



TIMBER SPECIES 19

Through its R D projects, QFRI is finding solutions to plantation establishment, management and protection, wood quality and processing technologies for hardwood and softwood timbers.

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SPECIES	Silver quandong
Botanical Names	<i>Elaeocarpus grandis</i>
Family Name	Elaeocarpaceae
Local Names	blue fig, blueberry ash, blue quandong, white quandong, cooloon
TREE DESCRIPTION AND OCCURRENCE	<p>A tall tree attaining height of 35 m and a stem diameter up to 2 m. The stem is prominently buttressed at the base and covered with a grey, smooth, slightly wrinkled bark. The older leaves turn bright red before being shed and this is a distinctive species recognition feature in the forest.</p> <p>This species occurs along the eastern coast of Australia, most commonly between Taree, New South Wales and Maryborough, Queensland. Small populations also occur on the Eungella Range and between Ingham and Cooktown. A disjunct stand occurs beside the mouth of the Daly River, Northern Territory.</p> <p>Timber of this species is now of limited commercial availability, although there is interest from Farm Forestry groups in establishing plantations of silver quandong.</p>
WOOD APPEARANCE	<p>Colour. The heartwood is generally white to cream white. In some cases it can have greyish or light brownish tones. There is no noticeable colour difference between sapwood and heartwood.</p> <p>Grain. Porous and open grained. There is no pronounced figure but a characteristic of the species is its long straight vessel lines on dressed longitudinal surfaces.</p>
WOOD PROPERTIES	<p>Density. 495 kgm⁻³ at 12% moisture content; approximately 2 m³ of seasoned sawn timber per tonne.</p> <p>Strength Group. S5 unseasoned; SD6 seasoned.</p> <p>Stress Grades. F5, F7, F8, F11 (unseasoned), F7, F8, F11, F14 (seasoned), when visually stress graded in accordance with AS 2082:2000, 'Visually stress-graded hardwoods for structural purposes.'</p> <p>Shrinkage to 12% MC. 4.3% (tangential); 1.4% (radial). These values apply to timber reconditioned after seasoning.</p> <p>Unit Shrinkage. 0.24% (tangential); 0.11% (radial). These values apply to timber reconditioned after seasoning.</p> <p>Durability. Class 4 – Suitable for use only in continuously dry situations under cover, well ventilated, clear of the ground and fully protected from the weather and other dampness.</p> <p>Lyctid Susceptibility. Untreated sapwood susceptible to lyctid borer attack.</p> <p>Preservation. Sapwood readily accepts preservative impregnation but penetration of heartwood is negligible using currently available commercial processes.</p> <p>Seasoning. Can be satisfactorily dried using conventional air and kiln seasoning methods.</p>

	<p>Hardness. Soft (rated 5 on a 6 class scale) in relation to indentation and ease of working with hand tools.</p> <p>Machining. Machines and turns well to a smooth surface.</p> <p>Fixing. No difficulty has been experienced with the use of standard fittings and fastenings.</p> <p>Gluing. Can be satisfactorily bonded using standard procedures.</p> <p>Finishing. Seasoned timber will readily accept stain, polish and paint.</p>
USES	<p>Construction. Once commonly used in joinery, mouldings and linings and also occasionally in general house framing, but is rarely used for these applications now.</p> <p>Decorative. Plywood, furniture, shop and office fixtures, turnery, carving, inlay work, picture frames.</p> <p>Others. Boat building (light), aircraft components. Has been used for archery equipment, billiard cues, beehives, venetian blinds, broom handles, templates, pattern making, boat oars, pencils, piano parts, tennis racquets, vaulting poles.</p>
IDENTIFICATION FEATURES	<p>GENERAL CHARACTERISTICS</p> <p>Sapwood. Indistinguishable from heartwood.</p> <p>Heartwood. Almost white to cream-white.</p> <p>Texture. Medium to coarse; grain straight with little or no figure.</p> <p>WOOD STRUCTURE</p> <p>Growth Rings. Absent.</p> <p>Vessels. Medium in size, in short radial rows of 2 to 6, sometimes more. Solitary vessels and pairs tending to be oval in shape. Vessel lines distinct.</p> <p>Parenchyma. Indistinguishable under a lens.</p> <p>Rays. Of two sizes (i) fairly large and distinct under a lens (ii) fine and small, barely visible even under a 10 x lens.</p> <p>OTHER FEATURES</p> <p>Burning Splinter Test. Burns to a thin white greyish partial ash.</p>

For more information and publications about growing, processing and pests and diseases of Queensland hardwood timbers, visit www.dpi.qld.gov.au/hardwoodsqli or call the DPI Call Centre: 132 533

Further reading Ilic, J. 1991. CSIRO Atlas of Hardwoods. Crawford House Press.
Tree Talk, Inc 1994. Woods of the World Pro. CD Rom.
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