

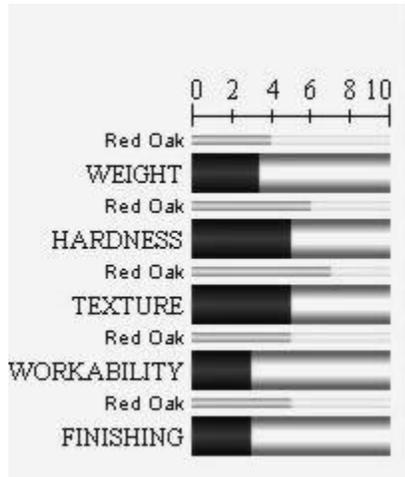
# Lacewood

(*Cardwellia sublimia*)



## Common Names:

Silky oak, Australian silky-oak, Lacewood, Northern silky oak, Queensland silky oak, Selano



## Mechanical Values

Category	Green	Dry	Units
Weight		33	lbs/cu.ft.
Density (air-dry)		33	lbs/cu.ft.
Specific Gravity		0.53	
Hardness			lbs
Stiffness	1145	1319	1000 psi
Bending Strength	6235	9715	psi
Shearing Strength		1493	psi
Max. Crushing Strength	3190	5800	psi
Work to Maximum Load			in-lbs/in <sup>3</sup>
Radial Shrinkage (G->OD)			%
Tangential Shrink. (G->OD)			%
Volumetric Shrink (G->OD)			%

## Environmental Profile

The environmental status of this species within its geographical boundaries has not been officially determined.ÿ

## Distribution

The species is reported to be native to Queensland, Australia, especially in the northern coastal areas.

## Product Sources

Some material from this species is reported to be available from sustainably managed, salvaged, recycled, or other environmentally responsible sources.ÿ Supplies are reported to be adequate for local consumption in Australia, but high shipping costs limit its availability on the U.S. and European markets. When available, they are reported to be often sold in 1 inch (2.54 cm) thicknesses by 14 feet (4 m) lengths at very high prices.

## Tree Data

The tree is reported to be tall and straight, attaining heights from 100 to 120 feet (30 to 36 m), and trunk diameters of up to 48 inches (120 cm).

## Sapwood Color

The narrow sapwood is almost white in color.

## Heartwood Color

The heartwood is pink to reddish brown, or pale pink to medium brown when freshly cut. It matures to a brownish color with age.

## Grain

The grain is generally straight. Large and prominent wood rays are reported to produce a distinct and an attractive silver grain figure on quartersawn surfaces.ÿ

## Texture

The wood has a coarse and even texture.ÿ The wood is lustrous.

## Odor

The wood has no characteristic odor or taste.

## Ease of Drying

The wood is reported to dry slowly and can potentially be difficult to season. Careful air-drying followed by a mild kiln schedule is suggested to prevent or minimize degrade.

## Drying Defects

Slight distortion, some surface checking, and splitting in thicker stock are some common drying defects. Wide flat sawn material may cup severely if unrestrained.

**Movement in Service**

The timber is reported to be moderately stable after seasoning, and tends to exhibit medium movement in use.

**Natural Durability**

Heartwood resistance to decay is rated as fair. Freshly sawn timber is reported to be vulnerable to attack by pinhole borers.

**Resistance to Impregnation**

The heartwood is reported to be moderately resistant to chemical treatment but the sapwood is permeable.

**Blunting**

The wood has medium blunting effect on cutting tools.

**Resistance to Cutting**

Cutting resistance is reported to be low but large ray cells may cause some crumbling.

**Planing**

The timber is reported to be easy to plane but sharp cutters and a reduced cutting angle of 20 degrees are recommended for best planing results. Quartersawn material may cause some picking up in planing if cutters are not very sharp.

**Turning**

The material is reported to respond readily to ordinary tools in turning, moulding, mortising, boring, and routing operations with very good results. Large rays may cause the wood to crumble, and care is required to achieve smooth, non-fuzzy surfaces.

**Moulding**

A reduced cutting angle of 20 degrees is recommended for moulding.

**Gluing**

The wood is reported to possess satisfactory gluing properties.

**Nailing**

The wood can be nailed very easily. No pre-boring required.

**Screwing**

The timber is reported to screw well.

**Sanding**

Sanding properties are reported to be good.

**Polishing**

The material is reported to have good polishing properties.

**Staining**

The material is reported to stain readily.

**Steam Bending**

This species is characterized by good steam bending properties.

**Response to Hand Tools**

The timber is reported to respond rather well to hand tools in most operations.

**Strength Properties**

The bending strength of the species is considered medium, being much weaker than White oak or Teak in the air-dry condition (about 12 percent moisture content). Compression strength parallel to grain, or maximum crushing strength, is medium. It is lower in this property than Teak. The weight is moderate. The density is high. Silky oak has a striking figure, varying from a small lacelike pattern to a large splashlike figure. It is reported to be light and soft, yet firm, strong and tough. The timber is reported to be popular as a highly ornamental wood, and is used for furniture, paneling, and similar decorative uses. High resistance to wear is reported to make Silkywood a suitable timber for flooring in heavy traffic areas. A reddish gum and white deposits are present in the wood. Green wood and sawdust from machining operations have been associated with skin irritation in some individuals.