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**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:**  $\beta$ -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

- $\beta$ -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