

INFORMATION LEAFLET
FOREIGN WOODS

Forest Products Laboratory,¹ Forest Service
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DEGAME, LEMONWOOD²
Calycophyllum candidissimum (Vahl.) DC.
Family: Rubiaceae



By

JEANNETTE M. KRYN, Forest Products Technologist
Division of Silvicultural Relations

Distribution and Habitat

There are five species of Calycophyllum³ distributed throughout the tropics, but only Calycophyllum candidissimum is well-known in the United States. It occurs in Cuba and from southern Mexico through Central America to Colombia and Venezuela (22).⁴ It seems to be most common on shaded hillsides, and in some areas it may form almost pure stands (8, 20, 21).

¹Maintained at Madison, Wis., in cooperation with the University of Wisconsin.

²Other woods called lemonwood are (15): Xymalos monospora Baill., family Monimiaceae of South Africa; Citrus limonia Osbeck of Honduras and C. limonum Risso of the East Indies, family, Rutaceae.

³The other species are:

Calycophyllum acreanum Ducke - Amazon Region

Calycophyllum multiflorum Gris. - Argentina, Paraguay, Brazil

Calycophyllum obovatum Ducke - Amazon Region

Calycophyllum spruceanum Benth. - Amazon Region.

⁴Underlined numbers in parentheses refer to the list of numbered references at the end of the article.

Other Common Names

Degame wood is also known by the following names (8, 10, 23, 29):

Alazano (Panama)	Guayabo colorado (Colombia)
Camarón (Mexico)	Madroño (Panama)
Dagame (Cuba)	Palo camarón (Mexico)
Degame lancewood (U.S.A.) ⁵	Salamo (Central America)

The Tree

Size

Degame may reach a height of 40 to 65 feet and a diameter of 8 to 24 inches. The bole may be straight, but it is often somewhat irregular or crooked (8, 13, 18, 21). It is commonly exported in the form of slender logs called degame spars (13, 18, 22, 24).

Bark

The bark is reddish gray or brown and shiny, shredding into short, narrow strips (18, 22).

Flowers

The white flowers grow in large terminal clusters (19, 22).

The Wood

Color

The heartwood is pale grayish yellow to brownish and sometimes variegated; not sharply demarcated from the wide, brownish white to colorless sapwood (13, 18, 22, 25).

⁵Other woods called lancewood are (15):

Acacia doratoxylon A. Cunn.; Leguminosae (Australia).

Amelanchier canadensis Medic.; Rosaceae (U.S.A.)

Dissiliaria baloghioides F.v.M.; Euphorbiaceae (W. Australia)

Oxandra lanceolata Baill.; Anonaceae (West Indies, Honduras,
tropical South America)

Eriostemon squameus Labi.; Rutaceae (Tasmania)

Rollinia multiflora St. Hil.; Anonaceae (Tropical South America)

Grain and Texture

The grain is usually straight but may be irregular; the texture is fine and uniform (8, 10, 22, 25).

Odor and Taste

The odor and taste are not distinctive.

Weight

Degame wood is heavy, with specific gravity (air dry) of 0.80 to 0.85 and a weight of 50 to 64 pounds per cubic foot (10, 22, 28). The average weight (air dry) at 15 percent moisture content is 51 pounds per cubic foot (5). A single log of another species, Palo blanco (*Calycophyllum multiflorum* Gris.) was tested at the Forest Products Laboratory in 1926-27 and found to have a specific gravity at oven-dry weight and green volume of 0.71 (9).

Mechanical Properties

The wood is described as hard, tough, strong, and resilient, and it is considered similar to lancewood (*Oxandra*) and hickory (*Carya*) (22). A similar species, pao mulato of Brazil (*Calycophyllum spruceanum*), with a specific gravity of 0.80 to 0.90 (air dry), had a resistance to compression of 741 kilograms per square centimeter (1), or approximately 10,000 pounds per square inch (parallel to grain).

Seasoning and Shrinkage

For kiln drying degame wood, schedule 2 of the British Forest Products Research Laboratory has been recommended (2).⁶ The U. S. Forest Products Laboratory schedule that appears to be the most applicable is T2 - B2 (26). Archery bow staves may be dried by the same schedule. Because of the tendency for such squares to warp, sticker spacing should be close, 12 to 15 inches; the stickers should be perfectly aligned; and the pile should be weighted down. Small quantities can be dried according to the suggestions given in another U. S. Forest Products Laboratory report, No. R1608 (19). The shrinkage in drying from green to oven-dry condition, in percent of the green dimension in palo blanco (*Calycophyllum multiflorum*) has been reported as follows: volumetric, 11.2; radial, 4.0; tangential, 6.8 (9).

⁶The British Forest Products Research Laboratory has noted that the seasoning properties of degame were derived from extremely limited data and the tentative schedule will probably require revision when more results are available.

Degame logs are said to be exported while still green, and when they reach their destination they are sawn through the middle to help control checking and to aid proper seasoning (13).

Resistance to Decay and Marine Borers

Degame is reported to be not very resistant to decay (22), but highly resistant to marine borers (8).

Working Characteristics

The wood works easily, turns and carves without difficulty, takes a high polish, does not split readily, and is characterized by dimensional stability (10, 22).

Uses

Degame wood is used locally for cart axles, agricultural implements, wheel spokes, tool handles, various turned articles, and the frames of buildings. In the United States it is used as a substitute for lancewood (Oxandra) principally for the manufacture of archery bows and fishing rods (10, 13, 18, 22, 25, 28).

Availability

Although it grows abundantly throughout Central America and neighboring areas, most of the degame entering the United States has in the past come from Cuba (22).

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