



SIGMA[®]
UNIVERSITY

Karanj



Synonym:

Gujarati: Karanj

Hindi: Karanj / Karanja

English: Indian Beech Tree

Botanical name: *Pongamia pinnata*

Family: Fabaceae (Leguminosae)

Chemical Constituent:

- **Flavonoids:** Pongamol, Karanjin, Glabrin
- **Fixed Oils:** Rich in fatty acids (oleic, linoleic, palmitic)
- **Other Compounds:** Sterols, tannins, glycosides

Therapeutic Effect:

- Skin Disorders: Effective in eczema, psoriasis, leprosy, and ulcers
- Antimicrobial: Strong antibacterial and antifungal properties
- Anti-inflammatory: Reduces swelling and irritation
- Wound Healing: Promotes tissue regeneration

- Insecticidal: Used in organic farming as a natural pesticide

Marketed preparation:

- **Karanj Oil (Pongamia Oil):** Widely available for topical use in skin conditions
- **Ayurvedic Formulations:** Used in ointments, creams, and herbal pest repellents
- **Agricultural Use:** Bio-pesticide and soil enhancer

Key Constituents:

- **Karanjin** – bioactive flavonoid with insecticidal and medicinal properties
- **Pongamol** – antioxidant and antimicrobial
- **Fatty Acids** – nourishing and protective for skin

Uses:

- Medicinal

- Treats skin diseases (eczema, scabies, leprosy)
- Heals wounds and ulcers
- Acts as an anti-inflammatory and analgesic
- Agricultural:
 - Natural pesticide and fertilizer
- Traditional:
 - Twigs used as toothbrushes
 - Oil used in lamps and soaps