Flowers unisexual, small, yellow; male flowers: sessile, in axillary spikes, Fruits are ellipsoid to rounded drupes, white velvety; seed normally one, very hard.

Economic Importance: Wood used for house-building, agricultural implements, tool handles and turnery.

Medical benefits: *Putranjiva roxburgii* is an ayurvedic herb used for the for the treatment of eye disorders, burning sensation, elephantiasis, difficulty in micturition, azoospermia and habitual abortions.







Common and Hindi name: Neem Tree

Botanical name and Family: Azadirachta indica (Meliaceae)

Adaptive features: Neem is likely native to the Indian subcontinent and to dry areas throughout South Asia. It has been introduced to parts of Africa, the Caribbean, and numerous countries in South and Central America.

Life span and physical features: The tree is 15–30 metres in height. It has attractive rounded crown and thick furrowed bark. The leaves are compound. The flowers are bisexual or staminate (male) and are borne in clusters in the axils of the leaves. The fruit is a smooth yellow-green drupe and has a sweet- flavoured pulp. The plant can be propagated from cuttings or root suckers.

Economic Importance: The tree is grown for fuel wood purposes in India and Africa. The wood peels well and is found useful for making shuttering grade plywood. Oil extracted from the seeds can be used directly as an insect and mite repellent, insecticide, and fungicide and is the source of many commercial pesticide products, including dusts, granules and concentrates.

Ecological Importance: Neem is extremely useful in urban forestry because it has remarkable ability to withstand air and water pollution as well as heat. It

also helps in restoring and maintaining soil fertility which makes it highly suitable in agro-forestry.

Medical benefits: The tree uses are based on its antibacterial and antifungal properties. It has long been used in Ayurvedic and folk medicine and is used in cosmetics and in organic farming applications.







Common and Hindi name: Guava

Botanical name and Family: Psidium guajava (Myrtaceae)

Origin and distribution: Guava was adopted as a crop in subtropical and tropical Asia, parts of the United States (from Tennessee and North Carolina, southward, as well as the west and Hawaii), tropical Africa, South Asia, Southeast Asia, and Oceania.

Life span and physical features: Guavas are typical Myrtoideae, with tough dark heavy leaves that are opposite, simple, elliptic to ovate, and 5–15 centimetres (2–6 in) long. The flowers are white, with five petals and numerous stamens. The fruits are many-seeded berries..

Economic Importance: Commonly cultivated for the fruit. In 2019, world production of guavas was 55 million tonnes, led by India with 45% of the total (table). Guava seed oil, which may be used for culinary or cosmetics products, is a source of beta carotene, vitamin A, vitamin C, copper, zinc and selenium, and is particularly rich in linoleic acid. [

Medical benefits: Guavas are rich in dietary fiber and vitamin C, with moderate levels of folic acid (nutrition table). Low in food energy per typical serving, and with few essential nutrients, a single common guava (*P. guajava*) fruit contains 257% of the Daily Value (DV) for vitamin C (table). Nutrient content varies across guava cultivars.

Since the 1950s, guavas – particularly the leaves – have been studied for their constituents, potential biological properties and history in folk medicine.







Common and Hindi name: FlameTree (Gulmohar)

Botanical name and Family: Delonix regia (Fabaceae)

Adaptive features and Habitat: In the continental United States, it grows in South Florida, Central Florida, and in the Rio Grande Valley of South Texas. It also grows in humid parts of Mexico, especially in the peninsula. It requires a tropical or near-tropical climate, but can tolerate drought and salty conditions. It prefers an open, free-draining sandy or loamy soil enriched with organic matter. The tree does not like heavy or clay soils and flowers more profusely when kept slightly dry. The tree is planted in India, where it is referred to as the *May-flower tree*, *Gulmohar* or *Gul Mohr*.

Life span and physical features: It is noted for its fern-like leaves and flamboyant display of orange-red flowers over summer. The flowers of *Delonix regia* are large, with four spreading scarlet or orange-red petals up to 8 cm (3 in) long, and a fifth upright petal called the standard, which is slightly larger and spotted with yellow and white. The tree can live up to 4 to 5 years if grown simply & 10 years if grown from the cutting.

Ecological Importance: Controls erosion in the arid and semi-arid areas.

Economic Importance: it is grown as an ornamental tree.

Cultural Significance: In the Indian state of Kerala, royal poinciana is called *kaalvarippoo*) which means "the flower of Calvary". There is a popular belief among Saint Thomas Christians of Kerala that when Jesus was crucified, there was a small royal poinciana 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 of royal poinciana got a sharp red colour.







Common and Hindi name: Indian gooseberry (amla)

Botanical name and Family: Phyllanthus emblica (Phyllanthaceae)

Adaptive features and physical features: It is a deciduous tree. Its native range is tropical and southern Asia. The tree is small to medium in size, reaching 1–8 m (3 ft 3 in – 26 ft 3 in) in height. The branchlets are finely pubescent, 10–20 cm (3.9–7.9 in) long, usually deciduous. The leaves are simple, subsessile and closely set along branchlets, light green, resembling pinnate leaves. The flowers are greenish-yellow.

Economic Importance:

- Fruit sour and astringent, cooling, diuretic, laxative, eaten raw or cooked, also pickled, a rich source of vitamin C; containing as much vitamin C a orange juice. Seeds yield a fixed oil. Fruits, bark and leaves are rich in tannin.
- Popularly used in inks, shampoos and hair oils, the high tannin content of Indian gooseberry fruit serves as a mordant for fixing dyes in fabrics. Amla shampoos and hair oil are traditionally believed to

Medical benefits: In Ayurveda, dried and fresh fruits of the plant are used as a common constituent. These fruits contain high amounts of ascorbic acid (vitamin C), and have a bitter taste that may derive from a high density of ellagitannins, such as emblicanin A (37%), emblicanin B (33%), punigluconin (12%), and pedunculagin (14%). Amla also contains punicafolin and phyllanemblinin A, phyllanemblin other polyphenols, such as flavonoids, kaempferol, ellagic acid, and gallic acid.







Common and Hindi name: Kadamba Tree

Botanical name and Family: Neolamarckia cadamba

Adaptive features: Neolamarckia cadamba, commonly known as the kadamba tree, is a large, fast-growing, deciduous tree native to South and Southeast Asia, including countries such as India, Bangladesh, Nepal, Bhutan, Myanmar, Thailand, Laos, Vietnam, Cambodia, and Indonesia. It is also known by various other names, such as burahol, kadam, kariyal, and Leichhardt pine.

Life span and physical features: Neolamarckia cadamba is a large, fast- growing tree with distinctive features, such as its large leaves, fragrant flowers, and woody capsules. Its relatively short life span makes it an important species in forest ecosystems where it provides habitat and food for wildlife, as well as traditional uses for human populations.

Economic Importance: The kadamba tree is highly valued for its ecological importance. It is known to provide habitat and food for various wildlife species, including birds, butterflies, and insects. The tree also has cultural and religious significance in many regions where it is found, and it is often planted near temples and sacred sites.

