



Alstonia congensis* and *A. boonei

Family: Apocynaceae

Alstonia

Other Common Names: Mujwa, Mujua (Uganda), Emien (Ivory Coast), Sindru (Ghana), Ahun, Awun (Nigeria), Bokuk, Kanja (Cameroon), Kaiwi, Kauwi (Sierra Leone).

Distribution: Widely distributed throughout West and Central Africa; abundant in humid forests of the Cameroons.

The Tree: Reaches a height of 130 ft, boles usually cylindrical and clear to 80 ft; trunk diameters 2 to 4 ft over a deeply fluted and buttressed base.

The Wood:

General Characteristics: Wood yellowish white with no distinction between sapwood and heartwood. Texture fine to medium; grain usually straight; luster low; without characteristic odor or taste. Large slit-like radial canals often occur at intervals of 1 to 3 ft.

Weight: Basic specific gravity (ovendry weight/green volume) 0.33; air-dry density 25 pcf.

Mechanical Properties: (2-cm standard)

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green (40)	5,220	930	2,920
12%	8,560	1,200	5,240
12% (44)	7,000	840	3,920

Janka side hardness 370 lb for green and 410 lb for dry material. Amsler toughness 50 in.-lb at 12% moisture content (2-cm specimen).

Drying and Shrinkage: Seasons rapidly with little or no degrade due to warping and checking. Kiln schedule T10-D4S is suggested for 4/4 stock and T8-D3S for 8/4. Shrinkage green to ovendry: radial 4.0%; tangential 5.4%; volumetric 12.4%. Movement in service is rated as small.

Working Properties: Works easily with both hand and machine tools and dresses to a smooth finish if sharp cutting edges are used. Glues and nails well; steam- bending properties are poor.

Durability: Wood is highly perishable and should be converted rapidly or given a chemical dip to prevent stain; liable to termite attack as well as powder-post beetle attack.

Preservation: Easily treated, absorptions over 30 pcf of preservative oils are reported using either open tank or pressure systems.

Uses: Light construction, plywood core stock, boxes and crates, joinery, furniture components.

Additional Reading: (3), (16), (40), (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.

16. France: Bois For. Trop. 1955. Douka (*Tieghemella africana*). Bois For. Trop. 42:37-40.

40. Lavers, G. M. 1967. The strength properties of timbers. For. Prod. Res. Bul. No. 50. 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.