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, United States of America, 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.

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SUGGESTED CITATION

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