

Bitter angelim

Family. Fabaceae

Botanical Name(s).

Vatairea guianensis

Vatairea paraensis

Vataireopsis speciosa

Vataireopsis surinamensis

Vatairea p.p.

Continent. Latin America

CITES. This species is not listed in the CITES Appendices (Washington Convention 2023).

Description of logs

Diameter. From 60 to 90 cm

Thickness of sapwood. From 4 to 7 cm

Floats. No

Log durability. Moderate (treatment recommended)

Description of wood

Colour reference. Yellow brown

Sapwood. Clearly demarcated

Texture. Coarse

Grain. Straight or interlocked

Interlocked grain. Slight

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

Physics and mechanics

The properties indicated are for mature wood. These properties may vary significantly depending on the origin and growing conditions of the wood.

Property	Average value
Specific gravity ¹	0.75
Monnin hardness ¹	5.6
Coefficient of volumetric shrinkage	0.51 % per %
Total tangential shrinkage (St)	7.8 %
Total radial shrinkage (Sr)	4.5 %
Ratio St/Sr	1.7
Fibre saturation point	23 %
Thermal conductivity (λ)	0.25 W/(m.K)
Lower heating value	18,050 kJ/kg
Crushing strength ¹	58 MPa
Static bending strength ¹	110 MPa
Modulus of elasticity ¹	19,500 MPa

¹ At 12 % moisture content, with 1 MPa = 1 N/mm



Flat sawn

Quarter sawn



Natural durability and preservation

Resistance to fungi. Class 3 - moderately durable

Resistance to dry wood borers. Class D - durable (sapwood demarcated, risk limited to sapwood)

Resistance to termites. Class M - moderately durable

Treatability. Class 3-4 - poorly or not permeable

Use class ensured by natural durability.

Class 2 - inside or under cover (dampness possible)

Requirement of a preservative treatment

Against dry wood borer. Does not require any preservative treatment

In case of temporary humidification. Requires appropriate preservative treatment

In case of permanent humidification. Use not recommended

Drying

Drying rate. Rapid to normal

Risk of distorsion. Slight risk

Risk of casehardening. No known specific risk

Risk of checking. No risk or very slight risk

Risk of collapse. No known specific risk

Notes.

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
Prewarm 1		> 50	50	87	17.0
Prewarm 2	4	> 50	50	86	16.5
Drying		> 50	53	85	15.7
		50 - 40	53	82.0	14.6
		40 - 35	54	78.0	13.4
		35 - 30	55	77.0	12.9
		30 - 27	57	73.0	11.9
		27 - 24	58	68.0	10.7
		24 - 21	60	61.0	9.3
		21 - 18	62	52.0	7.9
		18 - 15	64	43.0	6.6
		15 - 12	65	39.0	6.0
		12 - 9	65	31.0	5.0
		9 - 6	65	28.0	4.5
Conditioning	8		58	(3)	(2)
Cooling	(1)		Stop	(3)	(2)

(1)) Cooling: until the temperature inside the kiln no longer exceeds external temperature by more than 30 °C.

(2) UGL = final H% x 0,8 to 0,9.

(3) Subtract RH from the UGL determined in (2) and temperature, using the Hailwood-Horrobin equation.

Sawing and machining

Blunting effect. Fairly high

Sawteeth recommended. Stellite-tipped

Cutting tools. Tungsten carbide

Peeling. Not recommended or without interest

Slicing. Good

Notes. Sawdust may cause allergies.

Assembling

Nailing and screwing. Good but pre-boring necessary

Commercial grading

Appearance grading for sawn timbers.

According to NHLA grading rules (2015) Possible grading: FAS, Select, Common 1, Common 2, Common 3 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

Visual grading for structural applications

No visual grading for structural applications

Fire safety

Conventional French grading.

Thickness > 14 mm: M3 (moderately inflammable)

Thickness < 14 mm: M4 (easily inflammable)

Euroclasses grading. D-s2, d0

Default grading for solid wood, according to requirements of European standard EN 14081-1+A1 (August 2019). It concerns structural graded timber in vertical uses and ceiling with mean density upper 0.35 and thickness upper 22 mm.

End-uses

- Blockboard
- Cabinetwork (high class furniture)
- Exterior joinery
- Flooring
- Formwork
- Heavy carpentry
- Indoor staircases
- Industrial or heavy flooring
- Interior joinery
- Interior panelling
- Sliced veneer

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

Main local names

Country	Local name
Brazil	Angelim amargoso
Brazil	Aracuy
Brazil	Fava amarela
Brazil	Fava amargosa
Brazil	Faveira amarela
Brazil	Faveira amargosa
Brazil	Faveira bolacha

Main local names

Country	Local name
Colombia	Guerra
Colombia	Maqui
France (importated tropical timber)	Faveira amargosa
French Guiana	Inkassa
French Guiana	Yongo
Guyana	Arisauro
Guyana	Bastard purpleheart
Guyana	Bauwaua
Honduras	Amargo
Panama	Amargo
Peru	Mari-mari
Peru	Marupa del bajo
Suriname	Arisoeroe
Suriname	Gele kabbes
Suriname	Geli-kabissi