Medical benefits: Neolamarckia cadamba has a long history of traditional uses. Various parts of the tree, including the bark, leaves, flowers, and fruit, are used in traditional medicine for treating a range of ailments, such as fever, cough, wounds, and skin diseases. The timber from the kadamba tree is also used for construction, furniture making, and carving.







Common and Hindi name: kapok Tree , Safed seimal ceiba

Botanical name and Family: Ceiba pentandra (Bombacaceae)

Adaptive features: Kapok is a type of natural fiber that comes from the seed pods of the kapok tree (Ceiba pentandra), also known as the silk-cotton tree or ceiba tree. The kapok tree is native to tropical regions of America, Africa, and Asia.

Life span and physical features: The kapok tree (Ceiba pentandra) is a large, deciduous tree that can reach heights of up to 70 meters (230 feet) and have trunk diameters of over 3 meters (10 feet). It has a straight, cylindrical trunk covered with sharp, pointed thorns and a wide, spreading crown with large, compound leaves that can be up to 25 cm (10 inches) long. The leaves are composed of multiple leaflets arranged in a pinnate fashion.

Economic Importance: The kapok tree (Ceiba pentandra) has several economic importances, including:

- Timber: Kapok wood is lightweight and relatively soft, making it suitable for some carpentry and construction applications. The wood is often used for making furniture, carvings, and canoes, as well as for general-purpose lumber.
- Fiber: Kapok fibers, also known as kapok cotton or vegetable down, are used for stuffing pillows, mattresses, cushions, and other products that require lightweight and buoyant filling. Kapok's water-resistant and insulating properties make it desirable for outdoor gear such as life jackets, sleeping bags, and flotation devices.

Medical benefits: Traditional Medicine: In some cultures, various parts of the kapok tree are used for their medicinal properties.







Common and Hindi name: Mulberry Tree (shahtoot)

Botanical name and Family: Morus alba (Moraceae)

Adaptive features: The species is native to China and India and is widely cultivated and naturalized in United States, Mexico, Australia, Kyrgyzstan, Argentina, Turkey and Iran.

Life span and physical features: Mulberries are deciduous and have toothed, sometimes lobed leaves that are alternately arranged along the stems.

Individuals can be monoecious (bearing both male and female flowers) or dioecious (bearing only male or female flowers). The minute flowers are borne in tight catkin clusters. Each fruit develops from an entire flower cluster and is formally known as a multiple. The fruits somewhat resemble blackberries and ripen to white, pink, red, or purple.

Economic Importance: The white mulberry is widely cultivated to feed the silkworms employed in the commercial production of silk. White mulberry leaves are the preferred feedstock for silkworms, and are also cut for food for livestock (cattle, goats, The leaves are prepared as tea in Korea. The fruit are also eaten, often dried or made into wine.

Ecological Importance: Leaves of mulberry plants has strong absorption ability to absorb the air pollutants like carbon dioxide, carbon monoxide, hydrogen fluoride, sulphur dioxide and chlorine from atmosphere. Its roots have high ability to uptake the carbon pollutants and heavy metal pollutants from the atmosphere.

Medical benefits: *Morus alba* is a traditional Chinese medicine that contains alkaloids and flavonoids that are bioactive compounds. These compounds may help reduce high cholesterol, obesity, and stress. Various extracts from *Morus* alba including kuwanon G, moracin M, glucoside and mulberroside A have been suggested as having a variety of potentially-useful effects.







Common and Hindi name: Marodphali, Katsagon Tree

Botanical name and Family: Fernandoa adenophylla (Bignoniaceae)

Adaptive features: It is native to the Andaman Islands, India (Assam and other states), Bangladesh, Myanmar, Cambodia, Laos, Peninsular Malaysia, Thailand and Vietnam.

Life span and physical features: It is a deciduous small tree. It is 15-20 m tall, trunk is 15-25 cm in diameter. Leaves are large with leaflets on either sides.

Flowers are large, pale yellow and trumpet shaped that occur in panicles. The fruit is long and twisted, hanging like snakes from the branches.

Economic Importance: The wood is hard and seasons well. It is used for building and agricultural purposes.

Medical benefits: The tree is extensively used in traditional medicine as an ingredient in massage oils to ease muscular tension. It is generally utilized for snakebite (in the Morigaon district, Assam, India), skin disorders (in the Thai traditional medicine), hemorrhoids and constipation (in the Chakma tribe of Bangladesh).







Common and Hindi name: Peepal Tree

Botanical name and Family: *Ficus religiosa* (Moraceae)

Adaptive features: Ficus religiosa is native to most of the Indian subcontinent – Bangladesh, Bhutan, Nepal, Pakistan and India including the Assam region, Eastern Himalaya and the Nicobar Islands, as well as part of Indochina. It has been widely introduced particularly in the rest of tropical Asia, but also in Iran, Florida and Venezuela.

Life span and physical features: It is a large dry season-deciduous or semi- evergreen tree up to 30 metres tall and with a trunk diameter of up to 3 metres. The leaves are cordate in shape with a distinctive extended drip tip. The fruits are small figs 1–1.5 centimetres in diameter, green ripening to purple.

Economic Importance: The leaves provide a valuable mulch. Farmers in North India also cultivate it for its fig fruit. The latex is used in the production of water-resistant paper and as plasticizer for Hevea rubber.

Ecological Importance: The trunk of this tree is used by farmers as a soil leveller. After seed harvesting, the rectangular trunk is connected to tractors and levels the soil.

Medical benefits: It is used in traditional medicine for about fifty types of disorders including asthma, diabetes, diarrhoea, epilepsy, gastric problems, inflammatory disorders, infectious and sexual disorders. Chewing the roots of a peepal tree is said to help prevent gum disease. The extract of leaves is used to heal wounds due to cuts or burns.







Common and Hindi name: Pomegranate

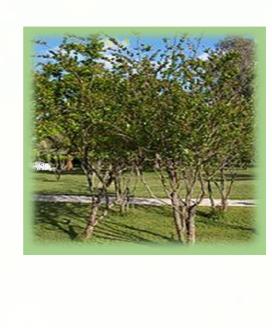
Botanical name and Family: Punica granatum (Lythraceae)

Adaptive features: Pomegranates are extremely heat tolerant, and perform best when temperatures are above 85 degrees F for at least 120 days a year. The trees are also drought-tolerant; however, supplemental irrigation is necessary during tree establishment and is critical for commercial fruit production.

Life span and physical features: A shrub or small tree growing 5 to 10 m (16 to 33 ft) high, the pomegranate has multiple spiny branches and is long-lived, with some specimens in France surviving for 200 years. The fruit is typically in season in the Southern Hemisphere from March to May, and in the Northern Hemisphere from September to February.

Economic Importance: As intact sarcotestas or juice, pomegranates are used in baking, cooking, juice blends, meal garnishes, smoothies, and alcoholic beverages, such as cocktails and wine.

