Tabebuia guayacan (Seem.) Hemsl.

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BIGNONIACEAE (BIGNONIA FAMILY)

Tecoma guayacan Seem

Cortez, corteza, guayacán

Distributed from southern Mexico to Colombia, T*abebuia guayacan* is very abundant in Costa Rica and Panama.

Tabebuia guayacan is a fast-growing, medium-to-large tree that reaches 25 to 50 m in height and 40 to 60 cm d.b.h.; it sometimes grows to 2 m d.b.h. The trunk is straight and cylindrical with prominent stilt roots, and the apex crown is rounded. The bark, light tan or buff to gray-brown in color, is split by long, shallow, vertical furrows with the plates between furrows broken into scales. The twigs are subtetragonal and glabrous; the nodes have no interpetiolar glands or pseudostipules. Leaves are opposite and palmate with five to seven leaflets (usually five) and without stipules. The leaflets are lanceolate to ovate, acuminate and basally rounded to obtuse. The terminal leaflets are 9 to 30 cm long and 3.7 to 15.5 cm wide; the intermediate leaflet is 8 to 30 cm long and 2.8 to 15 cm wide; the lateral leaflets are 6 to 21.5 cm long and 2.1 to 10.7 cm wide. Leaflets are often partially divided if not completely divided into seven leaflets. The basal pair is smaller, entire (or serrulate in seedlings), membranaceous, minutely lepidote (at least beneath) and stellate-pubescent with multicellular trichomes in the axils of lateral nerves beneath. The species grows in the tropical moist forest, sometimes reaching the premontane wet forest. Even though the tree requires humid and warm climates for good growth, it prefers the soils with good drainage often found in hilly areas.

The wood of *T. guayacan* is considered extremely heavy with a specific gravity of 0.85. The sapwood is light orange when dry; heartwood is dark brown with some olive-green traces. The grains are very intercrossed in narrow bands, and the wood has a medium texture and poor luster. The figure consists of fine stripes in the radial surface, and the pores are primarily solitary and inconspicuous (Carpio 1992). The wood dries quickly with severe to moderate defects in the ends. It is difficult to work and preserve but has good natural durability. It is used for railway ties, heavy flooring, boats, furniture feet, agricultural tools, sport items, and dock pilings.

Tabebuia guayacan blooms primarily from late March to May; occasional individual blooms appear during the wet season (May through November). Inflorescence is a terminal panicle, the flowers in twos or threes on the branches, with caducous bracts. The flowers have a very faint odor, the calyx is campanulate, and the corolla is yellow with reddish penciling on the throat. The fruit is a linear-cylindrical capsule, 29 to 61 cm long, 1.0 to 2.9 cm wide, essentially glabrous, inconspicuously lepidote or thick-stellate pubescent. Seeds are 0.9 to 1.1 cm long and 3.5 to 4.0 cm wide; the wings are hyaline-membranaceous and sharply demarcated from the seed body. Seeds are released late in the dry season at the beginning of the wet season.

Information on propagating *T. guayacan* is nonexistent; however, some data about reproduction of related species is presented in the next section.

ADDITIONAL INFORMATION

The species can be recognized vegetatively by the stellate trichomes beneath the axils of the lateral nerves of an otherwise glabrous leaflet and by its tendency to have seven leaflets (Gentry 1973). It is closely related to *T. serratifolia* from South America, which has simple trichomes in the axils of the lateral nerves and longer trichomes inside the corolla tube. In Costa Rica the species is sometimes confused with *T. ochracea* subsp. *Necochrysantha*, which also has yellow flowers.

When *T. rosea* and *T. ochracea* subsp. *neochrysantha* seeds are immersed for 24 hours in water at room temperature, germination percentage improves (Trujillo 1996a). The seeds of *T. ochracea* subsp. *neochrysantha* when hermetically kept in plastic bags in a cool chamber at 5 °C maintain their viability for 3 to 6 months. When placed in glass containers kept at 18 °C, their viability can be maintained for 1 year. *Tabebuia rosea* seeds can remain viable for 2 years.


2cm
2cm