



Bombax spp.

Family: Bombacaceae

Bombax

Other Common Names: Alone, Ogoumalanga (Gabon), Msufi-mwitu, Mfume (Tanzania), Megu (Mozambique), Kapokier (Senegal).

Distribution: West Africa and extending eastward into Tanzania; found in savanna and secondary forests as well as dense rain forests.

The Tree: Height ranges 80 to 120 ft, bole straight and cylindrical; trunk diameters 4 to 6 ft., some species buttressed.

The Wood:

General Characteristics: Heartwood pale reddish brown, yellowish brown, or light brown with a purplish tint, sometimes with darker markings; sapwood whitish, not always sharply differentiated. Texture medium to coarse; grain usually straight; without luster; sometimes with gum veins.

Weight: Basic specific gravity (ovendry weight/green volume) about 0.40; air-dry density 30 pcf.

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

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green (4)	4,310	730	2,380
12%	6,790	880	4,460
12% (44)	10,800	1,050	5,400
12% (44)	6,300	NA	4,700

Janka side hardness 390 lb for green material and 400 lb for dry. Amsler toughness 94 to 111 in.-lb for dry material (2-cm specimen).

Drying and Shrinkage: Dries rapidly with severe cup, sometimes with collapse, honeycomb, and checking. A kiln schedule similar to T6-B3 has been suggested. Shrinkage green to ovendry: radial 4.9%; tangential 8.1%. Movement in service is rated as small.

Working Properties: Usually saws easily and works well with hand and machine tools but cutters must be kept sharp; glues and finishes well; easy to rotary peel veneers.

Durability: Heartwood perishable, not resistant to termite attack; sapwood vulnerable to powder-post beetle attack. Rapid extraction and conversion necessary to prevent deterioration from stain, decay, and insect attack.

Preservation: Heartwood moderately to extremely resistant to preservative treatment sapwood permeable.

Uses: Plywood core stock, blockboard, boxes and crates, furniture components.

Additional Reading: (3), (4), (44), (58)

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.

4. Bryce, J. M. 1966. The strength properties of Tanzania timbers. Util. Sec. For. Div. Tec. Note No. 35.

44. Sallenave, P. 1955. Proprietes et mecaniques des bois tropicaux de l'union Francaise. Pub. Centre Tech. For. Trop. No. 8.

58. Tanzania: Util. Div. For. Dep. 1966. Timbers of Tanganyika: *Bombax rhodognaphelon* (East African bombax, msufi-mwitu). Moshi.

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