Medical benefits: The edible portion of raw pomegranate is 78% water, 19% carbohydrates, 2% protein, and 1% fat (table). A 100 g (3.5 oz) serving of pomegranate sarcotesta provides 12% of the Daily Value (DV) for vitamin C, 16% DV for vitamin K, and 10% DV for folate (table). Pomegranate seeds are a rich source of dietary fiber (20% DV) which is entirely contained in the edible seeds.





Common and Hindi name: Chandni Single

Botanical name and Family: Tabernaemontana divaricata

(Apocynaceae)

Adaptive features: Tabernaemontana divaricata is a species of flowering plant in the family Apocynaceae, native to India and Southeast Asia. It is commonly known as the crepe jasmine or pinwheel flower, and is widely cultivated as an ornamental plant.

Life span and physical features: The plant is a small, evergreen shrub that typically grows to a height of 2-3 meters. It has dark green, glossy leaves and produces fragrant, star-shaped flowers that are white in color and resemble pinwheels. The flowers bloom in clusters from spring to autumn, and are followed by small, oval-shaped fruits.

Economic Importance: Tabernaemontana divaricata has several economic uses and is a valuable plant species. However, it is important to note that the use of this plant for medicinal purposes or insect control should only be done under the guidance of a qualified healthcare practitioner or pest control expert.

Medical benefits: Traditional Medicine: Various parts of the plant have been used in traditional medicine for their medicinal properties. The plant has been used to treat various ailments such as fever, asthma, diarrhea, and skin disorders. The root and bark of the plant have been used as a sedative and to treat anxiety and insomnia.







Common and Hindi name: Tamarind

Botanical name and Family: Tamarindus indica (Fabaceae)

Adaptive features: The tree grows well in full sun. It prefers clay, loam, sandy, and acidic soil types, with a high resistance to drought and aerosol salt (wind-borne salt as found in coastal areas).

Life span and physical features: The tamarind tree produces brown, pod-like fruits that contain a sweet, tangy pulp, which is used in cuisines around the world. The tamarind is a long-lived, medium-growth tree, which attains a maximum crown height of 25 metres (80 feet). The crown has an irregular, vase-shaped outline of dense foliage.

Economic Importance: The tamarind tree produces brown, pod-like fruits that contain a sweet, tangy pulp, which is used in cuisines around the world. The pulp is also used in traditional medicine and as a metal polish. Throughout South Asia and the tropical world, tamarind trees are used as ornamental, garden, and cash crop plantings.

Ecological Importance: Tamarind is a leguminous tree bearing edible fruit.

Medical benefits: the fruit of the tamarind is used as a poultice applied to the foreheads of people with fevers. The fruit exhibits laxative effects due to its high quantities of malic acid, tartaric acid, and potassium bitartrate. Its use for the relief of constipation has been documented throughout the world..







Common and Hindi name: Yellow gulmohar

Botanical name and Family: Peltophorum pterocarpum (Peltophorum)

Adaptive features: Peltophorum pterocarpum, commonly known as the copperpod or golden shower tree, is a species of flowering tree belonging to the family Fabaceae. It is native to tropical regions of South Asia, including countries such as India, Sri Lanka, and Myanmar. The tree is known for its striking appearance and is often grown as an ornamental tree in gardens and along streets in tropical and subtropical regions around the world.

Life span and physical features: Peltophorum pterocarpum is known for its impressive size, attractive yellow flowers, and compound leaves, making it a popular ornamental tree in tropical and subtropical regions around the world. Copperpod is a medium to large-sized tree that can reach heights of up to 30 meters (98 feet) or more, with a spreading canopy that can be almost as wide as the tree is tall.

Economic Importance: Peltophorum pterocarpum has economic importance through its uses in timber, ornamental landscaping, traditional medicine, honey production, livelihoods, and environmental benefits, contributing to its value in local economies and communities.

Medical benefits: In some cultures, Peltophorum pterocarpum has been used for traditional medicinal purposes. Various parts of the tree, including the bark, leaves, flowers, and seeds, are believed to have medicinal properties and are used in herbal remedies for ailments such as inflammation, coughs, wounds, and skin diseases.







Common and Hindi name: Alstonia

Botanical name and Family: Alstonia scholaris Family- Apocynaceae **Adaptive features:** The upper side of the leaves are glossy, while the underside is

greyish.[5] Leaves occur in whorls of three to ten; petioles are 1–3 cm (0.39–1.18 in); the leathery leaves are narrowly obovate to very narrowly spathulate. Flowers bloom in the month October. The flowers are very fragrant like the flower of Cestrum nocturnum. Seeds of A. scholaris are oblong, with ciliated margins, and ends with tufts of hairs. The bark is almost odorless and very bitter, with abundant bitter and milky sap. **Life span and physical features:** Alstonia scholaris is a glabrous tree and grows up to 40 m (130 ft) tall. Its mature bark is grayish and its young branches are copiously marked with lenticels. One unique feature of this tree is that in some places, such as New Guinea, the trunk is three-sided (i.e. it is triangular in cross-section).

Economic Importance: The wood of Alstonia scholaris has been recommended for the manufacture of pencils, as it is suitable in nature and the tree grows rapidly and is easy to cultivate. The flowers yield an essential oil. During convocation the leaves of Alstonia scholaris (saptaparni) are awarded to graduates and postgraduates of Visva-Bharati University by the chancellor, given to him in turn by the Prime Minister of India.

Medical benefits: The bark is a bitter, astringent, alterative herb that lowers fevers, relaxes spasms, stimulates lactation and expels intestinal worms. It is anthelmintic, anticholeric, antispasmodic, astringent, emmenagogue, febrifuge, tonic and vulnerary. It is used to treat bowel complaints, abdominal pains, fevers and irregular menstruation, and has proved a valuable remedy for chronic diarrhoea and the advanced stages of dysentery, a decoction is applied as a wash for skin diseases, and as a gargle.







Common and Hindi name: Bahera

Botanical name and Family: Terminalia ballerica

Adaptive features: Baheda is a tall handsome tree, with characteristic bark, 12-50 m tall. Leaves are alternately arranged or fascicled at the end of branches, elliptic or elliptic obovate, leathery, dotted, entire. Leaf tip is narrow-pointed or rounded. Flowers are greenish yellow, 5-6 mm across, stalkless, upper flowers of the spike are male, lower flowers are bisexual. Stamens are 3-4 mm long. Fruit is obovoid 1.5-2.5 cm in diameter, covered with minute pale pubescence, stone very thick, indistinctly 5 angled.

Life span and physical features: is a large deciduous tree of South-East Asia that grows on plains and in lower hills. It has an uneven bluish or ashy-grey bark with longitudinal furrows. It grows to a height of 80-100 feet with a girth of 8-10 feet and is easily recognized from a distance by its characteristic bark and broad, massive crown.

Economic Importance: Be it in the dry or ripe form, Baheda contains essential vitamins like Vitamin C, proteins, and minerals like potassium, selenium, manganese, iron, and copper. Baheda portrays strong antimicrobial, antioxidant, anti-diarrheal, anti-asthmatic, anti-spasmodic, anticancer, anti-hypertensive, hepatoprotective, anti-pyretic, anti-tussive and expectorant properties, which helps it to provide an absolute remedy for several health anomalies including respiratory disorders, mouth ulcers, headache, cough, skin rashes, infertility,constipation,indigestion, insomnia, obesity and hair problems..

