

Jacaranda copaia (Aubl.) D. Don

V.M. NIETO and J. RODRIGUEZ
Corporacion Nacional de Investigacion of Forestal
Santafé de Bogotá, Colombia

BIGNONIACEAE (BIGNONIA FAMILY)

Bignonia copaia (Aubl), *Jacaranda copaia* var. *paraensis* Huber

Cedro blanco, chingale, gualanday, pavito, vainillo

Jacaranda copaia is a fast-growing tree 30 m in height and 20 cm d.b.h.; its leaves grow in terminal bundles, erect on top of the crown. The tree grows without much demand for nutrients on flat grounds and hillsides that are moderately to well drained. The species tolerates temporary floods, soils having a sandy-clayey to loose muddy texture and an acid to slightly acid pH. Its growth is delayed in very shallow soils. It adapts to multiple environmental conditions, growing naturally in areas with a marked dry season and in regions, such as the South Pacific, where there is no hydric deficit. In Colombia, it is found from sea level to 1000 m. It grows in areas with an average temperature of 25 °C and an annual precipitation ranging from 600 to 3000 mm. It grows in formations of the wet and very wet Tropical forest (bh/mh-T) (Venegas 1978). It is a pioneer and colonizing species.

Because the wood of *J. copaia* is easy to finish and work and has a good grain, it is used for decorative boards. It is also used for particleboard, beams, furniture, round arches, pulp, coffins, pencils, matches, crating, musical instruments, toys, and broomsticks (Escobar and Rodriguez 1993). When preserved it can be used for fenceposts. The sap is used as adhesive, varnish, and insect repellent. Because the tree is resistant to fire and termites, it can be used to improve soils.

The pale purple flowers appear at the beginning of sum-

mer; the fruit ripens before winter so the seeds can be scattered by the wind.

Seeds can be stored up to 2 months in plastic bags at a moisture content less than 8 percent and a temperature of 4 °C. A fungicide should be applied to the seeds before storage. Pregermination treatment consists of submerging the seeds in running water for 1 day. Seeds germinate in 5 to 20 days.

About 25,000 plantules are obtained from 1 kg of seeds in nurseries. The recommended substrate consists of two parts sand and one part soil, which must be disinfected before planting the seeds. A substrate of humus with loose texture is used in seedbeds to facilitate germination. Once the seedbed is disinfected with formol or hot water, the seed is planted at a depth no greater than 1 cm and covered with very fine soil.

When the first pair of real leaves are completely developed (1 month after germination), the plantule is transplanted to a coffee bag. The substrate in the bag must be rich in nutrients and have a loose texture. Three months later, plantules approximately 30 cm in height are ready to be outplanted. The ground must be completely cleaned to allow tracing and digging. Soils that are trampled should be plowed or dibbled with holes (Trujillo 1983, Universidad Nacional de Colombia 1988). The recommended planting distance is 3 to 4 m, depending on the type of soil and on the proposed commercial products to be obtained by thinning.

