



**USDA Forest Service
Forest Products Laboratory
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Wood Technical Fact Sheet

Vatairea spp.

Bitter Angelim

Faveira

Family: Leguminosae

Other Common Names: Amargoso (Honduras), Amargo amargo (Panama), Arisauru, Yaksaru (Guyana), Mora (Nicaragua), Gele Kabbes (Surinam), Angelim, Faveira (Brazil).

Distribution: Southern Mexico, southward along the Atlantic region of Central America, and through Venezuela to the Rio de Janeiro region of Brazil.

The Tree: Sometimes to a height of 125 ft with trunk diameters to 6 ft, commonly to 3 ft, boles have narrow high buttresses and may be clear for 70 ft.

The Wood:

General Characteristics: Heartwood yellow, becoming orange brown on exposure, striped with parenchyma, sometimes with oily appearance; distinct from the whitish, grayish or brownish-yellow sapwood. Luster variable; texture coarse to very coarse; grain straight to strongly interlocked; without distinctive odor but with bitter taste. Silica content of 0.2% is reported.

Weight: Basic specific gravity (ovendry weight/green volume) varies with species from 0.55 to 0.64; air-dry density 42 to 49 pcf.

Mechanical Properties: (2-in. standard)

Moisture content Bending strength Modulus of elasticity Maximum crushing strength

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

Green (25) 10,300 1,700 5,020

12% 14,600 1,790 6,950

12% (44) 17,200 2,340 NA

15% (34) 11,520 1,460 5,900

Janka side hardness for dry material 1,080 to 1,420 lb.

Drying and Shrinkage: The wood is reported to have a moderate air-drying rate with little or no drying defects. No data available on kiln schedules. Shrinkage green to oven-dry: radial 3.4%; tangential 7.4%; volumetric 8.6%.

Working Properties: Generally reported to be moderately good in machining characteristics but torn and raised grain in planing is common. Fine dust raised during working affects some operators.

Durability: Heartwood is rated as moderately durable to durable based on graveyard tests.

Preservation: Heartwood is reported to be very difficult to preserve, treatment of sapwood is good.

Uses: Construction work, flooring, general carpentry, railroad crossties.

Additional Reading: (25), (34), (44)