

**Institute of Professional Studies College of Pharmacy** 

**Medicinal Garden** 

# Pongamia pinnata (Karanj)

Pongamia pinnata is a medium size (of height 12 to 15 meter), glabrous, perennial tree.

#### **Classification:**

Kingdom: Plantae Order: Fabales Family: Leguminoseae

Genus: Pongamia

Species: pinnata





## **Geographical distribution**

*Pongamia pinnata* probably originated from India and occurs naturally or naturalised from Pakistan, India and Sri Lanka throughout Southeast Asia to north-eastern Australia, Fiji and Japan.

## **Phytochemicals**

Plant part	Phytochemical Present
Seed	glabrin; furanoflavones (e.g. karanjin, pongapin, kanjone, pongagalabrone, diketone, pongamol, and pinnatin); flanone derivatives (e.g. pongol); flavanoids (e.g. glabrachalcone isopongachromene); and essential oils
Bark	Phenylpropanoids
Fruit	furaflavanoids (e.g. pongapinnol A-D, coumestan, and pongacoumestan), furaflavanoid
	glucosides (e.g. pongamosides A-C); flavanol glucoside (e.g. pongamoside D)

#### **Medicinal uses**

- The extracts from the leaves, bark and seeds are applied locally in cases of rheumatism.
- The seed has anti-inflammatory properties and used to treat various skin conditions.
- The seed oil in particular has been prescribed in the treatment of dermatitis, eczema, scabies, sores and herpes.
- The leaves of *P. pinnata* are considered carminative and antidiarrhoeal and traditionally used in the treatment of flatulence, diarrhoea and dysentery.
- It is also applied on the chest to treat pneumonia, cold and chest pains, and applied locally for rheumatic disease and muscular atrophy.
- The seed oil is used as a laxative for the expulsion of intestinal parasites and as an ingredient for hair oil given to treat alopecia.
- The fruit had been advocated for used in the treatment of urinary and vaginal discharges.
- The root is used as a remedy for foul ulcers.
- The leaves together with the seeds are used to treat leprotic and the rind of the pod and the seed together is given to patients with whooping cough and bronchitis.
- Antiulcerogenic activity