



## ***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)

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green (7)	8,490	1,940	4,490
12%	14,310	2,390	8,220

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)

7. Bendtsen, B. A., and M. Chudnoff. 1979. Properties of seven Colombian woods. USDA Forest Serv. Res. Pap. FPL-299. For. Prod. Lab., Madison, Wis.
51. McMillen, J. M., and R. S. Boone. 1974. Kiln-drying selected Colombian woods Forest Prod. J. 24(4):31 -36.
56. Record, S. J., and R. W. Hess. 1949. Timbers of the new world. Yale University Press, New Haven, Conn.
71. Villamil G., F. (Editor). 1971. Maderas colombianas. Proexpo, Bogota.

***From: Chudnoff, Martin. 1984. Tropical Timbers of the World. USDA Forest Service. Ag. Handbook No. 607.***