Strychnos nux-vomica Linn.

Family : Loganiaceae
Group : 6. Star trees
Parts Used : Leaf, Seed, Bark

Vernacular Names

English : Strychnine tree

Malayalam : Kanjiram
Hindi : Kajra
Sanskrit : Karaskara
Kannada : Ittangi
Tamil : Itti
Telungu : Mushti



Distribution and habitat: Throughout India in deciduous forests up to 1200 m. It is also found in Sri Lanka, Siam, Indochina and Malaysia.

Botany: It is a large deciduous tree, with simple leaves and white fragrant flowers.

- *Leaves:* Simple, opposite, orbicular to ovate, coriaceous, glabrous, 5 nerved, apex obtuse, acute or apiculate, transverse nerves irregular and inconspicuous.
- *Inflorescence:* Many flowered terminal cymes, 2.5-5 cm across. Bracts (5 mm) and bracteoles (1.5 mm) small. Flowers are white or greenish white and fragrant. Calyx 5 lobed, pubescent and small (2 mm). Corolla salver shaped, tube cylindrical slightly hairy near the base within and greenish white, tube much elongate than the lobes. Stamens 5, filaments short.
- *Fruit*: A berry, 5-6 cm diameter, globose, indehiscent, thick shelled, orange red when ripe with fleshy pulp enclosing the seeds.
- **Seed**s: Seeds orbicular, flat, shiny, greenish white, coin like, 2-2.5 cm diameter, covered with fine grey silky hairs. Seeds mature in 8 9 months after flowering during December- June. Seeds have a dormancy of 4-6 weeks and viability up to 1 year

Properties: Spasmolytic, muscle relaxant

Chemical constituents:

- Seeds contain strychnine, Brucine, α and $\beta\text{-columbrine}.$ Isostrychnine, Pseudostrychnine. Glucoside- Loganin.
- Flowers contain Brucine, Icajine, Novacine, Strychnine, Vomicine and fruit pulp (phenolic glycoside) Cuchiloside and Salidroside

Uses: In small doses it can serve as efficacious cure forms of paralysis and other nervous disorders.

- 1. The seeds are used as a remedy in intermittent fever, dyspepsia, chronic dysentery, paralytic and neuralgic affections. It is also useful in impotence, neuralgia of face, heart disease.
- 2. Leaves are applied as poultice in the treatment of chronic wounds and ulcers and the leaf decoction is useful in paralytic complaints.
- 3. Root and root bark used in fever and dysentery.

Formulations: Samirgaja keasri hab khas

Agrotechnology

Soil and climate: It survives in lateritic soil. The tree prefers a warm tropical climate.

Propagation: It is propagated through seeds and vegetative propagation. Soak seeds in water overnight before sowing. It takes 30 days for germination.

Spacing: 5 m x 5 m

Seed requirement per acre : $0.3~\mathrm{kg}$ Seedlings required per acre : $160~\mathrm{nos}.$

Harvesting: The leaf fall is during December (do not shed all the leaves at a time) and new foliage appears in February. Flowering is during March - April and fruiting during May - December. Fruits take about 8-9 months to mature.

