



Caryocar spp.

Family: Caryocaraceae

Piquia

Cagui

Other Common Names: *C. villosum*: Ajillo (Costa Rica), Pekia (Guayana), Sawarie (Surinam), Almendro (Peru), Piquia (Brazil); *C. costarricense* Aji (Costa Rica), Cagui, Almendrillo, Almendron (Colombia).

Distribution: Commercial species of the genus found in Costa Rica and southward into northern Colombia, upland forests of the Amazon valley, to eastern Brazil and the Guianas.

The Tree: Attains heights of 120 to 150 ft and diameters of 5 to 7 ft (16 ft reported) in the Amazon valley; 3- to 4-ft diameters reported in Colombia. Logs of good form and clear to 70 ft.

The Wood:

General Characteristics: Heartwood yellowish to light grayish brown hardly separable from the sapwood. Texture medium to rather coarse; grain interlocked; fresh material with a mild vinegary scent but without odor or taste when dry.

Weight: Basic specific gravity (ovendry weight/green volume) 0.67 to 0.76; air-dry density 51 to 58 pcf.

Mechanical Properties: (2-in. standard)

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green (74)	12,450	1,820	6,290
12%	17,060	2,160	8,410

Janka side hardness 1,720 lb for both green and dry material. Forest Products Laboratory toughness average for green and dry material is 150 in.-lb (5/8-in. specimen).

Drying and Shrinkage: Air-dries at a slow rate, warping and checking develop but only to a minor degree. Classified as moderately difficult to difficult to season. No kiln schedules available. Shrinkage green to ovendry: radial 5.0%; tangential 8.0%; volumetric 13.0%.

Working Properties: Reported as easy to moderately difficult to saw; rapid dulling cutting edges; radial faces difficult to finish smoothly because of interlocked grain.

Durability: Heartwood rated as very durable in resistance to both brown-rot and white-rot fungi; classified as resistant to dry-wood termites and moderately resistant to marine borers.

Preservation: No data available on treatability. The wood is rated fair in its resistance to weathering (based on laboratory exposure tests) which contradicts its favorable reputation in the tropics.

Uses: General and marine construction, heavy flooring, railway crossties, boat parts, furniture components, especially suitable where hardness and high wear resistance are needed. Tree produces a large edible fruit which contains an oil-producing nut used for culinary purposes.

Additional Reading: (4), (46), (74)

4. Barghoorn, A. W., and M. Renteira R. 1967. Estudio anatomico y fisico-mecanico del Cagui (*Caryocar costarricense*). Bol. Inst. For. Latino Amer. Merida No. 2
46. Longwood, F. R. 1962. Present and potential commercial timbers of the Caribbean. Agriculture Handbook No. 207. U.S. Department of Agriculture.
74. Wangaard, F. F., and A. F. Muschler. 1952. Properties and uses of tropical woods, III. Tropical Woods 98:1-190.

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