

Cumaru

Atibt

Cumaru; NEN-EN 13556: cumaru (GB), cumaru (F), Cumaru (D), Code DXOD

Other names

Cumaru (Brazil), gaiac de Cayenne (French Guiana), ebo (Honduras), tonkawood, tonkabean (Guyana, Great Britain), charapilla, cumarut (Peru), tonka (Suriname), sarrapia (Venezuela, Colombia).

Botanic name

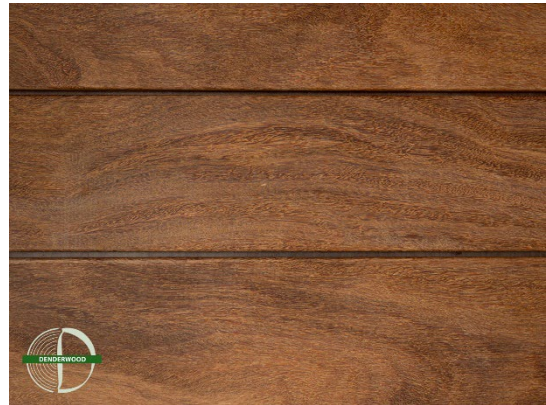
Dipteryx odorata (Aub.) Willd. (= *Coumarouna odorata*), *Dipteryx alata* Vogel, *Dipteryx magnifica* (Ducke) Ducke, *Dipteryx* spp., *Taralea oppositifolia* Aubl. (= *Dipteryx oppositifolia*).

Family

Leguminosae (Papilionaceae).

Growth area

Tropical South America.



Tree Description	Height about 30 m, maximum 50 m, with a well-shaped, straight branch-free trunk 18-24 m long. Maximum diameter is 1.2 m.
Supply	Sawn wood.
Wood Description	Heartwood and sapwood are clearly distinguishable. The sapwood is light yellow. The heartwood is yellow-brown to reddish-brown, usually with yellow-red veins. Cumaru feels somewhat oily and fresh has a faint vanilla smell and tastes like rancid oil.
Wood Recognition	Heavy, brownish wood, on copse face distinct aliform to confluent parenchyma and on the sessile face eta building.
Grain	Cross Thread .
Texture	Moderately coarse.
Voluminous mass	(850-)-1050(-1200) kg/m ³ at 12% moisture content.
Shrinkage	Radial 2.0% and tangential 2.6%.
Drying	Very slow. Cumaru shrinks quite slightly to moderately and has little tendency to end cracks and distortion when dried carefully. A calibration line for making electrical wood moisture measurements is not available.
Hardness	Longitudinal plane 15700 N.



Machinability	Cumaru is somewhat difficult to machine due to its large voluminous mass. However, it can be planed well and, except for strong cross grain, the planed surface becomes very smooth. Turns well.
Nailing & Screwing	Pre-drilling required.
Adhesives	Bad.
Bend	Not known.
Surface finish	Good.
Impregnability	Heartwood 4, sapwood not known (according to NEN-EN 350).
Details	The seeds (beans) provide a flavoring used as a substitute for vanilla. Within Cumaru, red and yellow varieties are distinguished which are marketed mixed. Red Cumaru comes from the tree species <i>Dipteryx magnifica</i> and is said to be slightly less durable than yellow cumaru, mainly from the tree species <i>Dipteryx odorata</i> .
Applications	Heavy durable construction, sheet piling, noise barriers, bridge and jetty decks, truck floors, street furniture, outdoor furniture, boats and shipbuilding, exterior paneling, veneer for furniture, turned goods, shuffleboards, sculpture, surrogate for pokwood (not for bearings). In its countries of origin, it is used for logs and striking wood.
Strength class	Classified as D60 depending on origin and quality (see Table D).

Sustainability

Relative resistance to mold

Heartwood class 1 (NEN-EN 350: practical experience and field research).

Relative resistance to animal organisms

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