



**USDA Forest Service  
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**Wood Technical Fact Sheet**

Guarea cedrata and G. thompsonii

Guarea

**Family:** Meliaceae

**Other Common Names:** Bossy (Ivory Coast), Kwabohoro (Ghana), Obobo (Nigeria), Edoucie (Cameroon).

**Distribution:** The range of both species overlaps in Ivory Coast, Ghana, and southern Nigeria. G. cedrata extends into the Cameroons, G. thompsonii reaches into Liberia.

**The Tree:** Reaches a height of 160 ft; boles are long, straight, and cylindrical; trunk diameters are about 3 to 4 ft above buttresses.

**The Wood:**

**General Characteristics:** Heartwood pinkish brown, darkening on exposure; sapwood variable in width, pale in color, often well demarcated. Texture medium to fine; grain straight, wavy, or interlocked; lustrous; both woods contain gums. Silica often present in G. cedrata. Cedary odor sometimes persists. Dust may irritate skin and mucous membranes.

**Weight:** Basic specific gravity (ovendry weight/green volume) about 0.48; air-dry density 36 pcf.

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

Moisture content Bending strength Modulus of elasticity Maximum crushing strength

(%) (Psi) (1,000 psi) (Psi)

Green (9) 10,800 1,290 5,140

12% 14,900 1,370 7,720

Green (9) 12,400 1,540 6,260

12% 15,500 1,570 8,680

12% (44) 14,700 NA 7,750

Janka side hardness about 1,000 lb for dry material. Amsler toughness 230 in.-lb for dry material (2-cm specimen).

**Drying and Shrinkage:** Dries fairly rapidly with little tendency to warp, may require some care to prevent checking. Kiln schedule T6-D2 is suggested for 4/4 stock and T3-D1 for 8/4. Shrinkage green to 12% moisture content: radial 2.0 to 2.5%; tangential 3.5 to 4.0%. Movement in service is rated as small.

**Working Properties:** Works fairly well with hand and machine tools, some picking of grain if interlocked, slight to moderate blunting of cutters, glues well, takes a good polish, good to moderately good steam-bending properties. Sometimes difficult to handle because of gum. Dust may be irritating.

**Durability:** Heartwood ratings vary from durable to moderately durable; moderately resistant to termite attack.

**Preservation:** Heartwood highly resistant to impregnation; sapwood permeable.

**Uses:** Furniture, joinery, paneling, boatbuilding, decorative veneers, turnery, flooring.

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