



Phoebe porosa

Family: Lauraceae

Imbuia

Brazilian-Walnut

Other Common Names: Canella imbuia, Embuia, Embuya (Brazil).

Distribution: Grows mostly in the moist Araucaria forests of Parana and Santa Catharina in southern Brazil, mostly at altitudes of 2,500 to 4,000 ft; forming rather rich stands.

The Tree: The tree attains a maximum height of 130 ft and a trunk diameter of about 6 ft.

The Wood:

General Characteristics: Heartwood yellowish or olive to chocolate brown, either plain or beautifully variegated and figured; sapwood is gray and usually distinct. Texture rather fine; grain is straight to curly and wavy; luster medium to rather high; spicy resinous scent and taste but losing most of it in drying. Dust arising in working may cause dermatitis.

Weight: Basic specific gravity (ovendry weight/green volume) 0.53; air-dry density 40 pcf.

Mechanical Properties: (First set of data based on 2-cm standard; second set on the 2-in. standard.)

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green (30)	11,100	1,120	4,620
15%	13,250	NA	6,400
Green (40)	7,700	1,080	3,380
12%	12,100	1,410	6,650

Janka side hardness 880 lb for green material and 950 lb at 12% moisture content. Amsler toughness 182 in.-lb at 15% moisture content (2-cm specimen).

Drying and Shrinkage: The wood is reported to be easy to air-dry, however thick stock is slow to dry and may develop honeycomb and collapse. Kiln schedule T6-D2 is suggested for 4/4 stock and T3-D1 for 8/4. Shrinkage green to ovendry: radial 2.7%; tangential 6.0%; volumetric 9.0%.

Working Properties: Saws and machines satisfactorily and finishes smoothly. Fine dust generated in working may cause dermatitis.

Durability: Heartwood is reported to be resistant to attack by decay fungi.

Preservation: No information available.

Uses: Fine furniture and cabinet work, paneling, flooring, gunstocks, decorative veneer, and joinery.

Additional Reading: (26), (30), (40), (56)

26. Gerry, E. 1952. information leaflet. Foreign woods. Imbuia, Embuia, or "Brazilian walnut," Phoebe porosa. USDA For. Serv. Mimeo. No. R1924.

30. Instituto de Pesquisas Tecnologicas. 1956. Tabelas de resultados obtidos para madeiras nacionais. Bol. Inst. Pesqu. tec. Sao Paulo No. 31.

40. Kynoch, W., and N. A. Norton. 1938. Mechanical properties of certain tropical woods chiefly from South America. Univ. of Mich. School of Forestry and Conservation Bull. No. 7.

56. Record, S. J., and R. W. Hess. 1949. Timbers of the new world. Yale University Press, New Haven, Conn.

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