



Herbal Garden (Muligai Vanam)



Castor Bean (Aamanakku)

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Botanical Name	:	<i>Ricinus communis</i> L.
Tamil Name	:	Aamanakku
Sanskrit Name	:	Eranda
English Name	:	Castor bean

Distribution and Habitat

Ricinus communis L. is an annual or perennial shrub belonging to the family Euphorbiaceae. This plant being a native of Africa and India is widely distributed throughout the tropical, subtropical and temperate regions of the world, very commonly found in fallow land, roadside, and compounds in rural and urban areas and also along seasonally dry rivers in altitudes between 400 and 2700 m. Leaves have long petiole and palm like lobed blades. Inflorescence consists of unisexual flowers which are arranged at the top of the axis in the form of panicles; male flowers lie towards the base and female flowers towards the apex. Fruit is three chambered capsule, globose with soft spines. When capsules mature, they split up into three cavities and the seeds are expelled out. Seeds ovoid, fleshy, greyish, silvery or light brown generally dotted seed coats.



Parts used

Leaves, flowers, stem, bark, roots, seed and seed oil.

Phytochemical constituents

Saponins, flavonoids, glycosides, phytosterols, tannins, terpenoids, amide derivatives, amino acids, proteins, fatty acids, phenolic compounds, and alkaloids.

Uses

Castor oil is a non-toxic vegetable oil. It is used in fabrics, paints, varnish, ink, crayons, dyes, soap, synthetic leather, cosmetics, perfumes, ointments and bio-fuel production. Castor oil is used as a laxative. It has also been used topically to treat ringworm and warts. It is an excellent illuminant and has been used in lamps.



Medicinal uses

Different parts of the plant or oil from castor can be used as a base material in most of the medicinal treatments. Castor oil is a multipurpose vegetable oil that people have used for thousands of years. These seeds contain a toxic enzyme called ricin. However, the heating process that castor oil undergoes during production deactivates the ricin, allowing the oil to be used safely.



The leaf can be used in the treatments related to anti-viral, biliousness, burns, ear/head ache, malaria and night blindness while stem is used for treatment of cancer and hypoglycaemia. The flowers can be used in treating glandular and vaginal pain. Fruits are used for curing tumours, treating piles, liver and spleen diseases. Root bark is used as purgative, in abortion, ascites, asthma, bronchitis, carination (expulsion of gas from stomach and intestines), hypoglycaemia, leprosy, pains, rectum and rheumatism diseases

(Ramanjaneyulu et al. 2017). Seed and seed oil is used to cure rheumatism, worm infestation, severe constipation and abdominal disorders. External application of this oil is used to relieve boils and various skin related disorders. Applying castor oil helps in reducing dandruff and promoting hair growth. Numerous biological activities of *R. communis* plants are anti-microbial, anti-fungal, anti-cancer, anti-diabetic, anti-inflammatory, anti-malarial, anti-oxidant, central analgesic, anti-convulsant, anthelmintic, anti-fertility, laxative, uterine contracting, anti-implantation, anti-asthmatic, bone regeneration, anti-ulcer, wound-healing, cytotoxic, insecticidal, anti-arthritic and hepato-protective (Berman et al., 2011).

Conclusion

R. communis is a medicinal shrub along roadsides, wastelands and other degraded areas in various warmer parts of the world. The plant is widely used in traditional and folkloric systems of medicine. It is widely propagated for the preparation of bio-fuel.

Photo link: https://keyserver.lucidcentral.org/weeds/data/media/Html/ricinus_communis.htm;
<https://krishijagran.com/news/new-variety-of-castor-seed-to-double-the-yield/>

