technology transfer *fact sheet*

Center for Wood Anatomy Research
USDA Forest Service • Forest Products Laboratory • One Gifford Pinchot Drive • Madison, Wisconsin 53705–2398

Vouacapoua american
Family: Leguminosae
Wacapou
Acapu

Other Common Names: Bruinhart (Surinam), Sarabebeballi (Guyana), Wacapou (French Guiana), Acapu (Brazil).

Distribution: Surinam, French Guiana, and the State of Para in Brazil. Occupies noninundated lands in upland forests.

The Tree: A canopy tree with small buttresses and usually a somewhat fluted lower trunk; bole clear to 50 to 75 ft; mostly not more than 24 in. in diameter but at times reaching 36 in.

The Wood:
General Characteristics: Heartwood dark brown or reddish brown, deepening upon exposure, figured with fine parenchyma lines; sharply demarcated from the nearly white sapwood. Luster medium to rather low; texture uniformly coarse; grain fairly straight to irregular; dry wood has no distinctive odor or taste.

Weight: Basic specific gravity (ovendry weight/green volume) 0.79; air-dry density 59 pcf.

Mechanical Properties: (2-in. standard)

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green (3)	15,850	2,620	9,170
12%	21,640	2,530	11,480

Janka side hardness for green material 1,610 lb, 1,730 lb at 12% moisture content. Forest Products Laboratory toughness average for green and dry material 203 in.-lb. (5/8-in. specimen).

Drying and Shrinkage: Moderately difficult to dry with slight warping in the form of cup and twist and slight checking. A modified T7-B3 schedule is used in Surinam for 4/4 stock. Shrinkage from green to ovendry: radial 4.9%; tangential 6.9%; volumetric 13.0%.

Working Properties: Moderately difficult to work because of density; machines to smooth surfaces, but there is some rough and torn grain in boring and mortising. Takes glue well.

Durability: Very durable in resistance to attack by a brown-rot and white-rot fungus, not attacked by dry-wood termites or other insects. Reports on resistance to marine borers are variable; good resistance is noted in Panama waters.

Preservation: Heartwood is highly resistant to moisture absorption and is probably not treatable.

Uses: Heavy construction, flooring (strip and parquet), interior trim, furniture, cabinetwork, paneling, railroad crossties.

Additional Reading:

1. Record, S. J. and Hess R. W. 1943. Timbers of the new world. Yale University Press. New Haven, CT.
2. Vink, A. T. 1965. Surinam timbers. 3rd Ed. Surinam Forest Service. Paramaribo, Surinam.
3. Wangaard, F. F., A. Koehler and A. F. Muschler. 1954. Properties and uses of tropical woods, IV. Tropical Woods 991-187.

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