



Herbal Garden (Muligai Vanam)

Kodikalli



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Botanical Name	:	<i>Euphorbia tirucalli</i> L.
Tamil Name	:	Kodikalli
Sanskrit Name	:	Saptala
English Name	:	Pencil tree, Pencil cactus

Distribution and Habitat

Euphorbia tirucalli (L.) also known as Pencil tree belongs to the family Euphorbiaceae. It is native to Ethiopia to South Africa and India. The plant is broadly distributed in hotter parts of India and is planted as a hedge plant in gardens and along cultivated fields. *E. tirucalli* is a shrub or small tree with pencil-thick, green, smooth, fleshy branches that reaches to a height of up to 7 m. It has a cylindrical and fleshy stem with fragile fleshy twigs that are 7 mm thick, often produced in whorls, longitudinally, finely stripped. The oval leaves are 1-2.5 cm long and about 3-4 mm wide; they usually fall off early. It contains milky, toxic and corrosive latex. The flowers are yellow and seen at the tip of the branches.



Parts used

Stem, root and latex

Phytochemical constituents

Flavonoids, terpenoids, steroids, alkaloids and tannins.

Uses

The plant has increasingly become popular as an ornamental plant. The latex of the plant is considered as an alternative energy due to the presence of petroleum like hydrocarbons. Plant contains hydrocarbon polymers that are used for manufacturing rubber substitutes. The latex has pesticidal features against aphids, mosquitoes, molluscs and pathogenic bacteria.



<https://www.exotic-plants.de/seeds/succulents/Euphorbia-tirucalli.php>

Medicinal uses

This plant has a number of medicinal uses. Latex of *E. tirucalli* is used for rheumatism, warts, cough, asthma, ear-ache, tooth-ache and neuralgia. It acts as a purgative in small doses while in big doses it is bitter irritant and emetic. Milky juice is useful in whooping cough, gonorrhoea, asthma, leprosy, dropsy, dyspepsia, enlargement of spleen, colic, jaundice and stone in bladder. A decoction of branches is used in gastralgia and stomach ache. Bark is used in treatment of fractures. Poultice prepared from the stem is used to repair the broken bones. Boiled root liquid act as an emetic in cases of snake bite and for infertility in women (Gupta *et al.* 2013). *E. tirucalli* have possessed activity in human-lymphocytes, analgesic, anthelmintic, antiarthritic, antibacterial, antifungal, antiviral, anti-HIV, anti-inflammatory, antioxidant, anticancer, hepato-protective pharmacological activities (Mali and Panchal, 2017).

Conclusion

E. tirucalli is probably the best known and most widespread of all Euphorbia species. It is generally evergreen since its stems and branches remain green all through the year and are rarely fed on by herbivores. It bears white poisonous latex, which may possibly account for the low herbivore pressure and medicinal features. The plant has abundant medicinal values. Stem and latex portion have been used as antimicrobial, antimalarial and anticancer.

