

Tabebuia impetiginosa (Mart.) Standl.^{1/}

SYNONYMS

Tecoma impetiginosa Mart (1845)

Tebebuia impetiginosa (Mart. ex DC.) Tol. (1952)

FAMILY

Bignoniaceae

VERNACULAR NAMES

Pau d'arco, ipê-roxo, pau d'arco-roxo, ipê-una,
ipê-preto, pau d'arco-rosa.

BOTANICAL DESCRIPTION

General

A tree which reaches 8 to 10 meters in height when isolated; in the forest it reaches a height up to 30m with a 100 cm diameter. The crown is long and irregular, always reaching the dominant stratum; the trunk is generally straight.

Inflorescence

In clusters of ordinate triads in sub-umbellate panicles the axes branch out dichotomously, and are thick and heavily covered with a yellow-white layer which also covers the pedicels and the calyx; bracts yellow-pilose, generally deciduous; calyx, bellshaped, scaly, tomentose, 5 to 8 mm in length; corolla pink-violet, 6 to 7 cm in length; ovary elliptical, 3 to 5 mm in length.

Flowering begins in September; or earlier in July to August. Fructification occurs in September.

^{1/} Based on the work of I.E.Pires and C.E.S.Nascimento, EMBRAPA/CPATSA 23, Petrolina, PE, Brazil.

Fruit

A long linear, coriaceous, pointed, capsule measuring 25 to 30 cm in length and 15 to 20 mm in width.

Foliage

The leaves are opposite, digitate, large, with 5 pubescent folioles; coriaceous, oblong-ovate, with a rounded base and shortly wedged apex, margin entire, somewhat pubescent; lateral ribs 6 to 10 mm apart, measuring 8 to 22 mm in length and 4 to 12 in width.

Bark

2 to 3 cm in thickness, rigid, dark brown on the outside and inside, with lengthwise furrows and transverse fissures, with no detaching plaques. The bark is bitter, astringent and mucilaginous.

WOOD PROPERTIES AND PRODUCTS

Light brown to dark greyish-brown in colour, very heavy and hard, resistant to adverse conditions; the sapwood is light brown. The specific gravity is 1.083.

Wood is used for carved pieces, construction, hydraulic projects, sleepers, fence posts, pillars, etc.

NATURAL DISTRIBUTION

It grows from Piauí to São Paulo, and is found in the region of "Cariri" in Ceará and on the "cerrados" of central Brazil.

CLIMATE

This tree grows from a humid sub-tropical climate, with periodical rains, to an arid tropical climate subject to prolonged dry periods of up to 12 months.

SOILS

The tree has a preference for deeper aluvial soils in gallery forests, ridges and tablelands; it is rarely found in shallow rocky soils.

HABITAT

In Ceará and Rio de Janeiro it is found in the rain forest, while in Minas Gerais it is found in forest, as well as on pasture land, as solitary trees. There exists no pure natural stands and it is usually found among other species such as Astronium sp., Anadenanthera sp. and Torresia sp., etc.

SEED HANDLING

The seeds are winged and easily dispersed by the wind. This requires care in collecting them before the fruits open. When stored in the open germination percentage is reduced by 30% within 6 months. However, when stored in cold chambers, the germination percentage is maintained above 70% up to 7 months. Germination takes place during a period of 15 days.

SILVICULTURE

This species is normally not cultivated on a commercial scale but is frequently grown as an ornamental tree (for parks and avenues). Its growth in pure stands is slow, but satisfactory when compared to the majority of native species. It presents a high survival rate even in regions where there is a high water deficit e.g. in Petrolina - PE.

STATUS

The species is suffering a slow decline.

PROTECTIVE MEASURES TAKEN

No measures have been taken at present neither for ex situ nor in situ conservation. The studies underway on this species are limited to studying the behaviour of trees in pure stands. In situ preservation is highly recommended. Studies of the reproductive system and the establishment of base populations is also recommended, to preserve the genetic variation and to provide reproduction material.

SELECTED BIBLIOGRAPHY

- Braga, R. 1976 Plantas do nordeste, especialmente do Ceara. 3.ed. Mossoro, Escola Superior de Agricultura. 540 p.
- Brune, A. 1975 Preservação das reservas genéticas de árvores nativas brasileiras. Brasil florestal, Rio de Janeiro, (24): 19-21.
- Brune, A. 1981 Implantação de populações base de espécies florestais. Documentos EMBRAPA/URPFCS, Curitiba: 1-9.
- Correa, M.P. 1974 Dicionário das plantas úteis do Brasil e das exóticas cultivadas. Rio de Janeiro, IBDF. v. 5 385 p.
- Gofari, L. & Caser, R.L. 1977 Zoneamento ecológico da região nordeste para experimentação florestal. Série técnica. PRODEPEF, Belo Horizonte, (10): 116 p.
- Golfari, L.; Caser, R.L. & Moura, V.P.G. 1978 Zoenamento ecológico esquemático para reflorestamento no Brasil. Série técnica. PRODEPEF, Belo Horizonte, (11): 66 p.
- Lima, P.C.F.; Souza, S.M.de & Drumond, M.A. 1982 Competição de espécies florestais nativas em Petrolina - PE. Silvicultura em São Paulo, São Paulo, 16A (parte 2): 1139-48
- Rizzini, C.T. 1971 Árvores e madeiras úteis do Brasil: Manual de dendrologia brasileira. São Paulo, Edgard Blucher. 294 p.
- Souza, S.M.de; Pires, I.E. & Lima, P.C.F. 1980 Influência da embalagem e condições de armazenamento na longevidade de sementes florestais. Boletim de pesquisa. EMBRAPA/CPATSA, Petrolina, (2): 15-24.
- Tigre, C.B. 1976 Estudos de silvicultura especializada no nordeste. Mossoro. Escola Superior de Agricultura. 176 p.