



# White chitrak



## Synonym

- Gujarati: Chitro (ચિત્રો), Chitrakmula (ચિત્રકમૂળ).
- Hindi: Cheeta (चीता), Chita (चिता), Chitrak (चित्रक).
- English: Plumbago, Doctorbush, Ceylon leadwort.

## Botanical name

- *Plumbago zeylanica*

## Family

- Plumbaginaceae

## Chemical Constituents

- Contains important compounds such as plumbagin (a naphthoquinone), chitranone, 3-chloroplumbagin, droserone, elliptinone, zeylanone, plumbagic acid,  $\beta$ -sitosterol, lupeol, and other triterpenoids and flavonoids.
- Plumbagin is the primary bioactive component, a yellow pigment soluble in organic solvents.
- Other phytochemicals include alkaloids, glycosides, saponins, steroids, tannins,

coumarins, phenolic compounds, carbohydrates, fixed oils, and proteins.

## **Therapeutic Uses**

- Possesses anti-inflammatory, anti-diabetic, antimicrobial, anti-cancer, anti-malarial, hepatoprotective, wound healing, antitumor, and antioxidant activities.
- Used traditionally for treating syphilis, tuberculosis, gonorrhea, mouth and chest inflammations, weight loss in obesity, digestive ailments, and skin diseases.
- Shows efficacy in reducing inflammation by suppressing NF-kappa B activation and oxidative stress, which supports wound healing.
- Studies report enhanced protein and GLUT4 mRNA expression in diabetic models, improving glucose homeostasis.

## **Marketed Preparations**

- Available in the form of powders, decoctions, capsules, and extracts used in Ayurvedic formulations.

- The root bark is the primary medicinal part used, commonly prescribed in doses of 1-2 grams/day in divided doses.
- Used in combination with other herbs in classical formulations targeting digestive health, weight management, and inflammatory conditions.