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Wood Technology Transfer Fact Sheet

Diplotropis purpurea

Sucupira

Common Names: Botonallare, Peonia (Venezuela), Tatabu, Aramatta (Guyana), Zwarte kabbes (Surinam), Coeur dehors (French Guiana), Sapupira, Supupira, Sucupira (Brazil).

Distribution: Uplands of the Guianas and in Para and Amazonas in Brazil. Fairly common in and French Guiana, infrequent in Surinam and Guyana.

The Tree:

Commonly 90 to 100 ft in height and 16 to 24 in. in diameter, occasionally up to 40 in. The bole is usually straight, cylindrical, unbuttressed, and clear to lengths 60 to 70 ft.

The Wood:

General Characteristics: Freshly cut heartwood is generally chocolate brown turning to a lighter brown when dry, occasionally grayish brown, with fine lighter parenchyma stripes; sharply demarcated from whitish or yellowish sapwood. Texture coarse; grain usually straight to slightly interlocked or slightly wavy; luster medium to high and golden, often with a waxy without distinctive odor or taste.

Weight: specific gravity (ovendry weight/green volume) 0.78; air-dry density 58 pcf.

Mechanical Properties:(First set of values based on the 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 (73) 17,400 2,680 8,020

12% 20,560 2,870 12,140

12 (24) 20,900 3,140 12,300

Janka side hardness 1,980 lb for green material and 2,140 lb at 12% moisture content. Forest Products laboratory toughness average for green and dry material is 201 in.-lb. (5/8-in. specimen).

Drying and shrinkage: The wood is moderately difficult to air season and rapid drying results in some checking and warping. Considerable checking and warping will occur in kiln-drying unless a mild schedule is used; T7-B3 has been suggested for 4/4 stock. Shrinkage green to ovendry: radial 4.6%; tangential 7.0%; volumetric 11.8%.

Working properties: The wood is moderately difficult to work and resulting surfaces, especially in planing, are fair to poor due to the coarse texture and frequent grain irregularity. The wood turns well and takes a good finish if filler is first applied.

Durability: In laboratory evaluations, the heartwood is rated very durable in resistance to both white-rot and brown-rot fungi. Other evaluations rate the wood as moderately durable; highly resistant to attack by dry-wood termites; not resistant to marine borers.

Preservation: If there is good end-grain exposure, absorption and penetration of preserving solutions are adequate using either open-tank or pressure-vacuum systems.

Uses: Heavy construction work, boat building, flooring, furniture components, turnery, railroad crossties, and tool handles.

Additional Reading: (24), (46), (72), (73)

24. Food and Agriculture Organization. 1970. Estudio de preinversion para el desarrollo forestal de la Guyana Venezolana. lnforme final. Tomo III. Las madera del area del proyecto. FAO Report FAO/SF: 82 VEN 5. Rome.

46. Longwood, F. R. 1962. Present and potential commercial timbers of the Caribbean. Agriculture Handbook No. 207. U.S. Department of Agriculture.

72. Vink, A. T. 1965. Surinam timbers: A summary of available information with brief descriptions of the main species of Surinam. Surinam Forest Service, Paramaribo.

73. Wangaard, F. F., A. Koehler, and A. F. Muschler. 1954. Properties and uses of tropical woods, IV. Tropical Woods No. 99:1-187.

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