

Family: FABACEAE (angiosperm)

Scientific name(s): Vatairea guyanensis  
 Vatairea paraensis  
 Vatairea spp.  
 Vataireopsis araroba  
 Vataireopsis surinamensis

Commercial restriction: no commercial restriction

## WOOD DESCRIPTION

Color: yellow brown  
 Sapwood: clearly demarcated  
 Texture: coarse  
 Grain: straight or interlocked  
 Interlocked grain: slight

Note: Bright yellow when freshly sawn, becoming yellow brown to dark brown or red brown.

## LOG DESCRIPTION

Diameter: from 60 to 90 cm  
 Thickness of sapwood: from 4 to 7 cm  
 Floats: no  
 Log durability: moderate (treatment recommended)

## 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 *:	0,75	0,12
Monnin hardness *:	5,6	3,0
Coeff. of volumetric shrinkage:	0,51 %	0,08 %
Total tangential shrinkage (TS):	7,8 %	1,7 %
Total radial shrinkage (RS):	4,5 %	0,9 %
TS/RS ratio:	1,7	
Fiber saturation point:	23 %	

Stability: moderately stable to stable

## MECHANICAL AND ACOUSTIC PROPERTIES

	<u>Mean</u>	<u>Std dev.</u>
Crushing strength *:	58 MPa	9 MPa
Static bending strength *:	110 MPa	24 MPa
Modulus of elasticity *:	19500 MPa	4550 MPa

(\*: at 12% moisture content, with 1 MPa = 1 N/mm<sup>2</sup>)

Musical quality factor: 127,7 measured at 2853 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 3 - moderately durable

Dry wood borers: durable - sapwood demarcated (risk limited to sapwood)

Termites (according to E.N. standards): class M - moderately durable

Treatability (according to E.N. standards): class 3-4 - poorly or not permeable

Use class ensured by natural durability: class 2 - inside or under cover (dampness possible)

Species covering the use class 5: No

## REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: does not require any 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

Possible drying schedule: 3

Risk of distortion: slight risk

Risk of casehardening: no

Risk of checking: no risk or very slight risk

Risk of collapse: no

M.C. (%)	Temperature (°C)		Air humidity (%)
	dry-bulb	wet-bulb	
Green	60	56	81
30	68	58	61
20	74	60	51
15	80	61	41

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: fairly high

Sawteeth recommended: stellite-tipped

Cutting tools: tungsten carbide

Peeling: not recommended or without interest

Slicing: nood

Note: Sawdust may cause allergies.

## ASSEMBLING

Nailing / screwing: good but pre-boring necessary

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 "INKASSA". 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

Industrial or heavy flooring

Interior panelling

Blockboard

Exterior joinery

Stairs (inside)

Formwork

Heavy carpentry

Flooring

Interior joinery

Sliced veneer

Cabinetwork (high class furniture)

Note: It is recommended to prepare surfaces and apply an undercoat, such as filling, before finishing as FAVEIRA AMARGOSA contains anti-siccatives.

## MAIN LOCAL NAMES

<u>Country</u>	<u>Local name</u>	<u>Country</u>	<u>Local name</u>
Brazil	ANGELIM AMARGOSO	Brazil	ARACUY
Brazil	FAVA AMARELA	Brazil	FAVA AMARGOSA
Brazil	FAVEIRA AMARELA	Brazil	FAVEIRA AMARGOSA
Brazil	FAVEIRA BOLACHA	Colombia	GUERRA
Colombia	MAQUI	Guyana	ARISAURO
Guyana	BASTARD PURPLEHEART	Guyana	BAUWUA
French Guiana	INKASSA	French Guiana	YONGO
Honduras	AMARGO	Panama	AMARGO
Peru	MARI-MARI	Peru	MARUPA DEL BAJO
Suriname	ARISOEROE	Suriname	GELE KABBES
Suriname	GELI-KABISSI		

