



## COMPARISON OF WOOD PROPERTIES BETWEEN SOME COMMONLY TRADED SPECIES

Botanical Name	<i>Hevea brasiliensis</i>	<i>Acacia mangium</i>	<i>Tectona grandis</i>	<i>Eucalyptus grandis</i>	<i>Eucalyptus marginata</i>	<i>Eucalyptus camaldulensis</i>
Trade Name	Rubber Wood	Acacia	Teak	Rose Gum	Jarrah	River Red Gum
Wood Appearance						
Colour	Sapwood not different from heartwood. Whitish yellow when freshly cut, seasons to cream or light brown, often with pinkish tinge	Heartwood varies from light brown to brown, often with darker markings, sapwood creamy-white to pale brown	The heartwood is generally golden brown but varies from grey-brown to red brown. Sapwood is well demarcated and pale yellow in colour	The heartwood ranges in colour from pale pink to red brown. Sapwood is usually paler in colour but it is not always clearly differentiated	The heartwood is dark red in colour. Sapwood is usually pale yellow	Heartwood ranges from Red to dark red, sapwood distinctly paler
Grain	Straight to shallowly interlocked or wavy grain, moderately coarse but even texture	Grain variable, texture coarse but rather even	Straight or occasionally interlocked. Texture is uneven varying from smooth to coarse due to its ringporosity	Moderately coarse textured but uniform. Predominantly straight grained with no pronounced figure	Moderately coarse textured and even. Wavy interlocking grain produces attractive fiddleback figure in some samples	Moderately coarse, uniformed textured, usually interlocked
Wood Properties						
Density 1)	600	745	670	800	835	870-1010
Strength Group 2)	SD7	SD5	SD6	SD4	SD4	SD4
Stress Grade 3)	F5, F7, F8, F11	F8, F11, F14, F17	F7, F8, F11, F14	F11, F14, F17, F22	F11, F14, F17, F22	F11, F14, F17, F22
Durability 4)	4 Suitable for use only in continuously dry situations under cover, well ventilated, clear of ground and fully protected from weather and other dampness	3 Moderately resistant to decay when fully exposed to weather, clear of ground and well drained with free air circulation	2 Highly resistant to decay when fully exposed to the weather, clear of the ground and well drained with free air circulation	3 Moderately resistant to decay when fully exposed to weather, clear of ground and well drained with free air circulation	2 Highly resistant to decay when fully exposed to the weather, clear of the ground and well drained with free air circulation	1 Highly resistant to decay in ground contact or in persistently damp or badly ventilated situations
Hardness 5)	5 Firm	3 Moderately Hard	4-6 Firm to very soft	3 Moderately hard	2 Hard	1 Very Hard

- 1) Average kg/m<sup>3</sup> at 12% Moisture Content (MC)
- 2) Seasoned, SD1 to SD8, SD1 highest
- 3) Basic working stress in bending e.g. F8 approx. 8 Mpa
- 4) Seasoned, 1 to 4, 1 highest
- 5) Relative ease of working with hand tools, 1 Very hard-6 Very soft

Source: "Timber Species Notes", Department of Primary Industries, Queensland, Australia, April 1994