

ZINGIBERACEAE

Kaempferia galanga L.

Vernacular names: Hindi - Chandramula; Sanskrit - Chandramulika; Tamil - Kacholam.

Trade name: Galanga.



Kaempferia galanga L.

Distribution: INDIA: This plant is possibly native to India, where it is widespread in the wild throughout the plains of India, particularly in the Eastern and Southern part of India up to an elevation of 1500 m; in tropics and subtropics of AFRICA and South East ASIA.

Habitat: Found throughout the plains of India under slightly shaded places such as open forest, forest edges and bamboo forests on various soils.

Population status / Cause for RET: Critically Endangered. Exploited mainly for the medicinal properties of the rhizome.

Description: A perennial, stemless herb; rhizome tuberous, aromatic; roots fleshy, cylindric. Leaves few, spreading horizontally on the surface of the ground, 3.5 – 13 x 2 – 9 cm, orbicular to round-ovate, base sheathing, margins entire or wavy, deep green, glabrous above, pubescent beneath; petioles short. Flowers, delicate, 6 – 12, collected in small

fascicles, fugacious, opening successively, fragrant, white with purple or lilac spot on each side of the lip.

Fl.: June - July.

Parts used commercially: Rhizomes, used in Ayurveda, Siddha and Folk medicine.

Medicinal properties and uses: The rhizome is credited with stimulant, expectorant, diuretic, anti-inflammatory and carminative properties. It is used in the treatment of cough, bronchitis, asthma, skin diseases, rheumatism, piles, oedema, fever, epilepsy, spleen disorders etc. Powdered rhizome is mixed with honey and is given in cough and pectoral affections. Rhizome in the form of powder or ointment is applied on the wounds and bruises to reduce swellings. Roasted rhizome is applied hot in rheumatism and for hastening the ripening of inflammatory tumours.

Rhizome is used to remove bad odour of the mouth. It is used for protecting cloths against insects. It is also used as a deodorant and disinfectant. It is eaten along with betel and arecanets as a mastigatory. It is attached to necklaces for their perfume. Steam distillation of rhizome yields essential oil, which is used in the manufacturing of perfumes and flavouring curry. It is also employed in cosmetics, hair tonics, toiletries and as a hair wash in dandruff.

Substitutes and adulterants: Under the trade name 'Sathi', a controversial Ayurvedic crude drug is being sold in the South Indian market. The accepted botanical source of Sathi is *Hedychium spicatum* Sm. (Zingiberaceae). Nevertheless, *K. galanga* is equated with Sathi, which is not an accepted source.

Cultivation practices: This plant is commonly cultivated in gardens for its medicinal and aromatic properties. The germplasm of this plant species is very well maintained in the experimental garden of Naoroji Godrej Centre for Plant Research, Shindewadi (Satara district), Maharashtra.

This plant can be easily propagated through rhizomes. The plant produces both mother and finger rhizomes. Mother rhizomes are better for propagation than finger rhizomes. Smoking of rhizomes prior to planting is beneficial for better germination and establishment of sprouts. The rhizome pieces can be planted in light soil and supplied liquid manure to promote its growth.

Planting of the rhizome pieces during the third week of May perhaps give significantly higher yield. It requires a warm humid climate. It thrives well up to an elevation of about 1500 m above mean sea level. Rich loamy soil with good drainage is ideal for the cultivation of this plant species. It cannot withstand water logging. It is a shade loving plant. Hence, partial shaded condition should be provided for better vegetative growth.

Commercial / Ex-Im data: It is traded in local and regional markets.

Legal: Included in Negative List of Exports.

References: Selvam, A.B.D. (2012). Pharmacognosy of Negative Listed Plants. Pp. 106-116.