



Cassipourea malosana

Family: Rhizophoraceae

Pillarwood

Other Common Names: Ndiri, Msengera, Fonzare (Tanzania), Musaisi (Kenya).

Distribution: A high mountain forest tree, 6,000 to 9,000 ft elevation in Uganda, Tanzania, and Kenya; also in Somalia and Ethiopia.

The Tree: Reaches a height of 90 to 110 ft; boles of 50 to 70 ft, straight, cylindrical, free of buttresses; trunk diameters 1 to 2 ft.

The Wood:

General Characteristics: Sapwood and heartwood not differentiated, whitish to light brown, often with purplish streaks associated with fungal attack. Texture fine and even; grain usually straight but with a slight to marked tendency to spiraling.

Weight: Basic specific gravity (ovendry weight/green volume) 0.59; air-dry density 47 pcf.

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

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green (40)	9,130	1,145	4,500
12%	19,200	1,670	8,900
Green (4)	11,700	1,650	4,850
12%	15,500	1,800	9,420

Janka side hardness 900 to 990 lb for green material and 1,250 to 1,650 lb for dry.

Drying and Shrinkage: Dries slowly and is subject to severe distortion, particularly twist, checking is slight. Kiln schedule T2-D4 is suggested for 4/4 stock and T2-D3 for 8/4 but degrade due to warp and end-checking should be expected. Shrinkage green to air-dry: radial 3.5%; tangential 8.0%. Movement in service is rated as medium.

Working Properties: Sawing of green timber is difficult because of a strong tendency to spring; rather easy to work dry wood with hand and machine tools, dressing to a smooth clean finish; suitable for turnery; somewhat troublesome to glue.

Durability: Classified as nondurable and not resistant to termite attack.

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

Uses: Flooring, turnery, tool handles.

Additional Reading: (3), (4), (40), (50)

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.

Bryce, J.M. 1967. The commercial timbers of Tanzania. Tanzanian For. Div. Util. Sec. Moshi.

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

40. Lavers, G.M. 1967. The strength properties of timbers. For. Prod. Res. Bull. No. 50. H.M. Stationery Office. London.

50. Tanzania: Util. Div. For. Dep. 1960. Timbers of Tanganyika: *Cassipourea malosana* (pillarwood). Moshi

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