

## Jacaranda mimosifolia

D. Don

Bignoniaceae

### LOCAL NAMES

Amharic (yetebmenja zaf); Creole (jakaranda, flabwayan ble); English (mimosa-leaved jacaranda, jacaranda, Brazilian rose wood); French (flambouyant bleu); Spanish (tarco, jacarandá, gualanolay, flamboyán azul); Tigrigna (palasandro)

### BOTANIC DESCRIPTION

Jacaranda mimosifolia is a deciduous tree up to 20 m in height with spreading branches making a light crown. Bark pale brown and furrowed, transverse cracks dividing the ridges between the furrows into long, narrow scales. The bole almost always short and malformed, and up to 40-50 cm in diameter.

Leaves compound and feathery on a stalk to 40 cm; up to 30 pairs of pinnae bearing small, pointed leaflets.

Flowers striking blue-violet, in clusters, each flower bell shaped, to 4 cm, usually on the bare tree before leaf growth.

Fruit a rounded woody capsule to 7 cm across with a wavy edge, brown-black when mature, splitting on the tree to set free many light-winged seeds. Capsules may hang on the tree for up to 2 years.

The generic name is a latinized form of an aboriginal name used in Brazil.

### BIOLOGY

In Puerto Rico, flowering is from early spring to June, the fruit maturing in spring and early summer. In northern India, the tree flowers from March to April. Ninety-nine per cent of flowers open in the early hours of the morning between 5 and 7 a.m. The tree seeds annually beginning at 8-10 years old.



Flowers at Kula, Maui, Hawaii (Forest and Kim Starr)



Habit at Baldwin Ave, Maui, Hawaii (Forest and Kim Starr)



Seed at in car, Maui, Hawaii (Forest and Kim Starr)

ECOLOGY

J. mimosifolia prefers highland areas but can also grow in some drier ones. It is frost tender when young. A deep-rooted, greedy feeder so that few plants or crops can grow below it; therefore, best planted away from flowerbeds. Leaf fall is also considerable.

BIOPHYSICAL LIMITS

Altitude: 500-2400 m, Mean annual temperature: Approximately 20 deg. C, Mean annual rainfall: 900-1300 mm or more.

Soil type: Grows best on well-drained sandy loam soils, although it will also survive on poor shallow soils. It does not tolerate waterlogged or clay soils.

DOCUMENTED SPECIES DISTRIBUTION

Native: Argentina, Brazil

Exotic: Antigua and Barbuda, Australia, Bahamas, Barbados, Colombia, Costa Rica, Cuba, Cyprus, Dominica, Dominican Republic, El Salvador, Eritrea, Ethiopia, Fiji, French Guiana, Ghana, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, India, Jamaica, Kenya, Martinique, Montserrat, Netherlands Antilles, Nicaragua, Panama, Puerto Rico, South Africa, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Surinam, Tanzania, Trinidad and Tobago, Uganda, US, Venezuela, Virgin Islands (US), Zambia, Zimbabwe



The map above shows countries where the species has been planted. It does neither suggest that the species can be planted in every ecological zone within that country, nor that the species can not be planted in other countries than those depicted. Since some tree species are invasive, you need to follow biosafety procedures that apply to your planting site.

**PRODUCTS**

Apiculture: The relatively large flowers easily attract bees; therefore, it is suitable for bee forage.

Fuel: *J. mimosifolia* provides useful firewood.

Timber: The timber is yellowish-white, hard, moderately heavy, fine textured, easy to work, and is used for carpentry. Wood is light brown and soft; it is used for poles and for making small items such as tool handles and carvings. Note that the wood associated with the timber trade name 'jacaranda' does not come from this tree but from *Dalbergia nigra*.

Medicine: Bark and roots are used for syphilis. Leaves also used as a vulnerary.

**SERVICES**

Shade or shelter: The tree creates pleasant open shade and can be used effectively as a screen or as a windbreak.

Ornamental: *J. mimosifolia* is widely grown throughout the highland tropics. When trees are not in flower, the finely cut foliage is also attractive, especially at close range.

**TREE MANAGEMENT**

The plants need weeding for about 2 years after transplanting. Young trees should be staked until well rooted. They require regular watering. Very fast growing on good sites; up to 3 m/yr in height in the first 2 years and over 1 m/yr over the first 9 years. Established plants respond well to coppicing. If used as an ornamental roadside tree, wide spacing (over 5 m) is advisable. It is a light demander, and to flower prolifically it needs to be grown in the open.

**GERMPLASM MANAGEMENT**

Orthodox seed storage behaviour; viability is maintained for at least 12 months in open storage at room temperature. Seeds tolerate desiccation to moisture content in equilibrium with 15% rh at 25 deg. C, no loss in viability in subsequent storage in liquid nitrogen at -20 deg. C. There are about 59 000 seeds/kg.

**FURTHER READING**

- Bein E. 1996. Useful trees and shrubs in Eritrea. Regional Soil Conservation Unit (RSCU), Nairobi, Kenya.
- Bekele-Tesemma A, Birnie A, Tengnas B. 1993. Useful trees and shrubs for Ethiopia. Regional Soil Conservation Unit (RSCU), Swedish International Development Authority (SIDA).
- Birnie A. 1997. What tree is that? A beginner's guide to 40 trees in Kenya. Jacaranda designs Ltd.
- Coates-Palgrave K. 1988. Trees of southern Africa. C.S. Struik Publishers Cape Town.
- Hong TD, Linington S, Ellis RH. 1996. Seed storage behaviour: a compendium. Handbooks for Genebanks: No. 4. IPGRI.
- ICRAF. 1992. A selection of useful trees and shrubs for Kenya: Notes on their identification, propagation and management for use by farming and pastoral communities. ICRAF.
- Katende AB et al. 1995. Useful trees and shrubs for Uganda. Identification, Propagation and Management for Agricultural and Pastoral Communities. Regional Soil Conservation Unit (RSCU), Swedish International Development Authority (SIDA).
- Lanzara P. and Pizzetti M. 1978. Simon & Schuster's Guide to Trees. New York: Simon and Schuster
- Luna RK. 1996. Plantation trees. International Book Distributors, Dehra Dun, India.
- Mbuya LP et al. 1994. Useful trees and shrubs for Tanzania: Identification, Propagation and Management for Agricultural and Pastoral Communities. Regional Soil Conservation Unit (RSCU), Swedish International Development Authority (SIDA).
- Noad T, Birnie A. 1989. Trees of Kenya. General Printers, Nairobi.
- Storrs AEG. 1995. Know your trees: some common trees found in Zambia. Regional Soil Conservation Unit (RSCU).
- Streets RJ. 1962. Exotic forest trees in the British Commonwealth. Clarendon Press, Oxford.
- Trees of Village Forestry 1983. Ministry of Natural Resources and Tourism. Division of Forestry, Dar es Salaam.

**SUGGESTED CITATION**

Orwa C, Mutua A, Kindt R, Jamnadass R, Simons A. 2009. Agroforestry Database: a tree reference and selection guide version 4.0 (<http://www.worldagroforestry.org/af/treedb/>)