



## **Euphorbia Tirucalli (Pencil Cactus) Plant – Morphology, Medicinal Involvement;**

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Abstract :

Euphorbia Tirucalli also known as Pencil cactus and also milk bush plant .

These plants are use worldwide natural source for medicinal purpose Euphorbia Tirucalli belonging to family Euphorbiaceae commonly known as Barki-thohar. Pencil cactus is grows freely in whole India. In Modern scientific medicine great advances but , Traditional Medicine is stillthe primary form of Treating diseases. According to World Health Organization about 80% of population stay in the developing countries rely almost exclusively on traditional medicine foe their primary healthcare needs. Human relied on nature or plants for basic needs such as clothing , food , shelter these all produces or manufacture from plants or plant parts. More compound extract from plants means drugs have been used for disease treatment.

India approximately called as Botanical Garden of the world because India is the largest producer of Medicinal herbs. These herbs or medicinal involvement study in Ayurveda.

Keywords - Euphorbia Tirucalli , pencil cactus , Barki-thohar , Euphorbiaceae , Botanical Garden



## Introduction –

The plant part used Milky juice ( used in small dose is purgative but in large dose it is a acrid , counter- irritant and emetic and steam bark.

Euphorbia tirucalli include pharmacological activites like Antibacterial , molluscicide , anti-herpetic and anti-mutagenic. Laxative agent in Euphorbia Tirucalli used to treat Asthma , cough , earache , cancer , sarcoma , skin tumors .

Euphorbia tirucalli contain 2000 species therefore Euphorbia tirucalli is the second largest genus in the angiosperms.

Plant Profile – it is small tree 5m tall, it as erect branches smooth and cylindrical in size. When branch is cut a milky sap come out. It is polish whorled and modified into phylloclade. The branches of Euphorbia tirucalli has a pencil shape due to this reason this plant also called as pencil cactus. pencil cactus its vernacular name. its latex contain white poisonous which my probably account low herbivore pressure and medical features.



Euphorbia tirucalli contain Phyto-constituent,

- 1) Tirucalicine
- 2) Cyclotirucanenol
- 3) Cycloeuphordenol
- 4) Euphorginol
- 5) Lupeol

Taxonomic Description –

Kingdom – Plantae

Division – Magnoliophyta

Class – Magnoliopsida

Order – Malpighiales

Family – Euphorbiaceae

Genus – Euphorbia

Species - Euphorbia tirucalli

Binomial Name – Euphorbia tirucalli

Plant Extract

Extraction means separate out pharmacological active agent with help of methods.

Extraction Methods for Euphorbia tirucalli –

Maceration , Infusion , Digestion , Decoction , percolation , Soxhlet ( Hot continuous extraction) , Counter current Extraction , ultrasound Extraction ( Sonication)

Uses of Euphorbia tirucalli –

Traditional uses-

Whole plant – In India , it use in treatment of leprosy and Leucorrhea.

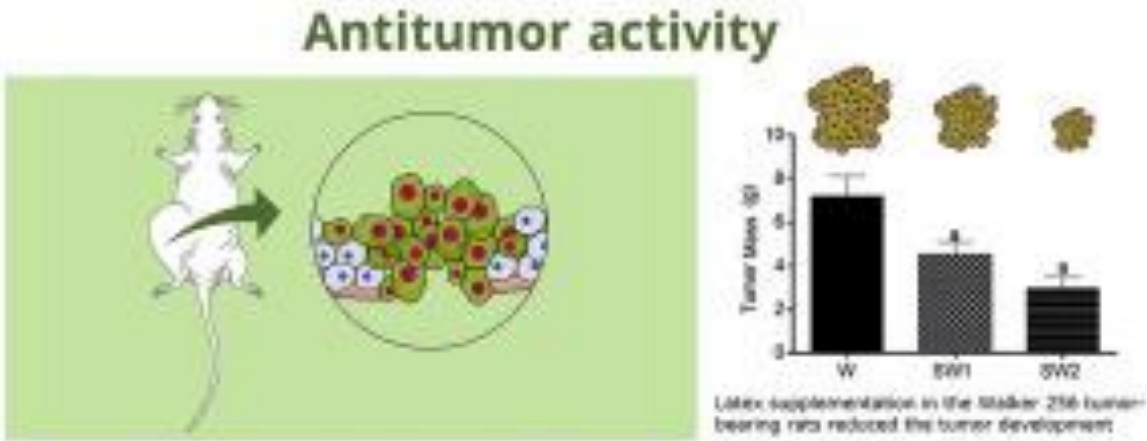
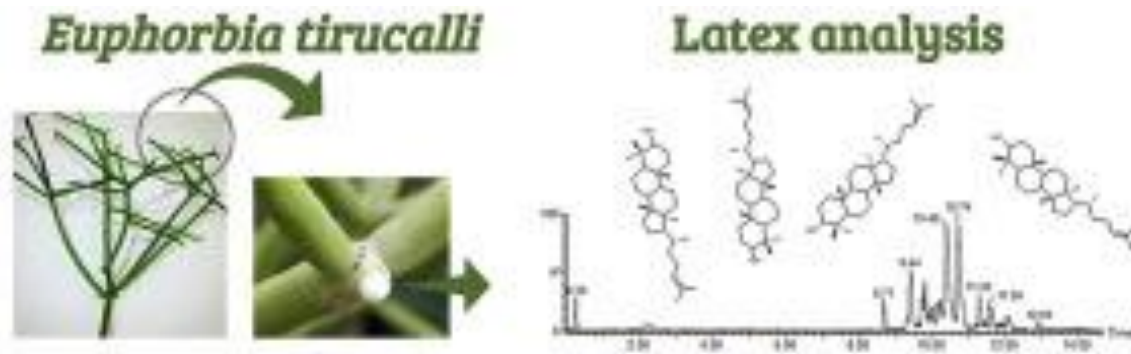
Latex – It is used for cough , asthma , ear-ache , tooth-ache , and Neuralgia.

Milky juice is carminative and purgative. It is used gonorrhoea , asthma , leprosy , dropsy , spleen , colic , jaundice.

Bark – It is in treatment of Fractures.

Stem- It is used to repair the broken bones

Root – Administered in colic and gastralgia. Boiled root liquid acts as an emetic in case of snake bites and for infertility in women.



Pharmacological Activities –

Analgesic

Anthelmintics

Antiarthritic

Antibacterial

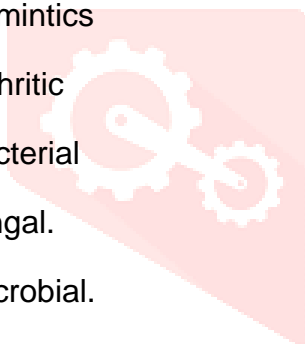
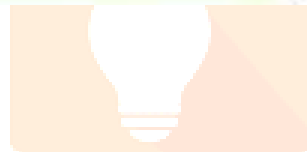
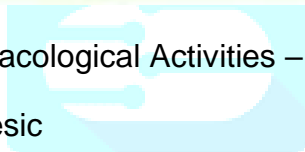
Antifungal.

Antimicrobial.

Anti-Inflammatory.

Antioxidant.

Antiviral.



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