technology transfer *fact sheet*

Center for Wood Anatomy Research
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Cordia millenii and C. platythyrsa
Family: Boraginaceae
West African Cordia

Other Common Names: Omo (Nigeria), ebe (Cameroon).

Distribution: Widely distributed in tropical Africa, found in closed forests and old secondary formations.

The Tree: Grows to a height of 60 to 100 ft, bole cylindrical, but rarely straight, 30 to 40 ft. in length; trunks about 3 ft in diameter above buttresses.

The Wood:
General Characteristics: Heartwood pale golden brown to medium brown occasionally with a pinkish tint; sapwood lighter. Texture coarse; grain typically interlocked give a stripe figure; lustrous; brittleheart fairly common.

Weight: Basic specific gravity (ovendry weight/green volume) about 0.34; 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)	7,800	880	3,810
12%	9,700	1,000	5,200
12% (44)	9,150	NA	4,050

Janka side hardness 550 lb for green and 590 lb for dry material. Amsler toughness 105 in.-lb for dry material (2-cm specimen).

Drying and Shrinkage: Dries rapidly and well with only a slight tendency to warp. A high temperature kiln schedule is necessary to remove moisture pockets. Kiln schedule T1 3-C4S is suggested for 4/4 stock and T1 1 -D3S for 8/4. Shrinkage green to ovendry: radial 3.4%; tangential 4.6%; volumetric 7.5%. Movement in service is rated as small.

Working Properties: Works well with hand and machine tools and is easy to finish, in planing there is some tearing of interlocked grain, nails satisfactorily.

Durability: Generally heartwood may be rated as moderately durable.

Preservation: Reported to be resistant to preservative treatments.

Uses: Fine furniture and cabinetwork, joinery, and other decorative work where strength is not important.

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. 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.