



**USDA Forest Service
Forest Products Laboratory
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Wood Technical Fact Sheet

Goupia glabra

Kopie

Kabukalli

Family: Goupiaceae (Celastraceae)

Other Common Names: Saino, Sapino (Colombia), Kopi (Surinam), Kabukalli (Guyana), Goupie (French Guiana), Cupiuba (Brazil).

Distribution: Uplands of the lower Amazon, the Guianas, and the Serrania de San Lucas, Carare-Opon, Rio Cauca Valley, and other regions of Colombia.

The Tree: A large buttressed, semi-deciduous, canopy tree; grows to a height of 130 ft and with diameters to 36 in., but usually 20 to 24 in.

The Wood:

General Characteristics: Heartwood light reddish brown, darkening superficially upon exposure; distinct but not sharply demarcated from thick brownish or pinkish sapwood. Luster medium to rather high; texture medium to coarse; grain straight to interlocked; odor is fetid when fresh but dissipates upon drying though still apparent.

Weight: Basic specific gravity (ovendry weight/green volume) 0.72; air-dry density 54 pcf.

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

Moisture content Bending strength Modulus of elasticity Maximum crushing strength

(%) (Psi) (1,000 psi) (Psi)

Green (73) 11,480 1,810 6,170

12% 15,300 2,150 8,350

12% (24) 16,600 2,370 10,850

Green (48) 14,000 1,980 7,350

15% 17,600 NA 9,750

Janka side hardness about 1,400 lb for green material and 1,840 lb at 12% moisture content. Forest Products Laboratory toughness average for green and dry material is 132 in.-lb (5/8-in. specimen).

Drying and Shrinkage: Moderately difficult to air-season, dries at a moderate rate with only slight warping and checking. Kiln schedule T7-B3 is suggested for 4/4 stock. Shrinkage from green to oven-dry: radial 4.5%; tangential 8.0%; volumetric 12.6%.

Working Properties: It is rated fair to good in most operations but torn and chipped grain is common in planing because of interlocked grain. Coarser material requires filler to obtain a smooth finish.

Durability: Laboratory evaluations indicate good resistance to attack by both brown and white-rot fungi, but rated only slightly to moderately resistant to decay in field tests in Guyana. Resistant to dry-wood termite attack but has little resistance to marine borers.

Preservation: Heartwood is very resistant and sapwood is moderately resistant to preservation treatments using either open-tank or pressure-vacuum systems.

Uses: Heavy construction, industrial flooring, furniture components. A highly favored general purpose timber in the Guianas.

Additional Reading: (24), (48), (46), (73)