

# *Hydnocarpus pentandrus* (Buch.-Ham.) Oken

**Synonyms** : *Hydnocarpus laurifolius* Sleumer

**Family** : Achariaceae

**Parts Used** : Seed, Oil

## **Vernacular Names**

English : Maroti tree

Malayalam : Marotti

Hindi : Calmogaru

Sanskrit : Tuvarakah

Kannada : Toratti, Surti, Suranti

Tamil : Maravatti



**Distribution and Habitat:** Forest of the Western Ghats

**Botany:** A medium sized dioecious evergreen tree, reaching 12-15 m in height with the pale brown somewhat rough bark mottled with white.

• **Leaves:** Simple, alternate, ovate, oblong or lanceolate, acuminate, entire or serrate, glabrous, base rounded or acute; petioles 6-9 mm long; stipules lanceolate, deciduous.

• **Flowers:** Small, greenish white, solitary or in small racemes and unisexual. Male flowers- stamens 5, opposite the petals; filaments subulate, hairy at the base, about equaling the petals. Female flowers- stamens 5, as in the male; anthers without pollen. Ovary globose, hairy; stigma flat on the top of the ovary, each cuneate and two lobed.

• **Fruit:** Berry globose or obovoid, size of a small apple, tomentose. Seeds 15-20 per fruit, obtusely angular, , yellowish.

**Properties:** Antileperotic, diuretic, astringent, pungent, thermogenic, acrid, alterant, anodyne, carminative, depurative, emetic, emollient, haematinic, stomachic, suppurative and tonic.

**Chemical constituents:** Seed and seed-hull: apigenin, chrysocrisol, chaulmoogric acid; and its homologues, flavonolignans, gorlic acid, hydnocarpic acid, hydnocarpin, isohydnocarpin, luteolin, palmitic acid.

**Uses:** Leprosy, skin diseases, pruritus, leucoderma, dermatitis, bronchopathy, eczema, scrofula, sprains, bruises, tubercular laryngitis, chronic ulcers, dyspepsia, colic, flatulence, verminosis, diabetes, and scald- head

**Formulations:** Tubrakadi-taila.

## **Agrotechnology:**

**Soil and Climate:** Water logged soils are unfit for growth of the plant. Soil must be well drained. Red laterite soil is seen to support the plant very well. Annual rainfall may be in the range of 2250 mm to 7500 mm. The annual temperature must be between 35°C- 40 °C

**Propagation:** Seed

**Nursery raising:** Nursery raising of seedlings is the most excellent method for artificial propagation. Ripe fruits are collected and the seeds are separated out and dried in shade. Nursery beds of standard size are taken by the end of May and freshly collected seeds are sown on the bed. Germination starts by third week of sowing.

**Interculture:** Ideal spacing is 2.7 m x 2.7 m. It is planted as intercrop in teak and Mahagony plantation.

**Irrigation:** Irrigation for first two years are must to protect from hot sunrays.

**Pest:** Stem borers damage the seedling..