Medical benefits: It is used to protect the liver and to treat respiratory conditions, including respiratory tract infections, cough, diarrhoea, eye diseases etc.





Common and Hindi name: Bottle brush

Botanical name and Family: Callistemon Pinnata; Myrtaceae

Adaptive features: Callistemon species have commonly been referred to as bottlebrushes because of their cylindrical, brush like flowers resembling a traditional bottle brush. They are mostly found in the more temperate regions of Australia, especially along the east coast and typically favour moist conditions so when planted in gardens thrive on regular watering.

Life span and physical features: Extremely hardy and long lived (bottlebrush flower year after year and can live for 20 to 40 years if given the right climatic and growing conditions). Plants are all woody shrubs which range from 0.5 m to 4 m tall. The flowers can be spectacular and are irresistible to nectar-feeding birds and insects.

Economic Importance: Bottlebrushes are important as landscape subjects in warm climates. They can withstand sandy soil and at least one species, Callistemon citrinus is somewhat salt tolerant, making the plants useful for coastal locations.

Medical benefits: Some species of bottle brush plants have medicinal properties and are used in traditional medicine to treat ailments such as fever, cough, and skin infections. Considered antibacterial, antifungal, anthelmintic, hemostatic, diuretic.





Common and Hindi name: Muchkund

Botanical name and Family: Pterospermum acerifolium, Malvaceae **Adaptive features:** Pterospermum acerifolium, the bayur tree or karnikara tree,is a flowering plant indigenous to Southeast Asia, from India to Burma. It is most likely to grow naturally along forested stream banks. The best growing conditions are a seasonally moist then dry climate with access to full sunlight.

Life span and physical features: It is a relatively a large tree, growing up to thirty meters tall. Mostly planted as an ornamental or shade tree, the leaves, flowers, and wood of a Bayur Tree can serve a variety of functions. The leaves are rough and rubbery to limit the loss of moisture in a hot climate. The leaves do not tear even on crumpling. The bottom side of the leaves range from a silver to rust color.

Economic Importance: The utilization of the leaves is exactly what the name depicts. Mature leaves are very large, reaching a length and width of up to thirty five centimeters. They can be used as actual dinner plates or as packaging and storage by wrapping materials inside.

Medical benefits : In Ayurveda, Indian system of medicine, Pterospermum acerifolium is used in treating headache, ulcers, wounds, cough, cold.





Common and Hindi name: Madhumalti

Botanical name and Family: Combretum indicum

Adaptive features: It is found in Africa, China, Taiwan, Malaysia, Philippines, Vietnam, Papua New Guinea and all over India. Madhumalti flowering season starts from March – June & Damp; then again from Aug – Oct. Madhumalti plant is a 365 day flowering plants which means that it blooms year after year. Its flowering season is usually during time when the temperature is a bit warm Life span and physical features: 5 meters to up to 8 meters. The leaves are elliptical with an acuminate tip and a rounded base. They grow from 7 to 15 centimeters and their, arrangement is opposite. The flowers are fragrant and tubular and their color varies from white to pink to red.

Economic Importance: Chinese honeysuckle, is a vine with red flower clusters belonging to Combretaceae (Indian almond family). It is climber vine and used for ornamental purpose. It can be easily found in gardens, park and open areas. It flowers and leaves are used for treating various ailments. Irangun malli is a beautiful flower with a wonderful aroma, the flowers opens at dusk and surrounds the area with an amazing fragrance. Medical benefits: The dried seeds of Rangoon Creeper are beneficial to treat intestinal worms and parasites. In the Philippines, the fruits of Combretum Indicum are consumed to treat cough and crushed fruits and seeds are externally applied to alleviate nephritis. A decoction made from the leaves is prescribed for abdominal pain.





Common and Hindi name: Bottle Palm

Botanical name and Family: Hyophorbe lagenicaulis

Adaptive features: Bottle palms are very cold sensitive and are killed at 0 °C (32 °F) or colder for any appreciable length of time. They may survive a brief, light frost, but will have foliage damage. It makes a fine containergrown palm in other locations as long as it is protected from the cold and not overwatered.

Life span and physical features: The life span of bottle palm trees depends at least partly on where they are sited and the level of care they receive. A well-cared-for tree in a location with adequate sun may live up to 70 or more years. Bottle palm has a large swollen trunk. It is a myth that the trunk is a means by which the palm stores water. Bottle palms have only four to six leaves open at any time. The leaves of young palms have a red or orange tint, but a deep green is assumed at maturity. The flowers of the palm arise from under the crowns haft.

Economic Importance: The trunk makes for a standout silhouette in the garden or even as a potted plant.

Medical benefits: It is used in making cosmetics, removes dandruff and skin inflammation.





Common and Hindi name: Chikoo

Botanical name and Family: Manilkara Zapota

Adaptive features: Sapota grows well in a wide range of climatic conditions from wet tropics to dry cool subtropical areas. But it prefers humid tropical climate.

Life span and physical features: Sapota is evergreen, tropical fruit tree, spreading habit and lives longer up to 100 years. Sapota has dense crown and a characteristic sympodial branching pattern, wherein the young branches are arranged horizontally. Leaves are medium, alternate, elliptic to ovate, glossy, spirally arranged and clustered at shoot tip. Flowers are solitary, small, campanulate, bisexual, greenish white. Fruits are ovoid to round, dull brown in colour with a firm. The fruit, typically a berry, has yellow to brown sweet pulp with malty flavour and grainy texture akin to that of a ripe pear.

Economic Importance: Sapota is eaten as a fruit but there are some problems related to storing the fruits due to its low shelf life. Therefore,

there is a large scope for further processing, this fruit to produce value added products like jams, jellies, squash, etc.

Medical benefits: Chikoo contains a high dose of antioxidants and has been found to be effective in lowering the risk of different types of cancers. It contains a healthy level of vitamins A and B which help in the maintenance of the several mucus linings in the body. This can in turn help to reduce the risk of lung and oral cancers.





SALWAN PUBLIC SCHOOL

Common and Hindi name: Curry Leaves
Botanical name and Family: Murraya koenigii

Adaptive features: Curry leaves thrive in tropical and subtropical climates. Curry leaves, botanically classified as Murraya koenigii, grow on a deciduous tree that can mature to 2-5 meters in height.

Life span and physical features: The curry leaf is a perennial plant – it survives in the wild for *approximately 2 years*. Curry leaves are small and long, slender, and oval narrowing to a point. The shiny, dark green leaves grow pinnately along a stem, and each branch can hold up to twenty, tightly clustered leaves. Curry leaves are extremely aromatic and have a strong flavor that has been compared to citrus, asafoetida, anise, and lemongrass.

Economic Importance: The most economical part of the plant is the leaves, which are used in cuisines as flavoring agents.

