



SIGMA
UNIVERSITY[®]

Mango



Synonym:

Gujarati: Keri / Aambo

Hindi: Aam

English: Mango

Botanical name: *Mangifera indica*

Family: Anacardiaceae

Chemical Constituent:

- **Xanthones:** Mangiferin (major bioactive compound)
- **Flavonoids:** Quercetin, Kaempferol
- **Phenolic Compounds:** Gallic acid, Caffeic acid
- **Sterols:** β -sitosterol
- **Other Compounds:** Tannins, Saponins, Carotenoids, Vitamins (A, C, E)

Therapeutic Effect:

- **Antioxidant:** Protects against oxidative stress
- **Antidiabetic:** Mangiferin lowers blood glucose levels

- Hepatoprotective: Supports liver function
- Antimicrobial: Effective against bacteria and fungi
- Anti-inflammatory: Reduces swelling and pain
- Anticancer: Exhibits cytotoxic activity against tumor cells
- Immunomodulatory: Enhances immune response

Marketed preparation:

- Mangiferin Capsules/Tablets – used as antioxidant and antidiabetic supplements
- Mango Leaf Extracts – available in herbal formulations
- Ayurvedic Preparations – decoctions for diarrhea, dysentery, and liver disorders
- Fruit-based Nutraceuticals – juices, powders, and concentrates rich in polyphenols

Key Constituents:

- Mangiferin – antioxidant, antidiabetic, anticancer
- Quercetin – anti-inflammatory, antimicrobial

- β -sitosterol – hypoglycemic, cholesterol-lowering
- Polyphenols & Carotenoids – antioxidant and protective

Uses:

- Medicinal:
 - Diabetes management
 - Liver protection
 - Diarrhea and dysentery treatment
 - Antioxidant and anticancer support
- Nutritional:
 - Rich source of vitamins, minerals, and dietary fiber
- Cosmetic:
 - Used in skin-care formulations for anti-aging and UV protection
- Traditional:
- Leaves used in rituals and medicinal decoctions

- Bark used for astringent properties