



**SIGMA**  
**UNIVERSITY**

**Neem**



## **Synonym:**

Gujarati: Limbdo

Hindi: Neem / Nimb

English: Neem / Indian Lilac

**Botanical name:** Azadirachta indica

**Family:** Meliaceae

## **Chemical Constituent:**

- Limonoids: Azadirachtin, Nimbin, Nimbidin
- Flavonoids: Quercetin
- Sterols:  $\beta$ -sitosterol
- Other Compounds: Gedunin, Salannin, Tannins, Glycoside

## **Therapeutic Effect:**

- **Antimicrobial:** Strong antibacterial, antifungal, and antiviral activity
- **Antidiabetic:** Helps regulate blood glucose levels

- **Anti-inflammatory:** Reduces swelling and pain
- **Skin Care:** Effective in acne, eczema, psoriasis, and wound healing
- **Dental Care:** Used in toothpaste and mouth rinses for oral hygiene
- **Insecticidal:** Natural pesticide for agriculture

## **Marketed preparation:**

- Neem Oil: Used for skin, hair, and agricultural purposes
- Neem Capsules/Tablets: For blood purification and immunity
- Neem Powder: For skin disorders and digestive health
- Ayurvedic Formulations: Neem churna, creams, and herbal soaps

## **Key Constituents:**

- Azadirachtin – insecticidal and antimicrobial

- Nimbacin & Nimbidin – anti-inflammatory and antifungal
- Quercetin – antioxidant and antibacterial
- Gedunin – antimalarial properties

## Uses:

- Medicinal:
  - Treats skin diseases (eczema, acne, psoriasis)
  - Controls diabetes and boosts immunity
  - Oral hygiene (toothpaste, chewing twigs)
- Agricultural:
  - Natural pesticide and soil enhancer
- Cosmetic:
  - Used in shampoos, creams, and soaps
- Traditional:
  - Neem twigs used as toothbrushes
  - Neem leaves used in rituals and fumigation

