



Cylicodiscus gabunensis

Family: Leguminosae

Okan

Other Common Names: Denya (Ghana), Edum (Gabon), Adoum, Bokoka (Cameroon), Bouemon (Ivory Coast).

Distribution: A large tree 180 to 200 ft in height, bole straight, cylindrical, and clear to 80 ft; trunk diameters about 3 to 4 ft but may reach 8 to 10 ft above short buttresses.

The Tree: Common in the rain forests of Sierra Leone to the Cameroons and Gabon.

The Wood:

General Characteristics: Heartwood yellow to golden brown, often with a slight greenish tinge, darkening on exposure to a reddish brown; sapwood 2 to 3 in. wide, pale pink, distinct. Texture moderately coarse, grain interlocked; lustrous; disagreeable odor when freshly cut, but without odor or taste when dry.

Weight: Basic specific gravity (ovendry weight/green volume) 0.80; air-dry density about rundown 60 pcf.

Mechanical Properties: (2-cm standard)

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green (9)	14,700	1,850	8,230
12%	20,300	2,330	12,380
12% (44)	25,800	2,560	14,200

Janka side hardness 2,540 lb for green material and 2,780 lb for dry. Amsler toughness about 400 in.-lb at 12% moisture content (2-cm specimen).

Drying and Shrinkage: Dries slowly with marked tendency to surface and end check but warping is not serious. Kiln schedule T2-C2 is suggested for 4/4 stock and T2-C1 for 8/4. Shrinkage green to ovendry: radial 6.0%; tangential 8.8%; volumetric 12.6%.

Working Properties: Rather difficult to saw with some dulling, difficult to work with hand and machine tools, tearing of interlocked grain in planing, turns well, glues and finishes well.

Durability: Heartwood is very durable and highly resistant to termite attack; sapwood liable to powder-post beetle attack. Resistant to marine borers, excellent weathering properties, and has high resistance to wear.

Preservation: Heartwood extremely resistant, sapwood resistant.

Uses: Marine piling and dockwork, heavy-duty flooring, railroad crossties, heavy construction.

Additional Reading: (3), (9), (17), (44)

3. Bolza, E., and W.G. Keating. 1972. African timbers-the properties, used, and characteristics of 700 species. CSIRO. Div. of Build. Res., Melbourne, Australia.

17. France: Bois For. Trop. 1955. Okan (Adoum) (*Cylicodiscus gabunensis*). Bois For. Trop. 43:11-14.

9. Farmer, R. H. 1972. Handbook of hardwoods. 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.