Medical benefits: Curry leaves have been used in traditional Ayurvedic medicine since ancient times and are believed to have anti-inflammatory and antimicrobial properties. The leaves can be boiled into a tonic or ground and used as a stimulant to keep the digestive system working properly and hair and skin healthy.





SALWAN PUBLIC SCHOOL

Common and Hindi name: Ficus Curly Botanical name and Family: Ficus pumila Adaptive features: Ficus Benjamina is a very

popular houseplant in temperate areas because of its elegant growth and tolerance of poor growing conditions; it does best in bright, sunny conditions, but it also tolerates considerable shade. It requires a moderate amount of watering in summer. Longer days, rather high and moderate day temperatures at night are favourable conditions for great appreciable growth in a short time. The plant is sensitive to cold and should be protected from strong drafts.

Life span and physical features: The ficus tree is known for its longevity,

living between 20 to 50 years. It is a tree with gracefully drooping branchlets and glossy leaves, oval with an acuminate tip. The bark is light gray and smooth. The bark of young branches is brownish. It has widely spread, highly branching tree top. It is a relatively small-leaved fig. The changeable leaves are simple, entire and stalked.

Economic Importance: *F. Benjamina* wood is suitable for making matchboxes. Bark is used for making ropes.

Medical benefits: *F. Benjamina* powder from roasted fruits is used as breakfast food. Leaves used as fodder. Leaves used also in bilious affections. Bark given in diarrhoea and diabetes. Fruits considered stomachic and carminative, used in hemoptysis. Latex used in piles and diarrhoea.





SALWAN PUBLIC SCHOOL

Common and Hindi name: Fire Bush

Botanical name and Family: Hamelia patens

Adaptive features: Firebush is a perennial or semi-woody shrub. Firebush can be planted in late spring or summer. It will grow and flower best if planted in full sun, but it can also be planted in partial shade. It is also moderately tolerant of salt spray, which can be helpful for gardeners in

coastal areas. It can be planted in any well-drained soil and will do best if it is watered regularly until it is established.

Life span and physical features: Firebush is a showy, fast-growing, semi-woody evergreen shrub that can get up to 15 ft tall under ideal conditions, but usually stays much smaller. Leaves are elliptic to oval, about 15 cm long, and gray-velvet-hairy underneath with reddish veins and leaf-stalks. Throughout the year, firebush produces showy clusters of bright reddish-orange or scarlet tubular flowers. Even the flower stalks are red. The clusters of fruit also are showy. Each fruit is a juicy berry with many small seeds, ripening from green to yellow to red and finally to black. Economic Importance: The firebush can be used as a foundation plant for large buildings and is superb when placed in the background of a mass of shrubs in a border. It is excellent in a mass planting and functions well as a screen or border. A hedge of firebush will need regular clipping. Flowers are often removed during this process.

Medical benefits: Firebush leaf extracts can be used for antiinflammatory, analgesic, and diuretic purposes, and it has also been shown to host antibacterial and antifungal properties, too. A tea can be made from the leaves, stems and flowers, and can be drank to relieve menstrual cramps, and treat fever and diarrhoea.





SALWAN PUBLIC SCHOOL

Common and Hindi name: Pilkan

Botanical name and Family: Ficus infectoria moraceae



Adaptive features: Pilkhan is a medium-sized tree which grows to a height of 24–27 metres (79–89 ft) In dry areas and up to 32 metres (105 ft) tall in wetter areas. It has two marked growth periods in its Indian environment: in spring (February to early May), and in the time of the monsoon rains (i.e. June to early September). The new leaves are a beautiful shade of reddish pink. This is a very massive tree in which the size of the crown can sometimes exceed the height of the tree.

Life span and physical features: The tree has gracefully drooping branchlets and glossy leaves, oval with an acuminate tip. The fruit is distinct. The fruit is in fact an enclosed inflorescence, sometimes referred to as a syconium, an urn-like structure lined on the inside with the fig's tiny flowers. Possess a white to yellowish sap (latex).

Economic Importance: Wood is suitable for making match- boxes. Bark is used for making ropes. Decoction of leaves is mixed with oil and applied to ulcers.

Medical benefits: Ficus infectoria is a well-known medicinal plant of India and used for a prolonged duration in Ayurveda, the ancient Indian medicinal system for the treatment of numerous body disorders such as urinary diseases, respiratory diseases, hemorrhoids, inflammatory conditions, diarrhea, liver diseases, diabetes, etc.





Common and Hindi name: kapok Tree (कापोक) Safed seimal ceiba

Botanical name and Family: Ceiba pentandra (Bombacaceae)

Adaptive features: Kapok is a type of natural fiber that comes from the seed pods of the kapok tree (Ceiba pentandra), also known as the silk-cotton tree or ceiba tree. The kapok tree is native to tropical regions of America, Africa, and Asia.

Life span and physical features: The kapok tree (Ceiba pentandra) is a large, deciduous tree that can reach heights of up to 70 meters (230 feet) and have trunk diameters of over 3 meters (10 feet). It has a straight, cylindrical trunk covered with sharp, pointed thorns and a wide, spreading crown with large, compound leaves that can be up to 25 cm (10 inches) long. The leaves are composed of multiple leaflets arranged in a pinnate fashion.

Economic Importance: The kapok tree (Ceiba pentandra) has several economic importances, including:

- Timber: Kapok wood is lightweight and relatively soft, making it suitable for some carpentry and construction applications. The wood is often used for making furniture, carvings, and canoes, as well as for general-purpose lumber.
- Fiber: Kapok fibers, also known as kapok cotton or vegetable down, are used for stuffing pillows, mattresses, cushions, and other products that require lightweight and buoyant filling. Kapok's water-resistant and insulating properties make it desirable for outdoor gear such as life jackets, sleeping bags, and flotation devices.

Medical benefits: Traditional Medicine: In some cultures, various parts of

used for their medicinal

the kapok tree are properties.





Common and Hindi name: Ashok Pendula

Botanical name and Family: Polyaltha longifolia pendula Annonaceae

Adaptive features: It is native to southern India and Sri Lanka, but has been widely introduced elsewhere in tropical Asia. This evergreen tree is commonly planted due to its effectiveness in alleviating noise pollution. It exhibits symmetrical pyramidal growth with willowy weeping pendulous branches and long narrow lanceolate leaves with undulate margins.

Life span and physical features: The Pendula Ashok grows best in warm, tropical climates and prefers well-draining soil. It can grow up to 15 meters in height and has a dense, round canopy. The tree is known for its ability to tolerate drought and is often used in landscaping in dry areas.

Economic Importance: The ashoka tree is an important source of income for many rural communities in India, as its bark, leaves, and flowers are used to make a variety of products, including traditional medicines and perfumes.

Medical benefits: The Ashoka tree is used to treat a variety of ailments, including menstrual cramps, headaches, and stress. The bark, leaves, and flowers of the tree are used in various preparations and are believed to have anti-inflammatory and analgesic properties.





