

1. AMLA/AMLAKKA

Kannada : **Bettanalli**
Scientific name : **Phyllanthus emblica.**
Sanskrit name : **Amalakke – Amla.**



Phyllanthus emblica L. (Amla); EUPHORBIACEAE
Amla (Fruit) used in various Ayurvedic medicines and also a component of 'Yogasanasana'
W. D. Sengupta, Banar, Banarasi, 1984, p. 108 (Bot. Dr. Occident. N. 1, 1984) (2000)

The fruit is a main ingredient of **Tripala**. It is a medium size tree. In winter, it sheds its leaves. The juvenile compound leaves are iridescent and possess almost all the colours of the Peacock. The compound leaves move spontaneously with the breeze, with subtle vibrations.

Coming in contact with the canopy, one may get mystique aura. This aura of breeze provokes and helps to embrace the thinking power.

Amla is the richest known natural source of Vitamin 'C' and one of the main ingredients of Chownprash. The fruit juice contains 20 times as much as Vitamin 'C' as Orange juice. A single fruit is equal in anti-scaorbatic value of one or two oranges. Tannin contain gallic acid, ellagic acid and glucose.

Well-maintained canopy will mitigate noise upto 2 to 5 dicibles. The appendages on the leaf, branches traps minute particulates. Purifies ambient air.

2. JACK/HALASU/PANNAS

Scientific name: *Artocarpus – integrifolia.*

This genus comprising of 100 species distributed in Indo-Malaya region and China. 18 species occur in India of which

- (1) *Artocarpus integrifolia* (Jack)
- (2) *Artocarpus hirsute* (Hebbalsu)
- (3) *Artocarpus incisa* - (Divyahalasu)
- (4) *Artocarpus lackoocha* (Wate).



It is a tall tree, attains a height of 40 feet to 60 feet with large shining dark green incised leaves. It bears prickly brownish yellow fruits. When young it grows best in shade. A matured fruit weighs upto 20 to 25 Kgs.

Every part of the plant and the fruit is a rich source of food to animals. Wood is used for making musical instruments like Veena, Tambura and percussion instruments.



It mitigates noise pollution and efficiently traps particulate matter. The tree is architecturally designed to trap sunlight and protects the earth from insulation. Thereby it reduces the soil temperature and improves the quality of breathable air.

The shining leaves absorb Carbon Dioxide even in dim light and also it has got the capacity to absorb carbon dioxide and release oxygen during moon light and also in star light.

3. NEEM/BEVU

Sanskrit : **Nimba**
English : **Margosa**
Scientific : **Azadirachta indica**



It is medium size evergreen tree. It thrives best in drier climate.



Every part of the tree is bitter and is found useful in indigenous medicines. The seed oil (margosa oil) is used in skin diseases, ulcers, sores and ringworms. It is also used in rheumatism as a liniment. It is reputed to possess anthelmintic and globally recognized bio-pesticide. It also prevents spread of virus. It contains Nimbidin. It is a best air purifier. It can mitigate air borne pathogens. It improves quality of life in the human habitat.

4. MAHAGANI :

Scientific name: **Swietenia Macrophylla**
Swietnia Microphylla

A magnificent evergreen tree with a handsome spreading crown. It attains a height of 30 mtrs. and a girth of 4.5 mtrs. It is a semi deciduous evergreen tree. It sheds its leaves in February and new leaves appear in March-April. The juvenile leaves are brilliant emerald in colour and tree looks beautiful in March-April.

Inconspicuous flowers appear during April-May. Fruits appear in October-December. The fruits remain erect on branches. It is an excellent tree for urban habitat, strong and sturdy. It can withstand ill treatment of lopping and root grubbing by civic authorities. It mitigates noise and traps particulate matter. It responds well for canopy manipulations.



5. **TABEBUIA ROSAE.**



It is an exotic medium size tree, native of tropical America.

It is beautiful, ornamental tree for urban planting. It can withstand to some extent ill treatment and can recover from man made minor shocks.

The flowers: Rose pink showy in terminal clusters. Various appendages of leaves and flowers traps particulate matter in the ambient air and filters the air. The deep furrows of upper surface of leaves and prominent ridges of undersurface and ciliaes will trap respiratory particulate matter in the ambient air. The branching architecture further enhances air-filtering capacity of the species.

The bark is credited with diuretic, antipyretic and possesses alogxeteric property. The fruit is also useful as a diuretic and fruit peel possesses hypnotic properties.

