



Cephalosphaera usambarensis

Family: Myristicaceae

Mtambara

Other Common Names: Mtambao (Tanzania).

Distribution: Occurs in isolated patches in evergreen rain forests of Tanzania, on steep mountain slopes at altitudes of 3,000 to 4,000 ft.

The Tree:

Commonly 150 ft or more in height; bole is straight, cylindrical, without flutes and usually without buttresses, 50 to 80 ft in length; trunk diameters 4 to 5 ft.

The Wood:

General Characteristics: Heartwood and sapwood not differentiated, light reddish brown. Texture medium; grain usually straight; without figure.

Weight: Basic specific gravity (ovendry weight/green volume) 0.48; air-dry density 37 pcf.

Mechanical Properties: (2-in. standard)

| Moisture content (%) | Bending strength (Psi) | Modulus of elasticity (1,000 psi) | Maximum crushing strength (Psi) |
|----------------------|------------------------|-----------------------------------|---------------------------------|
| 12%(5) | 13,500 | 2,450 | 6,430 |

Janka side hardness 740 lb for dry material.

Drying and Shrinkage: Air-dries slowly with little degrade but can be kiln dried rapidly with only moderate cup developing. Kiln schedule T10-D5S is suggested for 4/4 stock and T8-D4S for 8/4. Shrinkage green to 12% moisture content: radial 3.0% tangential 6.5%. Movement in service is rated as large.

Working Properties: Exceptionally easy to work with hand and machine tools and dresses to a good finish, nails easily and glues well, easy to peel into veneers.

Durability: The wood is vulnerable to attack by stain and decay fungi, liable to ambrosia beetle attack if extraction after felling is delayed.

Preservation: Both heartwood and sapwood are rated as moderately resistant to preservative treatments, though absorptions of over 20 pcf of preservative oil using a pressure treatment is reported.

Uses: Construction, joinery, furniture, boxes and crates, plywood, a general all-purpose utility wood.

Additional Reading: (3), (5), (9), (51)

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.
5. Bryce, J.M. 1967. The commercial timbers of Tanzania. Tanzanian For. Div. Util. Sec. Moshi
9. Farmer, R.H. 1972. Handbook of hardwoods. H.M. Stationery Office. London.
51. Tanzania: Util. Div. For. Dep. 1960. Timbers of Tanganyika: *Cephalosphaera usambarensis* (Tambara). Moshi

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