

# *Ocimum tenuiflorum* L.

**Synonyms** : *Ocimum sanctum* L.

**Family** : Lamiaceae

**Group** : Anti tussive (expectorant), Anti hypertensive, Antidotes, Anti-arthritic/anti-rheumatic/anti-inflammatory, Brain tonic, Antipyretic

**Parts Used** : Root , Seed, Whole plant

## **Vernacular Names**

English : Sacred basil, Holy basil

Malayalam : Krishnathulsi

Hindi : Kalatulsi

Bengali : Tulsi, Krishnatulsi

Tamil : Karuttulaci



**Distribution and habitat:** Erect, much branched, softly hairy, annual herbs, 30-75 cm high; stems and branches usually purplish, sub quadrangular, clothed with soft spreading hairs. Found throughout India.

## **Botany:**

• **Leaves** : Elliptic- oblong, entire or serrate, pubescent, minutely gland dotted 2.5-5 by 1.6-3.2 cm; petioles 1.3-2.5 cm long, slender, hairy.

• **Flowers:** Purplish or crimson, in close whorled racemes. Calyx 3-4 mm long in flower, pubescent, reaching 5 mm long in fruits; upper lip broadly obovate or sub orbicular, reflexed, very shortly apiculate; lower lip longer than the upper. Corolla 4 mm long, purplish; upper lips pubescent on the back. Stamens exerted; filaments slender, the upper pair with a small bearded appendage at the base. Nutlets subglobose or broadly ellipsoid, slightly compressed, pale brown or reddish.

## **Chemical constituents:**

- Roots-  $\beta$ -sitosterol and three triterpenes
- Plant- Ascorbic acid, carotene, alkaloids, glycosides, saponins and tannins
- Leaves- Bornyl acetate, cadinene, camphene, camphor, carvacrol,  $\beta$ -caryophyllene, 1,8-cineole, decyl aldehyde, eugenol, eugenol methyl ether, humelene, limonene, methyl chavicol, nerol,  $\alpha$  &  $\beta$ -pinenes and luteolin
- Seed oil - Sitosterol and long chain fatty acids

## **Uses:**

- Whole plant is used in cardiopathy, blood disorders, leucoderma, gastropathy in children, skin diseases.
- Seed is used for disorders of genitourinary system.
- Leaves are used for curing gastric disorders in children
- Fresh root is used in stings of wasps, bees, bites of worms and leeches.

**Formulations:** Cough syrup

## **Agro technology**

**Soil and Climate:** It comes up in a wide variety of soil, though moderately fertile, well-drained loamy or sandy loam soils are considered ideal for cultivation. It prefers fairly to high rainfall areas with humid condition.

**Propagation:** Seed. Seeds are sown in a nursery bed and transplanted at 4-6 leaf stage (6-7 weeks). Seed viability is for 18 months.

**Manuring:** Application of 20-25 kg of N and 10-15 kg of P per hectare one month after planting.

**Harvesting:** The first harvesting takes about 90-100 days for direct sown and 75-90 days for transplanted crops. Subsequent harvests are taken at 50-60 days intervals.

