



Bursera simaruba

Family: Burseraceae

Gumbo-Limbo

Almácigo

Other Common Names: Turpentine tree (Jamaica), Gommier blanc (Haiti), Chaca, Palo chino (Mexico), Carate (Panama, Colombia), Caraña, Indio desnudo (Venezuela).

Distribution: Of common occurrence in southern Florida, the West Indies, southern Mexico, Central America, and northern South America. The tree is not exact as to site and moisture conditions but reaches its best development in lowland forests. On some sites it occurs as pure or nearly pure forests.

The Tree: Generally a slender unbuttressed tree of short to medium height, commonly to 60 ft; diameters 14 to 18 in. Sometimes attain heights of 80 to 90 ft with trunk diameters of 3 ft.

The Wood:

General Characteristics: Heartwood is white, yellowish, or light brown, not differentiated from sapwood. Texture is fine to medium; grain fairly straight to irregular; moderate to rather high luster; without distinctive taste or odor.

Weight: Basic specific gravity (ovendry weight/green volume) 0.30 to 0.38; air-dry density reported to range from 19 to 30 pcf.

Mechanical Properties: (2-in. standard.)

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green (46)	3,300	560	1,510
12%	4,800	740	3,080
12% (64)	5,560	1,080	NA

Janka side hardness reported to be 270 lb air dry and 230 lb for green wood.

Drying and Shrinkage: The wood air seasons rapidly with minor degrade in the form of very slight checking and warp. Logs and lumber are very susceptible to attack by sap-stain fungi, requiring rapid conversion and chemical control. Shrinkage green to ovendry: radial 2.6%; tangential 4.2%; volumetric 7.3%.

Working Properties: The wood works easily with either hand or machine tools but with some fuzziness and torn grain. The use of very sharp, thin cutting edges and reduced feed rates is suggested. The wood has excellent resistance to screw-splitting and holds nails firmly. Logs are reported to peel well on rotary lathes without preheating.

Durability: The wood is not durable in ground contact and is vulnerable to powder-post beetle and termite attack.

Preservation: Capable of good absorption using either oil- or waterborne preservatives.

Uses: The timber is used for matchsticks, boxes, crates, house construction, and general carpentry; also suggested for pattern and core stock. Manufactured into a utility plywood in Mexico. Tree is used extensively as “live fencing,” also yields an aromatic resin used as an incense and varnish.

Additional Reading: (17), (46), (64)

17. Echenique-Manrique, R. 1970. Descripción, características y usos de 25 maderas tropicales mexicanas. Serie Maderas de México, Cámara Nacional de la Industria de la Construcción, México, D.F.

46. Longwood, F. R. 1962. Present and potential commercial timbers of the Caribbean. Agriculture Handbook No. 207. U.S. Department of Agriculture.

64. Slooten, H.J. van der, and M.E. Gonzales. 1971. Maderas latinoamericanas. VI. *Bursera simaruba*, *Poulsenia armata*, *Pterocarpus officinalis*, y *Ficus werckleana*. Turrialba

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