



**USDA Forest Service
Forest Products Laboratory
One Gifford Pinchot Drive
Madison, WI 53705-2398
(608) 231-9200**

Wood Technical Fact Sheet

Dialium guianense

Jutahy

Family: Leguminosae

Other Common Names: Guapaque (Mexico), Paleta (Guatemala, Honduras), Tamarindo montero (Nicaragua), Hauso (Panama), Tamarindo (Colombia), Cacho (Venezuela), Huitillo (Peru), Jatai-peba, Parajuba (Brazil).

Distribution: From southern Mexico through Central America to the Peruvian Amazon and Bahia and Matto Grosso, Brazil. In parts of its range the tree is very common on well-drained clay soils or sandy soils.

The Tree: Reaches a height of 115 ft with trunk diameters 24 to 30 in. above the narrow buttresses. Boles are cylindrical and clear to 50 ft.

The Wood:

General Characteristics: Heartwood uniform brown or reddish brown, becoming darker upon exposure; very distinct but not sharply demarcated from the thick whitish or yellowish sapwood. Luster medium; texture fine to medium; grain straight to interlocked; without distinctive odor or taste. Silica content reported to be as high as 1.83%.

Weight: Basic specific gravity (ovendry weight/green volume) 0.81 to 0.93; air- dry density 63 to 73 pcf.

Mechanical Properties: (First set of data based on 2-in. standard; second and third sets based on 2-cm standard.)

Moisture content Bending strength Modulus of elasticity Maximum crushing strength

(%) (Psi) (1,000 psi) (Psi)

12% (44) 24,400 2,920 NA

12% (71) 34,000 NA 15,700

Green (31) 23,800 3,070 11,000

15% 28,800 NA 13,900

Janka side hardness about 4,000 lb at 12% moisture content.

Drying and Shrinkage: The wood air-dries at a moderate to slow rate with a tendency to moderate surface and end checking; warp is reported to be slight to severe. Kiln schedule data not available. Shrinkage green to oven-dry: radial 5.3%; tangential 8.9%; volumetric 13.9%.

Working Properties: The wood is rated as very difficult to work because of its high density and high silica content. Specially tipped cutters are required to effectively saw or machine this wood. Torn grain is common.

Durability: The durability of this wood is reported to be high and with high resistance to insect attack.

Preservation: The wood is rated as difficult to treat.

Uses: Heavy construction, railway crossties, industrial flooring, turnery, vehicle framing.

Additional Reading: (31), (44), (71)