



Pinus oocarpa

Family: Pinaceae

Ocote Pine

Other Common Names: Pino (generally in Latin America), Ocote (Mexico, Guatemala, Honduras, Nicaragua).

Distribution: Upper mountain slopes and mountain ridge tops from northwestern Mexico southward to central Nicaragua; most extensively in Guatemala, Honduras, and Nicaragua.

The Tree: Tree size varies considerably over its range; heights up to 120 ft; diameters 16 to 32 in., occasionally 50 in. Boles are cylindrical, straight, and clear to 50 ft and more.

The Wood:

General Characteristics: Heartwood light reddish brown; distinct from the pale yellowish-brown sapwood. Luster medium; grain straight; texture is somewhat fine and uniform; odor resinous, taste not distinctive; growth rings distinct.

Weight: Basic specific gravity (ovendry weight/green volume) 0.55; air-dry density 41 pcf.

Mechanical Properties: (2-in. standard)

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green (1)	7,970	1,740	3,690
12%	14,870	2,250	7,680

Janka side hardness 580 lb for green material and 910 lb at 12% moisture content. Forest Products Laboratory toughness average for green and dry material is 120 in.-lb. (5/8-in specimen).

Drying and Shrinkage: The wood air-seasons at a fast to moderate rate with a minimum of seasoning defects. Kiln schedule T1 0-D4S is suggested for 4/4 stock and T8-D3S for 8/4. Shrinkage from green to ovendry: radial 4.6%; tangential 7.5%; volumetric 12.3%.

Working Properties: The wood is easy to work with hand and machine tools and is comparable with the southern yellow pines.

Durability: The heartwood is classified as very durable in resistance to attack by white-rot fungus and moderately durable when exposed to a brown rot. The wood does not weather well without the protection of paint or other coatings.

Preservation: Sapwood is permeable; heartwood resistant.

Uses: General purpose construction timber (light and heavy), flooring, box and crate lumber, poles and crossies (treated), and other uses similar to that of the southern yellow pines.

Additional Reading:

1. Wangaard, F. F. and A. F. Muschler. 1952. Properties and uses of tropical woods, III. Tropical Woods 981-190.

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