



*Stirculia rhinopetala*

**Family: Sterculiaceae**

**Brown Sterculia**

**Other Common Names:** Wwabima (Ghana), Lotofa (Ivory Coast), Aye (Nigeria).

**Distribution:** Lowland rain forests and savanna forests of Nigeria, Ghana, and Ivory Coast.

**The Tree:** Reaches a height of 90 to 120 ft; bole straight and cylindrical, clear to 70 ft; trunk diameters 2 to 4 ft; narrow buttresses extend to a height of 10 ft.

**The Wood:**

**General Characteristics:** Heartwood pale to deep reddish brown; sharply demarcated from the 2-in.-wide straw-colored sapwood. Texture rather coarse; grain straight to somewhat interlocked; slight bitter taste but no odor; numerous high rays produce an attractive figure when quartersawn.

**Weight:** Basic specific gravity (ovendry weight/green volume) about 0.64; air-dry density 50 pcf.

**Mechanical Properties:** (2-cm standard)

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green (9)	12,600	1,560	6,170
12%	21,000	2,040	10,100
12% (44)	21,300	NA	10,300

Janka side hardness 1,410 lb for green and 1,810 lb for dry material. Amsler toughness 292 in.-lb at 12% moisture content (2-cm specimen).

**Drying and Shrinkage:** Timber dries slowly, liable to severe degrade due to cupping, end checking, and collapse. Kiln schedule T2-C2 is suggested for 4/4 stock and T2-C1 for 8/4. Shrinkage green to 12% moisture content: radial 5.0%; tangential 9.5%. Movement in service is large.

**Working Properties:** Saws rather woolly with a tendency to spring, however works satisfactorily with hand and machine tools, tends to split on nailing, glues well, stains and polishes well but requires filler, has moderate steam-bending properties.

**Durability:** Heartwood has only moderate durability and is moderately resistant to termite attack; sapwood liable to stain and powder-post beetle attack.

**Preservation:** Heartwood is extremely resistant to preservative treatments; sapwood moderately resistant.

**Uses:** Heavy construction work where high durability is not required, tool handles, furniture components, flooring.

**Additional Reading:** (3), (9), (44)

3. Bolza, E., and W. G. Keating. 1972. African timbers-the properties, uses, and characteristics of 700 species. CSIRO. Div. of Build. Res., Melbourne, Australia.
9. Farmer, R. H. 1972. Handbook of hardwoods. H. M. Stationery Office. London.
44. Sallenave, P. 1955. Proprietes et mecaniques des bois tropicaux de l'union Francaise. Pub. Centre Tech. For. Trop. No. 8.

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