



SIGMA
UNIVERSITY

®

Tulsi (*Ocimumsanctum*)



Synonym:

Gujarati: તુલસી (Tulsi)

Hindi: तुलसी (Tulsi), सुरसा (Surasa)

English: Holy Basil, Sacred Basil, Tulsi

Botanical name: Ocimum sanctum L. (syn. Ocimum tenuiflorum L.)

Family: Lamiaceae (Mint family)

Chemical Constituent:

- Flavonoids:
 - *Orientin, Vicenin, Luteolin, Apigenin, Rutin*
 - Contribute to antioxidant and anti-inflammatory effects
- Essential Oils:
 - *Eugenol, Carvacrol, Linalool, Caryophyllene, Methyl eugenol*
 - Responsible for antimicrobial and aromatic properties

- Phenolic Compounds:
 - *Rosmarinic acid, Gallic acid, Caffeic acid*
 - Strong antioxidant activity
- Alkaloids:
 - Present in trace amounts; contribute to adaptogenic effects
- Tannins and Saponins:
 - Found in leaves and seeds; support antimicrobial and astringent actions
- Vitamins and Minerals:
- Vitamin A, C, K, Calcium, Iron, Zinc

Therapeutic Effect:

- Antidiabetic
 - Lowers blood glucose levels by enhancing insulin secretion
 - Inhibits α -glucosidase and improves glucose metabolism
- Adaptogenic (Stress-Relieving)

- Reduces cortisol levels and enhances resilience to stress
 - Used in anxiety and fatigue management
- Antimicrobial
 - Active against *E. coli*, *Staphylococcus aureus*, *Candida albicans*
 - Effective in oral care and skin infections
- Anti-inflammatory
 - Inhibits COX-2 and inflammatory cytokines
 - Useful in arthritis and respiratory inflammation
- Antioxidant
 - Scavenges free radicals and protects cellular integrity
 - Supports cardiovascular and liver health
- Immunomodulatory
 - Enhances immune response and resistance to infections
- Respiratory Support

- Used in asthma, bronchitis, and common cold
 - Acts as an expectorant and bronchodilator
- Hepatoprotective
- Protects liver cells from toxins and oxidative damage

Marketed preparation:

- Capsules/Tablets
 - Standardized extracts for stress relief, immunity, and blood sugar control
 - Examples: *Himalaya Tulsi, Organic India Tulsi Capsules*
- Herbal Teas
 - Tulsi-based infusions for detox, digestion, and respiratory health
 - Often blended with ginger, green tea, or turmeric
- Essential Oils
 - Used in aromatherapy, massage, and topical applications

- Rich in eugenol and linalool
- Ayurvedic Formulations
 - *Tulsi Churna, Tulsi Ark, Trikatu, Sitopaladi Churna*
 - Used for respiratory, digestive, and immune disorders
- Topical Products
 - Creams, gels, and soaps for acne, wounds, and skin infections
 - Often combined with neem or aloe vera
- Homeopathic Dilutions
- *SBL Ocimum Sanctum Dilution 200 CH* for colic, fever, and respiratory issues

Key Constituents: Vitamin A, C, K, Calcium, Iron, Zinc, *Ursolic acid, Oleanolic acid* *Orientin, Vicenin, Luteolin, Apigenin, Rutin*

Uses:

Antidiabetic, Antimicrobial, Antioxidant, Cardioprotective.