

# Species Datasheet

Datasheet No. A-140.019.001  
(family.genus.species)

DBT- Network Programme

## 1. Taxon:

Species: *Pongamia pinnata* (L.) Pierre

Subspecies:

Variety:

Cultivar:

Hybrid:

Image file

**2. Synonyms:** *Cajum pinnatum* (L.) Kuntze, *Cytisus pinnatus* L., *Dalbergia arborea* Willd., *Derris indica* (Lam.) Benn., *Galedupa indica* Lam., *G. pinnata* (L.) Taub., *G. pungum* J.G.Gmel., *Millettia novo-guineensis* Kaneh. & Hatus., *M. pinnata* (L.) Panigrahi, *Pongamia glabra* Vent., *P. glabra* var. *xerocarpa* (Hassk.) Prain, *P. mitis* (L.) Kurz, *P. mitis* var. *xerocarpa* (Hassk.) Merr., *P. pinnata* var. *xerocarpa* (Hassk.) Alston, *P. xerocarpa* Hassk., *Pterocarpus flavus* Lour., *Robinia mitis* L.

## 3. Systematic Position:

### APG IV (2016)

- Kingdom: Plantae
- Clade: Angiosperms
- Clade: Eudicots
- Clade: Rosids
- Order: Fabales
- Family: Fabaceae
- Genus: *Pongamia*
- Species: *P. pinnata* (L.) Pierre

### Bentham and Hooker (1862)

Kingdom: Plantae  
Division: Phanerogamia  
Class: Dicotyledons  
Subclass: Polypetalae  
Series: Calyciflorae  
Cohors: Rosales Bercht. & J. Presl  
Ordo: Leguminosae Juss.  
Subordo: Papilionaceae Giseke  
Genus: *Pongamia* Vent.  
Species: *P. pinnata* (L.) Pierre

## 4. Distribution:

**Global:** Australia, Bangladesh, Bismarck Archipelago, Brunei, Caribbean, China, Djibouti, Egypt, Fiji, Florida, Fujian, Guangdong, Hainan, India, Indonesia, Irian Jaya, Japan, Java, Kalimantan, Lesser Sunda Is, Malaysia, Myanmar, Ngl, Nicaragua, Northern Mariana, Ogasawara-Shoto, Pakistan, Papua New Guinea, Peninsular Malaysia, Philippines, Ryukyu Is, Sabah, Samoa, Singapore, Sri Lanka, Sudan, Sumatra, Taiwan, Tanzania, Thailand, Uganda, United States, Vietnam, Zaire

**India:** Andaman Island, Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Christmas, Dadra-Nagar-Haveli, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu-Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Mauritius, Meghalaya, Mizoram, Nagaland, Nicobar Island, Orissa, Pondicherry, Punjab, Rajasthan, Reunion, Rodrigues, Seychelles, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh, West Bengal

## 5. Indigenous/Exotic/Endemic; Cultivated/Wild: Wild

## 6. Threat Status:

IUCN: Least Concern

BSI:

**7. Habit and Habitat:** Tree. *P. pinnata* is found in coastal areas, often along beaches or river banks

**8. Life Form:** Phanerophytes

**9. Economic Importance:** Medicinal. Green manure. Fuel

**10. Probable Progenitor of:**

**11. DNA**

**C-value Methodology**

2C (2.51 pg)

Flow Cytometry<sup>1</sup>

2C (2.66 pg)

Flow Cytometry<sup>2</sup>

**12. Basic chromosome number(s):**  $x=11^{2,3,4}$

**13. Zygotic chromosome number(s):**  $2n=22^{2,3,4,5,6,7}$ ,  $2n=20^8$

**14. Gametic chromosome number(s):**  $n=11^{3,4,9,10}$

**15. Specialized chromosomes (B chromosomes/Sex chromosomes/Polytene chromosomes/Neocentric chromosomes):**

Image file

**16. Ploidy level:**

Image file

**17. Agamete ploidy:**

**18. Nature of polyploidy (auto, segmental, allo, autoallo):**

**19. Genomic formula:**

**20. Aberrant chromosome number(s) (aneuploidy, aneusomy, polysomy):**

**21. Somatic chromosomes:** <sup>3,4</sup>

**Karyotype** Majority metacentric chromosomes

**Chromosome size**

**NOR chromosome(s)**

**Degree of asymmetry** Symmetrical

Image file

**22. Banding pattern(s):**

Image file

**23. Physical mapping of chromosomes:**

**In situ hybridization**

Image file

**Fluorescent in situ hybridization**

Image file

**24. Genomic in situ hybridization:**

Image file

**25. Linkage map:**

Image file

**26. Chromosome associations:**

**Female meiosis**

**Male meiosis:** 11II<sup>4</sup>

Image file

**27. Chromosome distribution at anaphase I:** 11:11<sup>4</sup>

**28. Genetic diversity:**

**Chromosomal level**

Image file

**DNA level:** 11-15

**29. Any other information (Apomixis; Inversion; Male sterility; Pollen grain mitosis; Pollen stainability; Translocations etc.):**