

Mimusops elengi Linn.

Family : Sapotaceae
Group : 6. Star trees
Parts Used : Fruit , Seed, Bark, Flower

Vernacular Names

English : West Indian Medlar
Malayalam : Elanji
Hindi : Bakul
Sanskrit : Bakulah
Kannada : Ragademara
Tamil : Ilanci
Telugu : Pogada



Distribution and Habitat: Cultivated in North and Peninsular India and Andaman Islands. It is grown as an avenue tree in many parts of India.

Botany: It is an evergreen tree upto 15 m height with dark grey fissured bark and dense spreading crown.

• **Leaves:** 10 cm long and 5 cm broad, variable, oblong, glabrous, leathery with wavy margin. Petiole 1.2-2.5 cm long.

• **Flowers:** Star shaped, white, fragrant, axillary, solitary or in fascicles of 2-6, pedicellate and about 2.5 cm in diameter.

• **Fruits:** Ovoid or ellipsoid berries, 2.5 cm long, yellow when ripe.

• **Seed:** Solitary, ovoid, compressed, grayish brown and shiny.

Properties: The aerial part is diuretic. Leaf is an antidote for snakebite. Extract of flower (1mg/ kg body weight) showed positive diuretic action in dogs. Bark is tonic and febrifuge. Pulp of ripe fruit is antidiysenteric. Seed is purgative. Saponins from seed are spermicidal and spasmolytic. Bark and pulp of ripe fruit is astringent

Chemical constituents: b-sitosterol and its glucoside, a-spina-sterol, quercitol, taraxerol and lupeol and its acetate are present in the aerial parts as well as the roots and seeds.

• The aerial parts gave quercetin, dihydroquercetin, myricetin, glycosides, hederagenin, ursolic acid, hentriacontane and b-carotene.

• The bark contained an alkaloid consisting largely of a tiglate ester of a base with a mass spectrum identical to those of laburinine and iso-retronecanol and a saponin also which on hydrolysis gave b-amyrin and brassic acid.

• Seed oil was comprised of capric, lauric, myristic, palmitic, stearic, arachidic, oleic and linoleic acids.

Uses: Garlands made of its flowers are ever in good demand due to its long lasting scent.

• Tender stems are used as tooth brushes. It is also useful in urethrorrhoea, cystorrhoea, diarrhoea and dysentery.

• The flowers are considered expectorant and smoked in asthma. Flowers are used for preparing a lotion for wounds and ulcers. Powder of dried flowers is a brain tonic and is useful as a snuff to relieve cephalgia.

• Unripe fruit is used as a masticatory and will help to fix loose teeth. A lotion prepared from unripe fruits and flowers is used for smearing on sores and wounds.

• Seeds are used for preparing suppositories in cases of constipation especially in children.

• Bark is used as a gargle for odontopathy. The bark and seed coat are used for strengthening the gum and enter into the composition of various herbal tooth powders, under the name of "*Vajradanti*", where they may be used along with tannin-containing substances like catechu (*Acacia catechu*), pomegranate (*Punica granatum*) bark, etc. The bark is used as snuff for high fever accompanied by pains in various parts of the body.

Formulations: In Ayurveda, the important preparation of *Mimusops* is "*Bakuladya Taila*", applied on gum and teeth for strengthening them, whereas in Unani system, the bark is used for the diseases of genitourinary system of males.

Agrotechnology:

Propagation: The plant is propagated by seeds. Seeds are to be collected and dried. Seeds are to be soaked in water for 12 hours without much delay and sown on seedbeds. Viability of seeds is less. After germination they are to be transferred to polybags.

Planting: Pits of size 45 cm³ are to be taken and filled with 5kg dried cowdung and top soil. To these pits, about 4 months old seedlings from the polybags are to be transplanted with the onset of monsoon.

Manuring: Addition of 10 kg FYM every year is beneficial.

Plant protection: Any serious pests or diseases do not attack the plant.

Harvesting: Flowering commences from fourth year onwards. Bark, flowers, fruit and seeds are the economic parts.

