Simarouba amara

Simarouba

Marupa

**Family:** Simaroubaceae

**Other Common Names:** Aceituno (Honduras, Nicaragua, Panama), Cedro blanco, Simaruba (Venezuela), Soemaroeba (Surinam), Caixeta, Marupa, Maruba (Brazil), Acajou blanc (Fr. Guiana).

**Distribution:** Northern South America from Venezuela and the Guianas to the Amazon region of Brazil, also in Trinidad and Tobago.

**The Tree:** A large unbuttressed tree reaching a height of 140 ft and diameters of 20 to 24 in. occasionally 36 in. Boles are straight, cylindrical, strongly tapered, frequently clear to 70 to 90 ft.

**The Wood:**

**General Characteristics:** Heartwood not differentiated from the whitish or straw-colored sapwood, with occasional oily streaks. Luster rather high; texture medium and uniform; grain usually straight; without odor but with a bitter quinine-like taste.

**Weight:** Basic specific gravity (ovendry weight/green volume) 0.38; air-dry density 27 pcf.
**Mechanical Properties:** (First set of data based on 2-in. standard, second set on the 1-in. standard.)

<table>
<thead>
<tr>
<th>Moisture content</th>
<th>Bending strength</th>
<th>Modulus of elasticity</th>
<th>Maximum crushing strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>(%)</td>
<td>(Psi)</td>
<td>(1,000 psi)</td>
<td>(Psi)</td>
</tr>
<tr>
<td>Green (74)</td>
<td>6,310</td>
<td>1,140</td>
<td>2,970</td>
</tr>
<tr>
<td>12%</td>
<td>8,930</td>
<td>1,240</td>
<td>4,840</td>
</tr>
<tr>
<td>12% (24)</td>
<td>8,350</td>
<td>1,290</td>
<td>4,900</td>
</tr>
</tbody>
</table>

Janka side hardness 390 lb for green material and 440 lb at 12% moisture content. Forest Products Laboratory toughness average for green and dry material 66 in.-lb. (5/8-in. specimen).

**Drying and Shrinkage:** Reported to be easy to air-season, boards dry rapidly with little or no degrade. No information on kiln schedules available. Shrinkage from green to ovendry: radial 2.3%; tangential 5.0%; volumetric 8.0%.

**Working Properties:** The wood works easily and machines to a smooth clean surface. Freshly felled logs tend to split in sawing due to internal stresses. The wood is easy to finish and to glue.

**Durability:** Pure culture tests indicate the wood to be somewhat durable to a white-rot and brown-rot fungus; however, actual graveyard evaluations show the wood to be readily attacked by decay fungi and insects. The wood is also very susceptible to dry-wood termite attack and prone to blue stain.

**Preservation:** Absorption and penetration of wood preservatives are excellent using either a pressure-vacuum system or open-tank methods.

**Uses:** Interior construction, boxes and crates, furniture components, veneer and plywood, pattern making, millwork, particleboard and fiberboard.

**Additional Reading:** (24), (46), (72), (74)