

Common name(s): **Jutahy (Brazil)**
Paleto (Honduras, Int.)
Come Negro (Nicaragua, Int.)
Tamarindo (Nicaragua, Int.)
Ironwood (Int.)

Scientific name(s): *Dialium guianensis* (Aubl.) Sand
Arouna divaricata Willd. (synonym)
Arouna guianensis Aubl. (synonym)
Dialium acuminatum Spruce ex L. Williams (Synonym)

Family: Caesalpiniaceae

Distribution

This species is distributed from the south of Mexico, Belize, through Central America to Peru and Brazil. In Honduras and Nicaragua it is a dominant species in the lowland forests of the Atlantic coast with humid to very humid climate and preferable on well drained clay soils. It grows at altitudes below 350 m above sea level.

Log description

The total height is up to 30 m, with commercial lengths of about 15 to 20 m and diameters of 50 to 75 cm.

The tree is reported to develop cylindrical, sometimes irregular, boles, with low buttresses.

Wood description

Colour: heartwood is reddish brown.

Sapwood: sapwood is pale yellow.

Texture: medium.

Grain: reported to have interlocked grain.

Interlocked grain: present.

Luster: reported to be rather low.

Organoleptic characteristics: odor and taste indistinct.

Physical-mechanical Properties

Basic density: 0.79 – 0.97 g/cm³, Very Heavy

Modulus of elasticity: 175639 kg/cm², high

Movement: 1.98 %, low

Shear: 197 kg/cm², very high

Shrinkage relation: 2.19, high

Janka Hardness: 1559 kg, very high

Fibers saturation point: 22

Compression across the grain: 217 kg/cm², very high

Drying

The wood is moderately easy to air dry as well as kiln dry, it dries very slowly and develops moderate defects. In order to prevent defects during kiln drying, it is recommendable to use kiln schedules T3- C2 and T3- C1 for 1 and 2 inch boards respectively.

Natural durability

It is a very durable wood, very resistant to decay funguses, termite attacks and shipworm attacks under tropical conditions without treatment.

Working properties

The wood is very difficult to saw and work with hand tools due to a very high content of silica (Silica content reported to be as high as 1.83%), difficult to plane due to silica content and hardness (HM steel knives is reported to do the job well), good for turning and mortising, excellent for boring, moulding and sanding but nailing the wood is practically impossible. To work with this species it is necessary to use tools reinforced with either stellite or tungsten carbide steel.

The finish is excellent and because of the woods natural beauty it is recommendable to use a transparent finish.

Uses

Posts, railroad beams, outdoor furniture, veneer, heavy constructions, industrial flooring, outdoor decking.