



Jatoba

ATIBT:

Jatoba; NEN-EN 13556: courbaril (GB), courbaril (F), Courbaril (D), Code HYCB

Other names

Copalier (Antilles), jatoba, jatahy, jutai-acu, jatai (Brazil), courbaril (French Guiana), locust, kawanari (Guyana), algarrobo, guapinol (Central America), red locus, locus (Suriname).

Botanic name

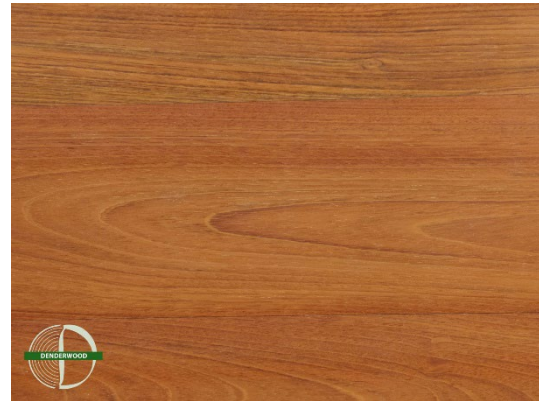
Hymenaea courbaril L. (= *Hymenaea stilbocarpa*), *Hymenaea* spp..

Family

Leguminosae (Caesalpinaceae).

Growth area

Tropical Central and South America.



Tree Description	Height average 30 m, maximum 40 m. The stem swollen at the base, straight, 18-24 m long, branch-free trunk is (0.5)0.6-0.9(-1.5) m in diameter.
Supply	Sawn lumber and semi-finished products.
Wood Description	The freshly sawn heartwood is flesh-colored, pinkish-red approaching reddish-brown. Jatoba can be finished smooth and then has an attractive sheen. The broad sapwood is gray to brownish gray. Sometimes tangential series of resin channels occur.
Wood Recognition	Red-brown, slightly flamed and with dark (black) streaks, heavy and hard, on head surface large vessels with eye-shaped parenchyma and thin marginal parenchyma bands. The wood fluoresces slightly yellow-orange.
Grain	Straight, sometimes irregular thread and slight cross-thread.
Texture	Fine to moderately coarse.
Voluminous mass	(750-)900(-1050) kg/m ³ at 12% moisture content, fresh 1150 kg/m ³ (moisture content approximately 45%).
Shrinkage	(Wet to 12% moisture content) Radially 0.6% and tangentially 1.1%.
Drying	Long, with little distortion and surface cracks. Jatoba with many dark streaks would warp more than evenly colored wood. A calibration line is available for making electrical wood moisture measurements.



Hardness	Longitudinal plane 10400-14600 N.
Machinability	Fairly easy to machine and nice smooth finish.
Nailing & Screwing	Pre-drilling required.
Adhesives	Good. For facade carpentry poor.
Bend	Really good.
Impregnability	Good with a solvent-based system, with a water-based system a sealer is desirable to prevent bleed-through of contents.
Impregnability	Heartwood 4, sapwood not known (according to NEN-EN 350).
Applications	For exterior work such as water works (lock gates in fresh water and bridge decks), shipbuilding (not for decks (too smooth and dark) but for keels, skins, edges, interior and exterior paneling), frames, windows, doors and facades. For interior work such as stairs, paneling, parquet, wide floorboards, construction lumber and furniture. Also for other items such as moldings, knobs, tool handles, carving and sculpture and turning.
Strength class	Classified as D40 depending on origin and quality (see Table D).

Sustainability

Relative resistance to mold

Heartwood class 2-3 (NEN 350: practical experience and field research). Class 1 (NEN-EN 113: laboratory test without ground contact) and Class 1 (literature). With jatoba the variation in durability must be taken into account which is caused by the different growing conditions in the large growing area and the number of different Hymenea species.

Relative resistance to animal organisms

Heartwood: drywood borers D, termites S-M and marine borers S (NEN-EN 350).