

## **Wood Technical Fact Sheet**

Melaleuca quinquenervia

syn. M. leucadendron

Broad-Leaved Tea-Tree

Cajeput

Family: Myrtaceae

Other Common Names: Gelam (Malaya), Niaouli (New Caledonia), Cajeput (United States), Paper-bark (Australia).

**Distribution:** Native to eastern Australia, Malay Archipelago, New Caledonia, and New Guinea; grows in pure stands on wet coastal fiats and brackish swamps. The tree has been widely planted in other tropical and subtropical areas, often becoming naturalized.

**The Tree:** May reach a height of 80 to 100 ft; usually 1 to 2 ft in diameter; boles frequently gnarled and twisted. The tree coppices easily. The thick spongy bark is distinctive and can be peeled off in large flakes.

## The Wood:

**General Characteristics:** Heartwood pinkish brown; sapwood paler and rather ill defined. Grain straight to irregular or wavy; texture fine and uniform; lustrous; without distinctive odor or taste.

Weight: Basic specific gravity (ovendry weight/green volume) 0.65; air-dry density 50 pcf.

**Mechanical Properties:** (2-in. standard)

Moisture content Bending strength Modulus of elasticity Maximum crushing strength

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

Green (6) 11,900 NA 5,920

Janka side hardness 1,530 lb for green material. Forest Products Laboratory toughness 175 in.-lb for green material (5/8-in. specimen).

**Drying and Shrinkage:** Difficult to season, prone to checking and warping; quartersawing may minimize degrade. No data available on kiln schedules. Shrinkage green to ovendry: radial 4.0%; tangential 9.5%; volumetric 16.2%.

**Working Properties:** Readily worked with hand and machine tools and takes a good finish. Rather rapid dulling of cutters is reported. A silica content of 0.20 to 0.95% is reported.

**Durability:** Heartwood durable in ground contact; also resistant to termite attack and marine borer activity. Sapwood liable to powder-post beetle attack.

Preservation: No information available.

**Uses:** Carvings, cabinetwork, boatbuilding, fencing, railroad crossties, mine props, marquetry, veneers, gun stocks. The leaves are distilled to yield an oil used for medicinal purposes; corky bark flakes have also been used for insulation as well as stuffing for pillows, etc.

**Additional Reading:** (6), (11), (44), (78)