Cynanchum annularium (Roxb.) Liede & Khanum

Synonyms: Holostemma ada-kodien Schult., Holostemma rheedi Wall.,

Holostemma rheedianum auct non Spreng

Family : Apocynaceae

Group: Galactogogue, Rejuvenatives, Eye diseases, Aphrodisiac/spermatogenesis

Parts Used: Root, Flower

Vernacular Names

English : Holostemma
Malayalam : Adapathiyan
Hindi : Chhirvel
Sanskrit : Jivanthi
Gujarathi : Khiravel
Tamil : Palay kirai
Telungu : Palagurugu.



Distribution and Habitat: It is seen in Tropical Himalaya, Sikkim, West Peninsula of India, Sri Lanka; Myanmar. **Botany:** Handsome glabrous twining shrub, roots thick, irregularly twisted; Stem glabrous, laticiferous.

- *Leaves*: Simple, opposite, cordate, petioles long, lamina cordiform to oblong, chartaceous, puberlous, penni-nerved'
- *Inflorescence*: Cymes axillary, umbellate, few flowered; Flowers purple in axillary umbellate cymes.
- Fruit: Follicle short, thick, smooth, acute.

Properties: Cooling, digestive, alternate, aphrodisiac, emollient, expectorant, galactagogue, ophthalmic, refrigerant, sweet and tonic.

Chemical constituents: Bark: α -amyrin, β -sitosterol, lupeol, alanine, aspartic acid, glycine, serine, threonine, and valine.

Uses: Eye troubles, blood vomiting, decaying, burning sensation, removes deranged bile, fever, constipation and cough.

Formulations: Vidaryadiganam, Dhanwandharam taila, Balarishta.

Agro technology:

Soil and Climate: Prefers a tropical climate with high rainfall and relative humidity. Soil should be light and porous permitting root development.

Propagations: Vegetatively by stem cuttings, mainly by seeds.

Irrigation: Regular irrigation is to be given till flowering.

Manures and Fertilizers: Application of 20 t /ha of farm yard manure , 100 kg/ ha bone meal, 500 kg /ha of neem cake, 2 kg/ha each of Trichoderma and AM fungi sustain good growth of plants. Wherever growth of plant is slow this can be supplemented with NPK, each @ 50 kg /ha split application spreading to second year is necessary.

Plant protection: Fungal diseases like leaf spot and leaf blight are commonly seen. It can be controlled by spraying 1% Bordeaux mixture. Leaf eating caterpillars are common which can be controlled by manual picking.

 ${\it Harvesting:}$ Harvesting can be done at the end of the second year when the vines start drying up. Roots are collected by deep digging and cleaned thoroughly in water. .

Processing: The tubers are cut in to pieces of 10 cm length and dried in sun before sale.







