



Calophyllum brasiliense

Family: Guttiferae

Santa Maria

Jacareuba

Other Common Names: Bari, Leche de Maria (Mexico), Calaba (Panama), Aceite maria (Colombia), Edaballi, Kurahara (Guayana), Balsamaria (Bolivia), Guanandi, Jacareuba (Brazil).

Distribution: Grows throughout the West Indies and from Mexico southward through Central America and into northern South America. It is found on all types of soils-from wet, humid to very dry sites.

The Tree: When conditions are favorable, the tree attains a height of 100 to 150 ft with a long straight clear bole 3 to 6 ft in diameter; unbuttressed.

The Wood: General Characteristics: Heartwood varies in color from pink or yellowish pink to brick red or rich reddish brown; sapwood 1 to 2 in. wide, lighter in color and not always clearly differentiated from heartwood. Texture medium and fairly uniform; grain generally interlocked; luster rather low to medium; odor and taste not distinctive.

Weight: Basic specific gravity (ovendry weight/green volume) 0.51; air-dry density 39 pcf.

Mechanical Properties: (First set of values based on 2-in. standard, second set of values based on 2-cm standard.)

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green (75)	10,490	1,590	4,560
12%	14,640	1,830	6,910
Green (22)	11,100	1,470	5,490
12%	15,700	1,710	8,730

Janka side hardness 890 lb for green wood and 1,150 lb for dry. Forest Products Laboratory toughness average for green and dry material is 180 in.-lb (5/8-in. specimen).

Drying and Shrinkage: The wood is moderately difficult to air-season, drying rate varies considerably, warp is moderate to severe, surface checking is slight. Kiln schedule T2-D4 is

suggested for 4/4 stock and T2-D3 for 8/4. Shrinkage from green oven-dry: radial 4.6%; tangential 8.0%; volumetric 13.6%. Movement in service is rated as medium.

Working Properties: The wood is fairly easy to work and generally yields smooth surfaces on straight-grained material but generates torn and chipped grain when interlocked; rates below average in planing, turning, and boring. Rotary cutting of this species for veneer has not been satisfactory.

Durability: The heartwood is generally rated as durable to moderately durable with respect to decay resistance; rated as very susceptible to attack by dry-wood termites; not resistant to marine borers.

Preservation: Heartwood is very resistant to impregnation by non-pressure and pressure systems. Sapwood has good permeability if incised.

Uses: Widely used in the tropics for general construction, flooring, furniture, boat construction; a favored general utility timber.

Additional Reading: (22), (46), (75)

22. Farmer, R. H. (Editor). 1972. Handbook of hardwoods. H. M. Stationery Office, London.

46. Longwood, F. R. 1962. Present and potential commercial timbers of the Caribbean. Agriculture Handbook No. 207. U.S. Department of Agriculture.

75. Wangaard, F. F., W. L. Stern, and S. L. Goodrich. 1955. Properties and uses tropical woods, V. Tropical Woods No. 103:1-139.

From: Chudnoff, Martin. 1984. Tropical Timbers of the World. USDA Forest Service. Ag. Handbook No. 607.