Mimosa verrucosa Benth.[1/]

SYNONYMS

Pithecolobium diversifolium Benth. (1844)
Pithecolobium foliosum Benth. (1844)

FAMILY

Leguminosae Subfam. Mimosoideae

VERNACULAR NAMES

Jurema branca, jurema de oieiras

BOTANICAL DESCRIPTION

General

A bush tree with a height of 2 to 5 meters, with stem that is generally multiple; bark dark impregnated with thorns, with verrucose and tomentose branches. Crown relatively dense, providing 90% shade in the winter, and approximately 50% in the summer. Rapid growth.

Inflorescence

A spike of c. six flowers, each with four sepals, four petals and eight stamens. Calyx 1 mm in length, corolla c. 3mm, tomentose, whitish or pink in colour; stamens 10-12 mm long; ovary sessile with long hairs. flowering occurs from October to December.

Fruit

A small, thin, tegumented pod, articulated and spirally shaped, 10 cm or more in length, single.

1/ Based on the work of I.E.Pires and C.E.Nascimento, EMBRAPA/CPATA, P.O. Box 23, Petrolina, PE,Brazil.

Foliage

Leaves with 7 to 9 pinnae, each one with 10 to 12 pairs of folioles; petiole winged, 7.5 cm in length stipulate; dilated at the base. Folioles 4 to 6 mm long by 3 to 4 mm wide, ovate or oblong, oblique, obtuse and coarse.

Bark

Dark, with rigid thorns; smooth, greyish in colour, with lengthwise open stripes; has sedative, narcotic, astringent and bitter properties.

WOOD PROPERTIES AND PRODUCTS

Little is known about the wood characteristics. It is stated that it has great durability when in contact with the soil.

Used for stakes, fuel and charcoal.

NATURAL DISTRIBUTION

Occurs in the "caatinga", more commonly in the "Sertão" of Paraiba on midslopes. It is also found on the "Sertão" of Ceará and on the "Sertão" of Pernambuco and Rio Grande do Norte.

CLIMATE

The climate of the areas where the "Jurema" grows vary from sub-humid tropical to semi-arid tropical or arid, with a dry period of 6 to 12 months and a water deficit reaching 1 300 mm.

SOIL

The "Sertão" species prefers tableland soils.

HABITAT

The species is common in hills, with tableland soils, and on the humid midslopes. It is not as dominant as the Mimosa hostilis; it is always associates with the Bauhinia sp., and sometimes Anadenanthera sp.,Torresia sp. and Astronium sp.

SEED HANDLING

No studies have been carried out on seed technology. Seeds, when dispersed, germinate naturally within 5 days, if conditions are favourable. Direct sowing in clearings, soon before the rains commences is recommended.

SILVICULTURE

Enrichment plantings of natural forest through direct sowing and out-planting of seedlings are recommended; also through plantations.

STATUS AND REASONS FOR DECLINE

In view of the scarcity of wood in the arid and semi-arid regions of the Northeast, as well as in the Central and Southern regions of Brazil, each and every native forest species is subject to exploitation, especially those which produce timber for commercial purposes.

The species presented here is now suffering a slow decline. Till now the replacement of this species is by natural regeneration only.

PROTECTIVE MEASURES TAKEN AND RECOMMENDED

No measures have been taken at present, neither for bringing the species into cultivation nor for preserving the original gene pool. The studies underway on this species are limited to studying its behaviour in pure stands.

In-situ preservation is highly recommended. However, the fact that the geographical distribution of this species is widespread, along with the non-existence of homogeneous and/or continuous stands, means, that this would require very vast areas.

Studies of the reproductive system of this species and establishment of base populations are recommended, to preserve the original genetic variation and to provide reproductive material.

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