Common and Hindi name: Ficus Nuda

Botanical name and Family: Ficus Retusa. Moraceae

Adaptive features: Ficus retusa is a rapidly growing, rounded, broadheaded, evergreen shrub or tree that can reach 10 meters (33 ft) in height with an equal spread. The smooth, light grey trunk is quite striking, can grow to around 1 meter (3.3 ft) in diameter, and it firmly supports the massively spreading canopy.

Life span and physical features: The tree has glabrous obovate leaves, usually longer than 10 centimeters (3.9 in) and spirally arranged. It has a gray to reddish bark dotted with small, horizontal flecks, called lenticels, that are used by woody plant species for supplementary gas exchange through the bark.

Economic Importance: The fruits of most of Ficus species are edible and impart economic importance or eaten as bush food.

Medical benefits: Roots and leaves are applied to wounds and bruises, bark and leaves for headache, juice from the leaves externally for colic and juice from the bark internally for liver disease.







Common and Hindi name: Drumstick

Botanical name and Family: Moringa oleifera, Moringaceae

Adaptive features: Moringa oleifera is a fast-growing, droughtresistant tree of the family Moringaceae, native to the Indian subcontinent and used extensively in South and Southeast Asia

Life span and physical features: M. oleifera is a fast-growing, deciduous tree that can reach a height of 10–12 m (33–39 ft) and trunk diameter of 45 cm (18 in). The bark has a whitish-gray color and is surrounded by thick cork. Young shoots have purplish or greenish-white, hairy bark. The tree has an open crown of drooping, fragile branches, and the leaves build up a feathery foliage of tripinnate leaves.

The flowers are fragrant and hermaphroditic, surrounded by five unequal, thinly veined, yellowish-white petals.

The fruit is a hanging, three-sided, brown, capsule, which holds dark brown, globular seeds. The seeds have three whitish, papery wings and are dispersed by wind and water

Economic Importance: Moringa may be used as forage for livestock, a micronutrient liquid, a natural anthelmintic, and possible adjuvant. Moringa oleifera leaf powder is as effective as soap for hand washing when wetted in advance to enable antiseptic and detergent properties from phytochemicals in the leaves. The seeds and press cake have been implemented as wastewater conditioners for dewatering and drying fecal sludge.

Medical benefits: Moringa leaves are rich in antioxidants, such as vitamin C and beta-carotene, which protect us from many chronic oxidative diseases, including heart diseases, diabetes, cancer, and Alzheimer's disease. These leaves also contain Quercetin (an antioxidant) that helps lower blood pressure.



Common and Hindi name: Champa

Botanical name and Family: Magnolia champaca

Adaptive features: The tree is native to the Indomalayan realm, consisting of South Asia, Southeast Asia–Indochina, and southern China. In its native range Magnolia champaca grows to 50 metres (160 ft) or taller. Its trunk can be up to 1.9 metres (6.2 ft) in diameter. The tree has a narrow umbelliform crown.

Life span and physical features: A large, evergreen tree with long, thin petals and fragrant blossoms is called a Champa or campaka in Sanskrit. The blooms are available in a spectrum of hues, from creamy white to orange. Since the beginning, the Champa flower has been a crucial part of Indian spiritual worship because of its potent and distinctive perfume.

Economic Importance: Wood used for posts, boards, veneers, furniture, decorative fittings, carriage, and ship – building, and carving. Also suitable for bent- wood ribs, general joinery work, bobbins, drums, battery separators and tea chest plywood. Flowers are source of Champa oil or Champaca oil, used in perfumery.

Medical benefits: The extract is rich in antioxidant and their antimicrobial activities help combat flu, cures fever, and improves eyesight. The presence of powerful flavonoids also makes an excellent cure for rheumatoid arthritis. It also alleviates symptoms of health disorders such as gout and vertigo.





Common and Hindi name: Chukrassia

Botanical name and Family: Chukrassia velutina, Meliaceae.

Adaptive features: The trees are tall with a cylindrical bole and spreading crown. *C. velutina* leaves are abruptly pinnate or bipinnate with leaflets that alternate or are subopposite, entire and unequal at the base.

Life span and physical features: Chukrasia tabularis, the Indian mahogany, is a deciduous, tropical forest tree species. Chukrasia tabularis flowers and fruits annually. The trees may start flowering when 5 years old. The winged seeds are dispersed by wind.

Economic Importance: In tropical Asia, especially India, Myanmar, Bangladesh, Vietnam, Thailand and southern China, the wood is highly prized for high-grade cabinet work, decorative panelling, interior joinery such as doors, windows, and light flooring, and for carving, toys, and turnery. It is also used for light to medium-heavy construction work, e.g., for posts, beams, scantlings, and planks, and for railway sleepers, ship and boat building, furniture, musical instruments etc.

Medicinal benefits - A bark extract has powerful astringent properties and is used as a febrifuge and to treat diarrhoea. In India *Chukrasia tabularis* is planted as a shade tree in coffee plantations, and in Vietnam and Malaysia as an ornamental tree.





Common and Hindi name: Moulsari (Spanish Cherry)

Botanical name and Family: *Mimusops* Elengi, Sapotaceae

Adaptive features: Bakul or moulsari is a very beautiful tree. It gives dense shade, planted along the roads. The tree bears creamy white fragrant flowers and ovoid berries. The flowers have such a great fragrance that it fills the night air with the delicious heady aroma. Flowers are small, star-shaped with a crown rising from the center.

Life span and physical features: Bullet wood is an evergreen tree reaching a height of about 16 m (52 ft). It flowers in April, and fruiting

Life span and physical features: Bullet wood is an evergreen tree reaching a height of about 16 m (52 ft). It flowers in April, and fruiting occurs between June and October. The leaves are glossy, dark green, oval-shaped. The bark of the tree is thick and appears dark brownish black or grayish black in colour, with striations and a few cracks on the surface. The tree may reach up to a height of 9–18 m (30–59 ft) with about 1 m (3 ft 3 in) in circumference.

Economic Importance: Its timber is valuable, the fruit is edible, and it is used in traditional medicine. As the trees give thick shade and flowers emit fragrance, it is a prized collection of gardens.

Medical benefits: This tree is especially useful in treating gum problems and dental disorders such as bleeding gums, loose teeth, sensitive teeth, cavities, etc. Its tender parts are used as tooth brush. It is used under the name of Vajradanti, in preparation of various herbal tooth powders along with many other ingredients such as catechu, pomegranate bark, etc. The bark of the tree is used to improve fertility in women.





SALWAN PUBLIC SCHOOL

Common and Hindi name: Ficus panda

Botanical name and Family: Ficus Benjamina, Moraceae

Adaptive features: Ficus Panda offered is a round, green, shiny plant usually found in gardens. Bowl shape of Ficus Panda provides a highly attractive look. Ficus Panda is a yellow-coloured bushy plant. The flowers are inconspicuous and the plants are grown mainly for their foliage. It is a tree reaching 2 meters to 30 meters (98 ft) tall in natural conditions. Ficus trees can maintain their tree-like shape regardless of their size, so this makes them ideal for bonsais or for massive houseplants in large spaces. The plant is used for ornamental purpose. Its generally kept indoor in the living room and in terrace area.

