Herbal Garden (Muligai Vanam)

Rambutan

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Botanical Name	:	*Nephelium lappaceum* L.
Tamil Name	:	Rambutan
Sanskrit Name	:	Rambutan
English Name	:	Rambutan

Distribution and Habitat

Nephelium lappaceum L. commonly known as Rambutan with its origin in Malaysia belongs to the Sapindaceae family and grows in tropical and subtropical climate. It is a medium sized evergreen tree growing to a height of 12-20m. Leaves alternate, 10-30 cm long, pinnate with 3-11 leaflets, each leaflet 5-15cm wide and 10-30cm broad.

Rambutan trees can be male, female. Flowers are hermaphroditic. Fruit in loose pendant, round to oval drupes, cluster of 10–20, 3-8cm long, 3-4cm broad, leathery, reddish, orange, or yellow skin, coated with fleshy hair. The flesh (aril), which adheres to the seed, is 0.4–0.8 cm thick, transparent, juicy, sweet or acidic, subacidic, or sweet. The seed is 2-3 cm long, oblong, and flattened, shiny brown. The fruit is of two types: sweet and sour.

Parts used: Leaves, fruits, roots and seeds.

Phytochemical constituents

Carbohydrates, alkaloids, steroids and sterols, glycosides, triterpenoids, ellagitannins, geraniin isomers, tannins, proteins, amino acids, fatty acids such as Palmitic, stearic, oleic and arachidic acids, anthocyanin, poly-phenolics, and rich in group of flavonoid like flavonols, flavanones, flavones and flavans.

Uses

Rambutan fruit is used in jams and jellies. Seed fat is used as a cocoa replacer, seed mucilage serves as a vitamin encapsulation, stabilizer, thickening agent, emulsifier, texture adjuster,

and seed protein serves as protein concentrate. The roots, leaves and bark are used in the manufacture of dyes. Dried fruit rind is used as an ingredient in manufacture of soap. (Jahurul et al. 2020).

Medicinal uses

N. lappaceum has been used as traditional medicine for centuries especially as a remedy for diabetes and high blood pressure. Fruit is high in antioxidants, dietary fibres and vitamins. Its parts including fruit peel, pulp, and seed are a great source of bioactive compounds. It provides important minerals like calcium, phosphorus, and iron, all of which are essential for maintaining strong bones and supporting overall skeletal health. Fruit extracts have been found to have cardio-protective and hepato-protective properties. The fruit is believed to be stomachic, astringent, anthelmintic and good remedy to treat diarrhoea and dysentery. The leaves are used in poultices for treating headache. The fruit acts as a vermifuge a medicine that destroys intestinal worms and helps to expel them. The bark is astringent and used as a remedy for thrush. A decoction of the roots is taken as a febrifuge. The pharmacological actions of *N. lappaceum* L. includes free radical scavenger, antibacterial, antiviral, anti-osteoporosis, anti-inflammatory, anti-hyper-glycemic, anti-hyper-cholesterolemic, anticancer, anti-diarrheal and anti-allergic (Mahmood et al. 2018; Shahrajabian et al. 2020).

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