(Source: Wealth of India)

6. RANGAMALLI (LIPSTICK TREE)

Annato : **Arnato / Monkey Turmeric Saffron tree.**
Sanskrit : **Rakta Beeja.**
Scientific : **Bixa orellana.**



A small tree found in hotter parts of India. It bears white and pink flowers. The fruits are capsules ovoid or subglobose Soft prickly.

This appendage of fruits trap air particulate matter very very efficiently and improves the breathable air quality.

Seeds impart a deep orange colour to silk and cotton. The carotenoide Bixin is the principle colouring matter present in the seeds. In addition to bixin, a water soluble yellow dye orrellin, methyl bixin, beta-carotene, cryptoxanthin, Buetin, Zeanthin are also found. Annato dye has been proved non-carsenogenic. On account of its non-toxic nature, dye is extensively used in dairy industry, for colouring butter, ghee, cheese, margarine, ice cream, chocolate, meat, cereals, confectionary, speices etc.. It is also used as an ingredient in hair oils, shoe polishes, nailgloss and furniture. It has wide range of uses besides improving the breathable air quality.

It can be planted under electric poles to avoid indiscriminate lopping. The unique appendages on fruits will perform an ecological function to trap particulate matter and environmental services besides its economical value

[Source: Wealth of India]

7. BHADRAKSHI / GUAZOMIA- *Gauzonia - tomentona*



It is a medium size ever green tree.. Foliage are beautifully designed to trap particulate matter and air borne pathogens. It can withstand windstorm to some extent. It is a good avenue tree for urban landscape. The bark is tonic, demulcent. The inner bark is esteemed as a remedy for Elephantiasis.

[Source: Indian Medicinal plants by Kirtikar and Basu]

8. HONGE / KARAJA

Scientific name: PONGAMIYA PINNATA



A medium size evergreen tree with a short bole and a spreading crown up to 18 metres. It is a native of Western Ghatts. The tree starts bearing fruits at the age of 4 to 7. It contains four Furnoflovones:

- 1) Karanjin
- 2) Pongopin
- 3) Kanjone
- 4) Ponga glabrone.

The seed contains 27 to 39% of fatty oil. It is gaining importance as a bio- diesel renewable energy. One tree of Honge provides a comfort of 14'/10' room size air conditioners and comfort of 2 rooms of air coolers of the same size respectively.

The shades of tree is compared to warmth of mother's womb. It can be planted in schools, hospitals, office compound, parks where school children/public can relax during bright sunlight. Bangalore experiences hot bright sunlight over 260 days, especially in the month of March to June. During these months, Honge's new shoots of leaves provide invaluable comfort and also shining leaves efficiently traps air borne particulate pathogens.



[Source: Wealth of India]

9. **SAMPIGE – CHAMPAKA.**

Scientific name: Michelia Champaka.



A tall evergreen tree. Usually attains a height of 25 to 30 meters and 3.5 metres in girth. It thrives best in a damp climate and requires deep moist soil. Its natural regeneration is from seeds. Wood is used as a decorative veneer.



Champa oil has delightful velvety odour. Champa oil constitutes as one of the most exquisite raw material for perfumery. It is being used in some of the finest French creations. Therefore, this tree is considered as a tree of Nature's symbolic expression of supreme reality.



The flowers are made up of 3 rows of 4 petals each. The best form petals are outer most which has been termed as a physical world and 2nd row has been terms as a vital world and 3rd row has been considered as a mental world. One can reap a divine smile through a deep breath of Champa flower. The chemical gratification helps to conquer an ego.

[Source: Flowers and their mysteries by Aurobindo Foundation, Auroville, Pondicherry]

10. KADAMBA -

English name: Anthocephalus cadamba.



A favourite tree of Goddess Lalita and Lord Krishna. One of the graceful native Tree with excellent architecture of leaves and branches to filter air borne particulates and pathogens. The leaves possess velvety hairs, which has the intrinsic ability to trap respiratory particulate matter.

It is an important sacred tree where one can renounce their pride under the canopy of this tree. This self-humiliation ignites the consciousness.



The striking orange, yellow flower ball enriches the soil with their abundant floral parts and enhances the soil fertility. The flowers act like light rays, which radiates to the human blood. This light rays rejuvenates the body and helps to suppress desires and leads to sanity.

11. RANJAL/BAKULA

[Scientific name: *Mimusops Elengi*]



The medium size trees, slow growing, ever green tree found in Deccan Peninsular. It is commonly cultivated as an avenue or a shade tree through- out India. Flowers are solitary in fascicles, Small creamy white star shaped fragrant flowers perfumes the air. The flowers resemble a serrated wheel.



In Ayurveda, the bark is abundantly used for dental care. The leaves are shining. The thick foliage mitigates dust and noise pollution.