Life span and physical features: With optimal care, ficus houseplants can live as long as 20 years, while ficus tree varieties grown outdoors in containers and moved indoors for winter can live up to 40 years. Outdoor ficus trees planted in their natural warm-weather habitats live more than 100 years. With optimal care, ficus houseplants can live as long as 20 years, while ficus tree varieties grown outdoors in containers and moved indoors for winter can live up to 40 years. Outdoor ficus trees planted in their natural warm-weather habitats live more than 100 years.

Economic Importance: Leaves used as fodder. Leaves used also in bilious affections. Bark given in diarrhoea and diabetes. Fruits considered stomachic and carminative, used in hemoptysis. Latex used in piles and diarrhoea; also used for bird- lime.

Medical benefits: Ficus fruits, roots, and leaves are used in traditional medicine to treat ailments such as gastrointestinal indigestion, hemorrhoids, inflammatory conditions, loss of appetite, liver disorders, urinary diseases, diarrhoea, diabetes, and respiratory and cardiovascular disorders.



SERVICE BEFORE SELF

SALWAN PUBLIC SCHOOL

Common and Hindi name: Jawabadh; weeping fig.

Botanical name and Family: Ficus benjamina, Moraceae

Adaptive features: Ficus benjamina is a very

popular houseplant in temperate areas because of its elegant growth and tolerance of poor growing conditions; it does best in bright, sunny conditions, but it also tolerates considerable shade. It requires a moderate amount of watering in summer and only enough to keep it from drying out in the winter. Longer days, rather high and moderate day temperatures at night are favourable conditions for great appreciable growth in a short time.

Life span and physical features: The ficus tree is known for its longevity, living between 20 to 50 years. Ficus benjamina is a tree reaching 30 m (98 feet) tall in natural conditions, with gracefully drooping branchlets and glossy leaves oval with an acuminate tip. The bark is light gray and smooth. The bark of young branches is brownish. The widely spread, highly branching tree top often covers a diameter of 10 meters.

Economic Importance: This fig plant is very good for beating pollutants that can be emitted from carpets or household furnishings and appliances like formaldehyde, benzene and trichloroethylene that can irritate the nose, mouth, and throat and lungs.

MEDICINAL- It contains some bioactive compounds such as laxative substances, flavonoids, sugars, vitamins A and C, and enzymes that show antimicrobial, antinociceptive, antipyretic, hypotensive, and anti-dysentery properties.

SERVICE BEFORE SELF





SALWAN PUBLIC SCHOOL

Common and Hindi name: Kachnar

Botanical name and Family: *Bauhinia variegata*, Fabaceae family **Adaptive features**: Kachnar, or Bauhinia variegata, is a tree that may be found in India and other regions of South Asia. The Kachnar tree can reach a height of 12 meters and is considered a medium-sized tree. The tree has deep furrows in its grey or brown bark. The butterfly-like leaves are green

and deeply split in the middle. The blooms are huge and spectacular, with either pink or white petals, and they bloom in April.

Life span and physical features: A tropical tree with a life span of 25-50 years.he Kachnar tree is a tiny tree that can grow up to a height of 10 metres to 12 metres. It is a deciduous tree.

Economic Importance: For several years, parts of the tree, including leaves, flowers, and flower buds are used as vegetables in several regions of India. Also, the stem of kachnar produces fibre. Kachnar is also found to produce a kind of gum.

Medical benefits: Ayurvedic practitioners employ the Kachnar tree for its medicinal properties. Diarrhoea, dysentery, and other gastrointestinal ailments can all be alleviated by taking infusions of the tree's bark. Diseases of the skin, fever, and malaria are also treated with this. Asthma, cough, and bronchitis are all treated using Kachnar tree leaves. Its blossoms are used to stop bleeding; regulate menstruation.





SALWAN PUBLIC SCHOOL

Common and Hindi name: Papdi

Botanical name and Family: Holoptelea integrifolia Planch, Ulmaceae **Adaptive features**: A large deciduous tree, upto 25m. It is native to most of Indian subcontinent, Indo-China and Myanmar. It is found mostly on

plains but also in mountains on elevations up to 1100 m.

Life span and physical features: The Indian elm is a large deciduous tree, about 20–25 m tall (rarely over 30 m), with a broad crown featuring several ascending branches. Bark is grey in colour, covered with blisters, peeling in corky scales on old trees. Leaves are alternately arranged. Crushed leaves emit an unpleasant odour. Flowers are small, greenish-vellow to brownish in color.

Economic Importance: Holoptelea integrifolia is used for timber which makes cheap furniture and used as firewood in rural parts. It is also used in ecological forestry for its heat and drought tolerance and regenerative abilities. Its flowers, leaves and bark have medicinal uses against several diseases.

Medical benefits: The plant Holoptelea integrifolia is used traditionally for the treatment of inflammation, gastritis, dyspepsia, colic, intestinal worms, vomiting, wound healing, leprosy, diabetes, hemorrhoids, dysmenorrhea,







SALWAN PUBLIC SCHOOL

Common and Hindi name: Jamun

Adaptive features: Jambolan is an evergreen tropical tree in the flowering plant family Myrtaceae, and favored for its fruit, timber, and ornamental value. It is native to the Indian subcontinent and Southeast Asia, including Myanmar, Sri Lanka, Bangladesh and the Andaman Islands. **Life span and physical features**: The Indian elm is a large deciduous tree, about 20–25 m tall (rarely over 30 m), with a broad crown featuring several ascending branches. It can reach heights of up to 30 metres (98 ft) and can live more than 100 years. Bark is grey in colour, covered with blisters, peeling in corky scales on old trees. Leaves are alternately arranged. Crushed leaves emit an unpleasant odour. Flowers are small, greenish-yellow to brownish in color.

Economic Importance: Holoptelea integrifolia is used for timber which makes cheap furniture and used as firewood in rural parts. It is also used in ecological forestry for its heat and drought tolerance and regenerative abilities. Its flowers, leaves and bark have medicinal uses against several diseases.

Medical benefits: The plant Holoptelea integrifolia is used traditionally for the treatment of inflammation, gastritis, dyspepsia, colic, intestinal worms, vomiting, wound healing, leprosy, diabetes, hemorrhoids, dysmenorrhea, and rheumatism.





Common and Hindi name: Amaltas

Botanical name and Family: Cassia Fistula, Fabaceae

Adaptive features: The amaltas flowers are bright yellow in colours and slight zygomorphic. They grow in a dropping raceme arrangement and usually, in a group of three. The flowers bloom in late spring and grow profusely in such an overwhelming manner that no leaves are visible at times.

Life span and physical features: The golden shower tree is a medium-sized tree, growing to 10–20 m tall with fast growth. The leaves are deciduous, long, and pinnate with three to eight pairs of leaflets. The flowers are produced in pendulous racemes each flower with five yellow petals of equal size and shape. The fruit is a legume with a pungent odor and containing several seeds.

