



***Afzelia* spp.**

**Family: Leguminosae**

**Afzelia**

**Other Common Names:** Doussie (Cameroon), Apa, Aligna (Nigeria), Mkora, Mkola, Mbambakofi (Tanzania), Chanfuta, Mussacossa (Mozambique), Beyo, Meli, Azza (Uganda).

**Distribution:** West, Central, and East Africa. Occur in the dense evergreen forests but also common in the savanna and coastal forests of East Africa.

**The Tree:** Reaches best development on moist sites with heights of 80 to 120 ft and clear boles 30 to 50 ft; trunk diameters 3 to 5 ft and more; large irregular buttresses sometimes present.

**The Wood:**

**General Characteristics:** Heartwood reddish brown after exposure; sapwood pale straw to whitish, well defined. Texture moderate to coarse; grain straight to interlocked; medium luster; without characteristic odor or taste. Some pores contain a yellow dyestuff which, under moist conditions, can discolor textiles, paper, or other cellulosic materials.

**Weight:** Basic specific gravity (ovendry weight/green volume) 0.67; air-dry density 51 pcf.

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

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
12% (40)	18,100	1,900	11,490
12% (56)	16,640	1,510	10,030

Janka side hardness 1,770-1,850 lb for dry material.

**Drying and Shrinkage:** Seasons satisfactorily but slowly with little or no degrade. Kiln schedule T6-D2 is suggested for 4/4 stock and T3-D1 for 8/4. Shrinkage green 12% moisture content: radial 1.0%; tangential 1.5%. Movement in service is rated as small.

**Working Properties:** Rather difficult to saw and machine because of rapid dulling of saw teeth and cutters but works to a smooth finish; some tearing of grain on radial faces. Difficult to stain where pores contain yellow deposits. Classified moderate in wood bending properties. Dust may be irritating. Difficult to glue.

**Durability:** Heartwood is rated as very durable and moderately resistant to termite attack; sapwood liable to attack by powderpost beetles. In East African waters, teredo are slow to attack and develop. Pholad attack is more rapid.

**Preservation:** Extremely resistant to preservative treatments; sapwood reported to be moderately resistant.

**Uses:** Exterior joinery (window frames, doors), flooring, heavy construction including harbor and dock work, furniture, because of good acid resistance used for vats and tanks.

**Additional Reading:** (3), (9), (40), (56)

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.

40. Lavers, G. M. 1967. The strength properties of timbers. For. Prod. Res. Bul. No. 50. H. M. Stationery Office. London.

56. Tanzania: Util. Div. For. Dep. 1966. Timbers of Tanganyika: *Afzelia quazensis* Moshi.

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