



Ceiba pentandra

Family: *Bombacaceae*

Ceiba

Silk-Cotton-Tree

Other Common Names: Fromager, Enia (Ivory Coast), Ngwe, Banda (Sierra Leone), Ghe (Liberia), Araba, Okha (Nigeria), Doum, Bouma, Odouma (Cameroon, Gabon), Fuma (Congo Rep).

Distribution: Widely distributed in West Africa, more or less scattered in secondary forest formations. Also found in tropical America and southeast Asia.

The Tree: A large tree to 200 ft with a straight, cylindrical bole 40 to 60 ft long; trunk diameters 6 ft and more over large buttresses. Stems of young trees are covered with conical spines.

The Wood:

General Characteristics: Sapwood and heartwood not clearly demarcated, wood is whitish, pale brown, or pinkish brown, often with yellowish or grayish streaks. Texture coarse; grain interlocked, occasionally irregular; luster low; without characteristic odor or taste.

Weight: Basic specific gravity (ovendry weight/green volume) 0.26; air-dry density 20 pcf.

Mechanical Properties: (2-cm standard)

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
12% (33)	5,800	600	3,150

Amsler toughness 78 in.-lb for dry material (2-cm specimen).

Drying and Shrinkage: Seasons rapidly without marked distortion. Kiln schedule T10-D5S is suggested for 4/4 stock and T8-D4S for 8/4. Shrinkage green to ovendry: radial 2.8%; tangential 6.4%; volumetric 10.4%.

Working Properties: Difficult to saw cleanly and to dress smoothly, cut surfaces tend to be woolly, tools must be kept sharp for best results, easy to nail and glue, peels to give good veneers.

Durability: Very susceptible to attack by decay fungi and insects, requires rapid harvest and conversion to prevent deterioration, liable to powder-post beetle attack, prone to stain.

Preservation: Good treatability.

Uses: Plywood, blockboard, boxes and crates, joinery, furniture components. Seed pods yield a silky hair (kapok).

Additional Reading: (3), (9), (33)

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.
33. France: Bois For. Trop. 1975. Fromager (Ceeiba pentandra). Bois For. Trop. 163:37-51.

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