



Canarium schweinfurthii

Family: Burseraceae

African Canarium

Other Common Names: Abel (Cameroon), Aiele (Ivory Coast), Elemi (Nigeria), Bediwunua, Eyere (Ghana), Mwafu (Uganda).

Distribution: Widely distributed in East, Central, and West Africa.

The Tree: Reaches a height of 150 ft with a straight cylindrical bole to 90 ft, trunk diameters 4 to 5 ft over a slight buttress.

The Wood:

General Characteristics: Heartwood a light pinkish brown or light pinkish yellow; sapwood whitish or straw colored, wide, not clearly differentiated. Texture somewhat coarse; grain interlocked sometimes producing a very attractive roe figure; lustrous; pleasant characteristic scent, without taste.

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

Mechanical Properties: (2-cm standard)

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green (40)	5,900	900	3,130
12%	10,100	1,180	6,160
12% (44)	8,740	NA	4,830
12% (44)	10,750	1,310	6,240

Janka side hardness 520 lb for green material and 670 lb for dry. Amsler toughness at 12% moisture content 88 to 128 in.-lb (2-cm specimen).

Drying and Shrinkage: Timber seasons slowly, possibly with some collapse and a tendency to end checking and warp. Kiln schedule T1 0-D4S is suggested for 4/4 stock and T8-D3S for 8/4. Shrinkage green to 12% moisture content: radial 2.5%; tangential 4.5%. Movement in service is rated as medium.

Working Properties: Timber works easily with machine and hand tools but has a severe blunting effect on cutters because of silica content, sharp knives are required to avoid a woolly finish in planing, glues and nails satisfactorily, peels and slices easily.

Durability: Heartwood not resistant to decay and is vulnerable to termite attack; sapwood liable to attack by powder-post beetles. Logs must be protected with insecticides and fungicides and converted as soon as possible.

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

Uses: Plywood, decorative veneers, parquetry, joinery, furniture components.

Additional Reading:: (3), (9), (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.
9. Farmer, R.H. 1972. Handbook of hardwoods. H.M. Stationery Office. London.
40. Lavers, G.M. 1967. The strength properties of timbers. For. Prod. Res. Bull. No. 50. H.M. Stationery Office. London.
44. Sallenave, P. 1955. Propriétés et mécaniques des bois tropicaux de l'union Française. Publ. Centre Tech. For. Trop. No.8.

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