

(608) 231-9200

Wood Technical Fact Sheet

Simarouba amara

Simarouba

Marupa

Family: Simaroubaceae

Other Common Names: Aceituno (Honduras, Nicaragua, Panama), Cedro blanco, Simaruba (Venezuela), Soemaroeba (Surinam), Caixeta, Marupa, Maruba (Brazil), Acajou blanc (Fr. Guiana).

Distribution: Northern South America from Venezuela and the Guianas to the Amazon region of Brazil, also in Trinidad and Tobago.

The Tree: A large unbuttressed tree reaching a height of 140 ft and diameters of 20 to 24 in. occasionally 36 in. Boles are straight, cylindrical, strongly tapered, frequently clear to 70 to 90 ft.

The Wood:

General Characteristics: Heartwood not differentiated from the whitish or straw-colored sapwood, with occasional oily streaks. Luster rather high; texture medium and uniform; grain usually straight; without odor but with a bitter quinine-like taste.

Weight: Basic specific gravity (ovendry weight/green volume) 0.38; air-dry density 27 pcf.

Mechanical Properties: (First set of data based on 2-in. standard, second set on the 1-in. standard.)

Moisture content Bending strength Modulus of elasticity Maximum crushing strength

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

Green (74) 6,310 1,140 2,970

12% 8,930 1,240 4,840

12% (24) 8,350 1,290 4,900

Janka side hardness 390 lb for green material and 440 lb at 12% moisture content. Forest Products Laboratory toughness average for green and dry material 66 in.-lb. (5/8-in. specimen).

Drying and Shrinkage: Reported to be easy to air-season, boards dry rapidly with little or no degrade. No information on kiln schedules available. Shrinkage from green to ovendry: radial 2.3%; tangential 5.0%; volumetric 8.0%.

Working Properties: The wood works easily and machines to a smooth clean surface. Freshly felled logs tend to split in sawing due to internal stresses. The wood is easy to finish and to glue.

Durability: Pure culture tests indicate the wood to be somewhat durable to a white-rot and brown-rot fungus; however, actual graveyard evaluations show the wood to be readily attacked by decay fungi and insects. The wood is also very susceptible to drywood termite attack and prone to blue stain.

Preservation: Absorption and penetration of wood preservatives are excellent using either a pressure-vacuum system or open-tank methods.

Uses: Interior construction, boxes and crates, furniture components, veneer and plywood, pattern making, millwork, particleboard and fiberboard.

Additional Reading: (24), (46), (72), (74)