



Ocotea rodiaei

Family : Lauraceae

Demerara Greenheart

Other Common Names: Bibiru, Sipiri, Kevatuk (Guyana), Beeberoe, Demerara groenhart, Sapiroe (Surinam).

Distribution: Commercial quantities mostly in the north central portion of Guyana but also found in Surinam and in the Venezuelan Guiana. It has also been reported from the Maroni Region of western French Guiana and from northern Brazil.

The Tree: Grows to a height of 130 ft with diameters up to 40 in., commonly 16 to 24 in. in diameter with heights of 100 ft. Boles are cylindrical, straight, and clear for 50 to 75 ft with only moderate taper; usually basally swollen or with low buttresses.

The Wood:

General Characteristics: Heartwood varies from light to dark olive green or blackish often with intermingling of lighter and darker areas; not sharply defined from the pale yellow or greenish sapwood. Texture fine and uniform; grain straight to roey; lustrous; odorless and tasteless when dry.

Weight: Basic specific gravity (ovendry weight/green volume) 0.80 to 0.91; air- dry density 62 to 70 pcf.

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

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green (42)	20,300	2,310	9,770
12%	26,200	3,040	13,040
Green (40)	20,900	3,040	10,690
12%	25,500	3,700	13,040

Janka side hardness 1,880 lb for green material and 2,360 lb at 12% moisture content.

Drying and Shrinkage: The wood dries very slowly with a marked tendency to check and end split; however, warping is not serious and the total amount of degrade is not excessive. Lumber over 1 in. in thickness should be air-seasoned prior to kiln-drying. Kiln schedule T2-C2 is suggested for 4/4 stock and T2-C1 for 8/4. Shrinkage green to oven-dry: radial 8.8%; tangential 9.6%; volumetric 17.1%. Movement in service is rated medium.

Working Properties: Moderately difficult to work with hand or machine tools because of its density, dulls cutting edges rather quickly but finishes to a fine smooth lustrous surface. Turns easily and takes a high polish. A moderately good steam-bending wood. Gluing gives variable results.

Durability: The heartwood is rated highly resistant to attack by decay fungi and is also rated as highly resistant to attacks by marine borers but this may vary from one locality to another, particularly in brackish waters. Highly resistant to attack by dry-wood termites.

Preservation: Impermeable to preservative treatments.

Uses: Marine and ship construction, lock gates, docks, industrial flooring, vats, filter press plates, piling, heavy construction, turnery, specialty items (fishing rods, billiard cue butts).

Additional Reading: (22), (40), (42), (46)

22. Farmer, R. H. (Editor). 1972. Handbook of hardwoods. H. M. Stationery Office, London.
40. Kynoch, W., and N. A. Norton. 1938. Mechanical properties of certain tropical woods chiefly from South America. Univ. of Mich. School of Forestry and Conservation Bull. No. 7.
42. Lavers, G. M. 1969. The strength properties of timbers. For. Prod. Res. Bull. No. 50. 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.

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