technology transfer fact sheet

Bucida buceras
Family: Combretaceae
Jucaro
Oxhorn Bucida

Other Common Names: Black-olive (Jamaica), Ucar, Gregre (Puerto Rico), Bois gri-gri (Haiti), Grignon (French Guiana), Leertouwarsboom (Surinam).

Distribution: Upper Florida Keys, Bahamas, Cuba, Jamaica, Hispaniola, Puerto Rico and Virgin Islands, and Leeward Islands to Guadeloupe in Lesser Antilles. Also from southern Mexico to Panama and northern South America along the coasts of Colombia, Venezuela, and the Guianas.

The Tree: A widely spreading timber and shade tree, medium to large sized, 30 to 60 ft high and up to 3 ft in trunk diameter, sometimes to heights of 110 ft and diameters of 5 ft, with erect cylindrical boles.

The Wood:

General Characteristics: Heartwood yellowish to greenish-brown, olive hued; not always sharply demarcated from yellowish- to light brown sapwood. Longitudinal stripes are frequent as a result of roey grain; moderately fine to medium in texture very lustrous. Although green wood has a tarry odor, seasoned wood has no characteristic odor or taste.

Weight: Basic specific gravity (ovendry weight/green volume) 0.93; air-dry density 69 pcf.

Mechanical Properties: (2-cm standard)

Moisture content	Bending strength	Modulus of elasticity	Maximum crushing strength
(%)	(Psi)	(1,000 psi)	<u>(Psi)</u>
Green (39)	15,400	2,000	NA

Janka side hardness 2,340 lb for green wood.

Drying and Shrinkage: The wood is moderately easy to season for a timber of high density; only minor amounts of warping and checking occur. Shrinkage green to ovendry is also low for its weight: radial 4.4%; tangential 7.9%; volumetric 12.2%. No kiln schedules available.

Working Properties: The wood is rather difficult to saw and machine with hand and power tools because of its very high density. Very smooth finishes can be obtained however torn grain is common in planing.

Durability: Resistant to dry-wood termites and durable in ground contact but not resistant to marine borers

Preservation: Both sapwood and heartwood are resistant to impregnation with preservatives.

Uses: Highly valued for posts, poles, railway crossties, and other durable construction; heavy duty flooring, workbenches; charcoal. The bark has been employed in tanning.

Additional Reading: (17), (39), (45), (56)

- 17. Echenique-Manrique, R. 1970. Descripcion, caracteristicas y usos de 25 madera tropicales mexicanas. Serie Maderas de Mexico, Camara Nacional de la Industria de Construccian, Mexico, D.F.
- 39. Kukachka, B. F., T. A. McClay, and E. Beltranena M. 1968. Propiedades seleccionadas de 52 especies de madera del Departamento del Peten, Guatemala. Proyecto de Evaluacion Forestal. FAO-FYDEP.
- 45. Longwood, F. R. 1961. Puerto Rican woods: Their machining, seasoning, and related characteristics. Agriculture Handbook No. 205. U.S. Department of Agriculture.
- 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.