

Alstonia venenata R. Br.

Synonyms : *Alstonia venenatus* Brown, *Echites veneta* Roxb., *alstonia*

Family : Apocynaceae

Group : Antidotes

Parts Used : Root , Fruit

Vernacular Names

English : *Alstonia*

Malayalam : Vella analivegam, Theeppala

Sanskrit : Visaghni

Kannada : Addasarpa

Tamil : Sinnappalai



Distribution and Habitat: Throughout India

Botany: Large shrub or small tree up to 6 m in height

• **Leaves:** Simple, arranged in whorls of 3-6, membranous, lanceolate, margins wavy

• **Flowers** : White, arranged in terminal sub umbellate cymes or in racemes.

Fruits : Fusiform with stalked and beaked follicles, tapering at both ends.

Seeds: Many flattened with a tuft of hair at each end.

Parts used: roots, fruits

Uses:

• Roots are useful in skin diseases, erysipelas, leprosy, cobra bite and other venomous bites, epilepsy, fatigue, fever and otalgia.

• Fruits are useful in syphilis, insanity and epilepsy.

• Alcoholic extract of the fruits showed initial activation effect on acetylcholine esterase, followed alternately by inhibition and activation of the enzyme.

Chemical constituents:

• The plant is a rich source of indole alkaloids. Alkaloids are present in various parts.

• Stem bark and root contain venenatine, alstovenine, 3-dehydroalstovenine and reserpine.

• Stem bark contains venoxidine, anhydroalstonatine, kopsinine, venalstonine, venalstoruidine, echitovenine and veneserpine.

• Fruits contain echitovenidine, (+)minovincinine, echitoserpidine, echitoserpine, echitoveniline, 11-methoxy echitovonidine, 11-methoxy (-) minovincinine, echitoserpiline, (-)vincadifformine, 11-methoxy(-)vincadifformine and venoterpine.

• Leaves contain echitovenaldine, echitoveniline, alstolenine, deacetylakuammiline, polynuridine, dihydropolynuridine and raucaffrinoline.

• Fruits contain b-amyirin acetate and lupeol ester of b-hydroxy acid .

Agrotechnology

Propagation: By seeds and rooted thin stem cuttings. 3months old seedlings are used for transplanting.

Spacing : 3 m x 3m

Harvesting: Flowers are formed in the first year itself. It can be used for medicinal purposes after seven years of growth.



