



Ocotea rubra

Family: Lauraceae

Determa

Red Louro

Other Common Names: Determa (Guyana), Wana, Wane (Surinam), Grignon rouge (French Guiana), Louro vermelho (Brazil).

Distribution: The Guianas, Trinidad, and the lower Amazon region of Brazil. Occasional to frequent on sandy or loamy soils in Guyana.

The Tree: Trees reach heights of 130 ft with diameters to 5 ft; usually 90 to 100 ft high with diameters of 2 to 3 ft; boles are generally basally swollen and clear 40 to 80 ft.

The Wood:

General Characteristics: Heartwood light reddish brown with a golden sheen; well-defined sapwood, narrow, dull gray or pale yellowish brown. Texture rather coarse; grain is interlocked to straight; quartersawn lumber is sometimes attractively figured; dry wood is without distinctive odor or taste.

Weight: Basic specific gravity (ovendry weight/green volume) 0.52 to 0.59; air-dry density 40 to 45 pcf.

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

Moisture content	Bending strength	Modulus of elasticity	Maximum crushing strength
(%)	(Psi)	(1,000 psi)	(Psi)
Green (74)	7,820	1,460	3,760
12%	10,470	1,820	5,800
Green (30)	10,300	1,450	5,150
15%	13,600	NA	7,150

Janka side hardness 520 lb for green material and 660 lb at 12% moisture content. Forest Products Laboratory toughness average for green and dry material is 75 in.-lb. (5/8-in. specimen). Amsler toughness 137 in.-lb at 15% moisture content (2-cm specimen).

Drying and Shrinkage: The wood is moderately difficult to air-season; drying at a moderate rate with slight checking and moderate warp. Kiln schedule T6-D2 is suggested for 4/4 stock and T3-D1 for 8/4; there is a tendency to warp and check in the kiln. Shrinkage green to oven-dry: radial 3.7%; tangential 7.6%; volumetric 10.4%.

Working Properties: Works readily with hand and machine tools with little dulling effect; reported to glue readily and polishes fairly well.

Durability: Heartwood is rated durable to very durable in resistance to attack by white-rot and durable to a brown rot; moderately resistant to dry-wood termites; is similar to teak in resistance to marine borers. Weathering characteristics are excellent and the wood is highly resistant to moisture absorption.

Preservation: The heartwood is not treatable.

Uses: Furniture, general construction, boat planking, tanks and cooperage, joinery, heavy marine construction, turnery, parquet flooring, veneer and plywood is also suggested.

Additional Reading: (10), (30), (46), (74)

- 10. British Guiana, Forestry Department. 1951. British Guiana timbers: Determination. Leaflet No. 7.
- 30. Instituto de Pesquisas Tecnológicas. 1956. Tabelas de resultados obtidos para madeiras nacionais. Bol. Inst. Pesqu. tec. São Paulo No. 31.
- 46. Longwood, F. R. 1962. Present and potential commercial timbers of the Caribbean. Agriculture Handbook No. 207. U.S. Department of Agriculture.
- 74. Wangaard, F. F., and A. F. Muschler. 1952. Properties and uses of tropical woods, III. Tropical Woods 98:1-190.

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