Economic Importance: It grows into a 30-14 feet tall tree with a trunk consisting of reddish wood. The wood is hard and heavy; it is used for cabinet, and inlay work. Wood is also used to make agricultural implements and tool handles.

Medical benefits: The leaves of Amaltas can be used in skin conditions like ringworms, eczema, and skin eruptions. Amaltas root may help with dermatological problems. The fruit pulp of Amaltas was also found to be beneficial in treating skin diseases and worms. The leaves of amaltas may be used in erysipelas.





Common and Hindi name: Balm Kheera

Botanical name and Family: Kigelia Pinnata, Bignoniaceae

Adaptive features: Balam Kheera is known as cucumber or sausage tree because of the enormous fruits, which hang from long fibrous stalks. It is a fruit abundantly found and cultivated in West Bengal and Southern India. It is widely grown in the tropical region as an ornamental roadside tree or on the riverbed.

Life span and physical features: It is a tree growing up to 20 m tall and it typically has spreading branches. The bark is grey and smooth at first, peeling on older trees. The wood is pale brown or yellowish, undifferentiated, and not prone to cracking.

Economic Importance:

Medical benefits: Balam Kheera is rich in medicinal compounds that fight malaria. The stem of Balam Kheera contains excellent anti-malarial properties in terms of chloroquine (a drug commonly used to treat and prevent Malaria) and quinine (an anti-parasite that prevents Malaria).





Common and Hindi name: Chandan

Botanical name and Family: Santalum album, Santalaceae

Adaptive features: Sandalwood, genus of about 25 species of semiparasitic plants of the family Santalaceae, especially the fragrant wood of the true, or white, sandalwood, Santalum album. The group is distributed throughout southeastern Asia, Australia, and islands of the South Pacific.

Life span and physical features: A real sandalwood tree can reach a height of about 10 metres (33 feet), has leathery leaves that are arranged in pairs on the branch, and is parasitic on the roots of other tree species to some extent. The flowers of the tree are small and white, while the leaves are narrow and pointed. The fruit is a small, hard drupe that is green when ripe. Sandalwood trees are slow growing; it may take them up to 60 years to reach maturity.

Economic Importance: Sandal wood is the second most expensive wood in the world. The aromatic heartwood is one of the finest natural materials for carving. Sandal wood oil is used in perfumes, cosmetics, aromatherapy, and pharmaceuticals.

Medical benefits: The active ingredient of sandalwood album oil, alphasantalol, has been used as a remedy for several ailments including common cold, urinary tract infections, digestive problems among others.







Common and Hindi name: Golden Bamboo

Botanical name and Family: Phyllostachys aurea, Poaceae

Adaptive features: Phyllostachys aurea is invasive and grows in many types of soil and climatic conditions, therefore it is often used for controlling erosion.

Life span and physical features: Lucky bamboo is a short-lived plant and lives for one to two years. The internodes, or the part of the stem between two joints, is short and swollen at the base of the stem, a characteristic that helps distinguish golden bamboo from other bamboo species. Leaves are slender, lance-shaped, and are often arranged in fan-like clusters. Leaves grow about 15 cm (6 in) long.

Economic Importance: It is a very popular bamboo for living fences, furniture manufacturing, ceilings, and is suitable as an indoor ornamental plant in pots or containers.

Medical benefits: The high concentrations of cellulose in bamboo have been shown to stimulate the appetite, prevent constipation, and improve digestion. Low-carbohydrate diets have been shown to help prevent or improve some medical conditions, including diabetes, high blood pressure, and cardiovascular disease.





Common and Hindi name: Karonda

Botanical name and Family: Carissa carandas, Apocynaceae

Adaptive features: It is a hardy, drought-tolerant plant that thrives well in a wide range of soils. The plant flourishes in regions with high temperatures, and it is abundant in the Western Ghats of Konkan in the western coastal states of Maharashtra and Goa in India. It is also grown naturally in the temperate conditions of the Himalayan Siwalik Hills of India and Nepal at elevations of 30 to 1,800 metres

Life span and physical features: Karonda is a handy fruit. It can be grown successfully is tropical and subtropical climate plant growth is affected in high rain fall and waterlogged areas. High temperature and arid climate are suitable for karonda cultivation. Karonda is grown successfully on a wide range of soil types, viz. sandy loams, laterite, alluvial sand, and calcareous soil even it is found growing well in in stony, rocky, and less fertile soil.

Economic Importance: Ripe Karonda fruit carries excessive amount of pectin consequently it is also utilized in making jelly, jam, squash, syrup,

tarts, and chutney. Karonda is a fruit of arid resins, it contains many types of vitamins and minerals, it is the main source of iron.

Medical benefits: Karonda fruit benefits comprise promoting digestive processes, enhancing brain activity, curing fevers, and augmenting heart wellness.





SALWAN PUBLIC SCHOOL

Common and Hindi name: China Orange

Botanical name and Family: Citrus sinensis, Rutaceae

Adaptive features: Citrus sinensis has adapted a fleshy fruit that is brightly colored, sweet tasting, and nutritious to other organisms that may come across it. This encourages other organisms to eat the fruit and since the seeds or indigestible, they are later released in the feces of that organism.

Life span and physical features: C. sinensis trees can grow up to 20 feet high and produce fruit for 50 to 80 years. Orange trees have fragrant, fivepetal white flowers and oval, glossy leaves. Orange trees prefer intermediate types of soils but can grow in sandy or clay soils.

Economic Importance: The major economic value of oranges lies in their fruits, but several fragrant oils can also be extracted from their flowers, or, more commonly, their peel as a byproduct of the orange-juice industry.

These essences can be used to manufacture so-called Neroli and Portugal oils.

Medical benefits: China oranges have nutrients that help wounds heal and keep colds at bay. Eating them can also aid with digestion and your nervous system, reducing vomiting and muscle cramps. Regular oranges consumption might help lower your chances of getting cancer.





SALWAN PUBLIC SCHOOL

Common and Hindi name: Jatropha

Botanical name and Family: Jatropha curcas L., Euphorbiaceae

Adaptive features: Jatrophas are drought-resistant perennial and multipurpose shrubs or trees, like the cassava plant. Jatropha is a deciduous tree, shedding its leaves during the dry season.

Life span and physical features: Jatropha curcas has leaves that are shallowly divided into 3-5 rounded lobes and hairless. The small flowers have five greenish-yellow petals and are borne in small branched clusters. Its fruiting capsules are usually dull yellow and hairless. It can grow to a height of 3-5 m, and remains productive for 30 to 50 years.

Economic Importance: The plant produces many useful products, especially the seed, from which oil can be extracted; this oil can be used as a feed stock for biodiesel. The extracted oil can also be used for making soap, glue, dye, etc. The leaves, shoot latex, roots and seed oil has medicinal properties.

Medical benefits: Jatropha curcas is traditionally used to treat bacterial and fungal infections or febrile diseases, muscle pain or jaundice. It is also used for obtaining new drugs through the identification of active ingredients to eliminate pathogens or inhibit signs and symptoms of human and veterinary diseases.



