



SIGMA<sup>®</sup>  
UNIVERSITY

# Ficus Benjamina



**Synonym:**

Gujarati: Java Fig (જાવા ફિગ) or Benjamin Fig (બેન્જામિન ફિગ)

Hindi: weeping fig (बેંજામિન વૃક્ષ)

English: weeping fig

**Botanical name:** *Ficus benjamina*

**Family:** Moraceae

**Chemical Constituent:**

- Flavonoids: Quercetin, Kaempferol, Rutin
- Terpenoids: Lupeol,  $\beta$ -sitosterol, Taraxerol
- Phenolic Compounds: Gallic acid, Caffeic acid
- Alkaloids: Present in trace amounts
- Essential Oils: Contain compounds like  $\alpha$ -pinene, limonene (from stem and root)
- Tannins: Contribute to astringent and antimicrobial properties
- Saponins: Mildly present, contribute to anti-inflammatory effects
- Steroids: Stigmasterol, Campesterol

- Others: Coumarins, carbohydrates, proteins, and amino acid

## Therapeutic Effect:

- Antimicrobial: Effective against *E. coli*, *Staphylococcus aureus*, and *Candida albicans*
- Anticancer: Exhibits cytotoxic activity against certain cancer cell lines
- Anti-inflammatory: Reduces inflammation via inhibition of cytokines like TNF- $\alpha$
- Wound Healing: Promotes fibroblast activity and tissue regeneration
- Antioxidant: Scavenges free radicals, protects against oxidative stress
- Antidiabetic (potential): Some extracts show glucose-lowering effects in animal models
- Hepatoprotective: May protect liver cells from chemical-induced damage

## Marketed preparation:

- Herbal Extracts

- Used in Ayurvedic and Unani formulations
- Available as tinctures, decoctions, and standardized extracts
- Topical Creams/Ointments
  - For skin conditions like inflammation, wounds, and fungal infections
  - Often combined with other botanicals
- Traditional Remedies
  - Used in folk medicine for piles, leprosy, malaria, and ulcers
  - Leaf and bark decoctions used orally or topically
- Cosmetic Applications
  - Extracts used in skin-brightening and anti-aging formulations
  - Incorporated into natural soaps and lotions
- Limited Commercial Supplements
- Not widely available as standalone capsules or tablets
- Mostly used in compound herbal blends

**Key Constituents:** flavonoids, triterpenoids

**Uses:** ornamental indoor/outdoor tree; some traditional uses for coughs; primarily grown as an ornamental.