**Brosimum spp. (Utile group)**

**Family: Moraceae**

**Cow-Tree**

**Sande**

**Other Common Names:** Mastate (Costa Rica), Avichuri (Colombia), Palo de vaca (Venezuela), Amapa doce, Gaucho macho (Brazil).

**Distribution:** Ranges from the Atlantic Coast in Costa Rica southward to Colombia and Ecuador.

**The Tree:** The tree attains a height of 80 to 100 ft with an erect trunk about 30 to 45 in. in diameter.

**The Wood:***

**General Characteristics:** Dried there is no distinction between sapwood and heartwood uniform yellowish white to yellowish brown or light brown. Grain is straight to widely and shallowly interlocked; medium texture; luster high. Odorless and tasteless.

**Weight:** Basic specific gravity (ovendry weight/green volume) ranges from 0.35 to 0.50 for this group. Air-dry density averages about 24 to 38 pcf.

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

<table>
<thead>
<tr>
<th>Moisture content</th>
<th>Bending strength (Psi)</th>
<th>Modulus of elasticity (1,000 psi)</th>
<th>Maximum crushing strength (Psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green (7)</td>
<td>8,490</td>
<td>1,940</td>
<td>4,490</td>
</tr>
<tr>
<td>12%</td>
<td>14,310</td>
<td>2,390</td>
<td>8,220</td>
</tr>
</tbody>
</table>

Janka side hardness 603 lb for green material and 903 lb for air dry.

**Drying and Shrinkage:** The lumber air-seasons rapidly and easily with little or no degrade. However, material containing tension wood will be subject to warp. Kiln schedule T5-C3 has been suggested for 4/4 stock. A faster schedule was developed that can dry this wood to 7 percent moisture content in 6 to 8 days (51). Shrinkage green to ovendry: radial 3.9%; tangential 7.8%.

**Working Properties:** The wood is easy to machine. However, tension wood is sometimes prevalent and this will cause fuzzy grain and burning of saws due to pinching. Takes stains and finishes readily; presents no gluing problems.

**Durability:** The wood is vulnerable to attack by stain and decay fungi as well as insects.

**Preservation:** Reported to be treatable, but no detailed information is available.

**Uses:** Plywood, particleboard, fiberboard, carpentry, light construction, furniture components, pulp and paper products, and moldings.
Additional Reading: (7), (51), (56), (71)
