

Family: FABACEAE-MIMOSOIDEAE (angiosperm)

Scientific name(s): Parkia multijuga
 Parkia nitida
 Parkia pendula
 Parkia ulei

Commercial restriction: no commercial restriction

WOOD DESCRIPTION

Color: creamy white
 Sapwood: not demarcated
 Texture: medium
 Grain: straight or interlocked
 Interlocked grain: slight
 Note: Sometimes, heartwood presents very large light brown veins.

LOG DESCRIPTION

Diameter: from 60 to 90 cm
 Thickness of sapwood:
 Floats: no
 Log durability: low (must be treated)

PHYSICAL PROPERTIES

Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions.

	<u>Mean</u>	<u>Std dev.</u>
Specific gravity *:	0,47	0,11
Monnin hardness *:	2,3	0,8
Coeff. of volumetric shrinkage:	0,43 %	0,07 %
Total tangential shrinkage (TS):	7,0 %	1,2 %
Total radial shrinkage (RS):	2,8 %	0,9 %
TS/RS ratio:	2,5	
Fiber saturation point:	29 %	
Stability: poorly stable		

MECHANICAL AND ACOUSTIC PROPERTIES

	<u>Mean</u>	<u>Std dev.</u>
Crushing strength *:	38 MPa	9 MPa
Static bending strength *:	67 MPa	16 MPa
Modulus of elasticity *:	11510 MPa	2294 MPa

(*: at 12% moisture content, with 1 MPa = 1 N/mm²)

Musical quality factor: 109,2 measured at 2773 Hz

NATURAL DURABILITY AND TREATABILITY

Fungi and termite resistance refers to end-uses under temperate climate. Except for special comments on sapwood, natural durability is based on mature heartwood. Sapwood must always be considered as non-durable against wood degrading agents.

E.N. = Euro Norm

Funghi (according to E.N. standards): class 5 - not durable

Dry wood borers: susceptible - sapwood not or slightly demarcated (risk in all the wood)

Termites (according to E.N. standards): class S - susceptible

Treatability (according to E.N. standards): class 2 - moderately permeable

Use class ensured by natural durability: class 1 - inside (no dampness)

Species covering the use class 5: No

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: requires appropriate preservative treatment

In case of risk of temporary humidification: requires appropriate preservative treatment

In case of risk of permanent humidification: use not recommended

DRYING

Drying rate: rapid to normal

Risk of distortion: high risk

Risk of casehardening: no

Risk of checking: high risk

Risk of collapse: no

Note: A moderate drying schedule must be used in order to reduce the risks of distortion. Possible risks of casehardening and collapse.

Possible drying schedule: 1

M.C. (%)	Temperature (°C)		Air humidity (%)
	dry-bulb	wet-bulb	
Green	40	37	82
40	44	38	68
30	44	36	59
20	46	36	52
15	49	37	46

This schedule is given for information only and is applicable to thickness lower or equal to 38 mm.

It must be used in compliance with the code of practice.

For thickness from 38 to 75 mm, the air relative humidity should be increased by 5 % at each step.

For thickness over 75 mm, a 10 % increase should be considered.

SAWING AND MACHINING

Blunting effect: normal

Sawteeth recommended: ordinary or alloy steel

Cutting tools: ordinary

Peeling: good

Slicing: not recommended or without interest

Note: Fuzzy surface.

ASSEMBLING

Nailing / screwing: poor

Gluing: correct

COMMERCIAL GRADING

Appearance grading for sawn timbers: According to NHLA grading rules (January 2007)

Possible grading: FAS, Select, Common 1, Common 2, Common 4

In French Guiana, the local name of this species is "DODOMISSINGA". Grading is done according to local rules "Bois guyanais classés".

Possible grading: Choix 1, choix 2, choix 3, choix 4

FIRE SAFETY

Conventional French grading: Thickness > 14 mm : M.3 (moderately inflammable)

Thickness < 14 mm : M.4 (easily inflammable)

Euroclasses grading: D s2 d0

Default grading for solid wood, according to requirements of European standard EN 14081-1 annex C (April 2009). It concerns structural graded timber in vertical uses with mean density upper 0.35 and thickness upper 22 mm.

END-USES

Veneer for interior of plywood

Boxes and crates

Interior panelling

Moulding

Fiber or particle boards

Formwork

Interior joinery

Current furniture or furniture components

Blockboard

MAIN LOCAL NAMES

<u>Country</u>	<u>Local name</u>	<u>Country</u>	<u>Local name</u>
Brazil	FAVA ARARA TUCUPI	Brazil	FAVA BOLOTA
Brazil	FAVEIRA	Brazil	PARICA
Brazil	VISGUEIRO	Colombia	HUARANGO
Colombia	RAYO	Ecuador	TANGAMA
Guyana	BLACK MANARIBALLI	Guyana	IPANAI
Guyana	UYA	French Guiana	DODOMISSINGA
French Guiana	KOUATAKAMAN	Peru	GOMA PASHACO
Suriname	KWATAKAMA	Venezuela	CASCARON

