



Andira inermis

Family: Leguminosae

Angelin

Partridge Wood

Other Common Names: Moca (Puerto Rico, Cuba), Cuilimbuco, Maquilla (Mexico), Barbosquillo, Arenillo (Panama), Rode kabbes (Surinam), Acapurana (Brazil).

Distribution: Occurs throughout the West Indies and from southern Mexico through Central America to northern South America and Brazil. In most locations the tree will grow under varying rainfall and soil conditions.

The Tree: Evergreen, unbuttressed, moderate-sized trees; diameters of 20 to 28 in., heights of 90 to 120 ft, and clear boles 60 to 70 ft long are not uncommon.

The Wood:

General Characteristics: The narrow sapwood is pale brown to grayish yellow and usually clearly demarcated from the yellowish-brown to dark reddish-brown heartwood. Bands of light colored parenchyma tissue give this wood a distinctive figure. Luster rather low; without distinctive odor or taste when dry; texture very coarse; grain only moderately irregular.

Weight: Basic specific gravity (ovendry weight/green volume) 0.64, air-dry density to 80 pcf.

Mechanical Properties: (2-in. standard)

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
12% (44)	20,870	2,640	NA
12% (24)	17,680	2,442	9,130

Janka side hardness about 1,600 lb air dry.

Drying and Shrinkage: The wood air-seasons at a moderate rate with little degrade. Sapwood, during early stages of drying, is susceptible to discoloration by sap-stain fungi. Movement of seasoned wood is rather low. Shrinkage green to ovendry: radial 4.6%; tangential 9.8%; volumetric 12.5%.

Working Properties: Angelin saws and works fairly well except that it is difficult plane to a smooth surface because of the alternating bands of hard and soft (parenchyma) tissue. The wood works well in the lathe, holds nails and screws well and glues satisfactorily. Polishes and varnishes well after filling.

Durability: Heartwood is resistant to attack by decay fungi and insects, but is only moderately resistant to dry-wood termites. Sapwood is highly vulnerable to powder-post beetle attack.

Preservation: Heartwood difficult to treat by both hot and cold bath and pressure-vacuum systems. Absorptions are considerably less than 6 pcf with poor penetration. Permeability of sapwood is also low.

Uses: The wood is used locally for heavy construction, crossties, house framing, and exterior siding. Other suggested uses are turnery, furniture and cabinet work, parquet flooring, and decorative veneer.

Additional Reading: (24), (44), (46), (72)

24. Food and Agriculture Organization. 1970. Estudio de preinversion para el desarrollo forestal de la Guyana Venezolana. Informe final. Tomo III. Las maderas del area del proyecto. FAO Report FAO/SF: 82 VEN 5. Rome.
44. Llach, C. L. 1971. Properties and uses of 113 timber-yielding species of Panama. Part 3. Physical and mechanical properties of 113 tree species. FO-UNDP/PAN/6. FAO, Rome.
46. Longwood, F. R. 1962. Present and potential commercial timbers of the Caribbean. Agriculture Handbook No. 207. U.S. Department of Agriculture.
72. Vink, A. T. 1965. Surinam timbers: A summary of available information with brief descriptions of the main species of Surinam. Surinam Forest Service, Paramaribo.

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