



***Brachystegia spp.***

**Family: Leguminosae**

**Okwen**

**Other Common Names:** Achi, Ngu, Akolodo (Nigeria), Meblo (Ivory Coast), Naga (Cameroon), Mendou (Gabon).

**Distribution:** A commercial grouping of four species of *Brachystegia* found in West Africa; common and gregarious in the wetter high forests of Nigeria.

**The Tree:** Tall, emergent 120 to 150 ft in height, boles are straight and cylindrical, trunk diameter 4 to 7 ft above the buttresses.

**The Wood:**

**General Characteristics:** Heartwood light to dark brown; sapwood yellow to yellowish brown, well defined. Texture medium to coarse; grain usually deeply interlocked producing a pronounced roe figure; luster high.

**Weight:** Basic specific gravity (ovendry weight/green volume) varies with species 0.45 to 0.58; air-dry density 34 to 44 pcf.

**Mechanical Properties:** (2-cm standard)

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green (42)	11,400	1,280	5,720
12%	15,200	1,530	8,270
12% (41)	12,300	1,190	6,230

Janka side hardness 930 to 1,430 lb for dry material.

**Drying and Shrinkage:** Dries rather slowly with a marked tendency to check and warp. Kiln schedule T6-D2 is suggested for 4/4 stock and T3-D1 for 8/4. Shrinkage green to 12% moisture content: radial about 2.5%; tangential about 3.5%. Movement in service is rated as medium.

**Working Properties:** Difficult to saw because of gumming of teeth, blunting may be serious, machines moderately well, good turning characteristics, difficult to plane to a smooth surface because of severe tearing of grain in *B. nigerica*.

**Durability:** Heartwood is rated as moderately durable, sapwood liable to attack by powder-post beetles.

**Preservation:** Heartwood is extremely resistant to treatment, sapwood is permeable.

**Uses:** Parquet flooring, decorative veneer, general construction where high durability is not required, joinery.

**Additional Reading:** (3), (9), (41), (42)

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.

41. Nigeria: Dep. For. Res. 1966. *Brachystegia kennedyi* (Okwen). For. Prod. Res. Rep. Dep. For. Res. Nigeria No. FPRL/7.

42. Nigeria: Dep. For. Res. 1966. *Brachystegia nigerica* (Okwen). For. Prod. Res. Rep. Dep. For. Res. Nigeria No. FPRL/8.

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