



Acacia melanoxylon

Family: Leguminosae

Australian Blackwood

Other Common Names: None.

Distribution: Eastern Australia from Queensland southward to Victoria and also in Tasmania. Introduced into East and South Africa, India, Ceylon, Chile, and Argentina.

The Tree: Reaches a height of 100 ft with trunk diameters up to 3 ft. Many stems are buttressed, defective, or irregular and, in the open, boles are rarely clear for more than 12 to 14 ft.

The Wood:

General Characteristics: Heartwood golden to dark brown, sometimes with a reddish tinge; dark streaks mark the growth zones; sharply demarcated from the straw-colored sapwood. Lustrous; texture fine to medium; grain usually straight, sometimes interlocked or wavy; without distinctive odor or taste.

Weight: Basic specific gravity (ovendry weight/green volume) 0.57; air-dry density 40 pcf.

Mechanical Properties: (First set of data based on the 2-in. standard, second set the 2-cm standard.)

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green(6)	10,400	1,710	4,880
12%	15,900	2,050	8,420
12% (60)	14,600	2,210	NA

Janka side hardness 950 lb for green material and 1,100 lb at 12% moisture content. Forest Products Laboratory toughness 146 in.-lb for green material (2-cm specimen).

Drying and Shrinkage: Australian grown wood is reported to be easily seasoned without degrade. Wood grown in Tanganyika had negligible checking and splitting but with a marked tendency to cup. Kiln schedule T6-D2 is suggested for 4/4 stock and T3-D1 for 8/4. Shrinkage green to ovendry: radial 3.4%; tangential 9.0%. Movement in service is reported as medium.

Working Properties: The timber is easy to work with hand or machine tools; can be steam bent easily down to a 3-in. radius; glues and stains well and can be highly polished.

Durability: Durability of heartwood is reported as intermediate and is readily attacked by termites; sapwood is moderately susceptible to *Lyctus* attack.

Preservation: Heartwood is reported as not treatable using either open tank or pressure systems. Moderately heavy vessel penetration is obtained in the sapwood.

Uses: Fine furniture and cabinet wood, fancy veneers, interior joinery, bentwork, turnery, tight cooperage, gunstocks, musical instruments.

Additional Reading: (4), (6), (60)

4. Australia: CSIRO For. Prod. Newsletter. 1963. *Acacia melanoxylon*. Properties of Australian timbers: Blackwood. For. Prod. Newsletter. CSIRO Aust. No. 295.
6. Bolza, E., and N. H. Kloot. 1963. The mechanical properties of 174 Australian timbers. CSIRO Div. For. Prod. Technol. Pap. For. Prod. Aust. No. 25.
60. Tanzania: Util. Div. For. Dep. 1963. Timbers of Tanganyika: *Acacia melanoxylon* (Australian Blackwood). Utilization Section, Forest Division, Moshi.

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