Snakewood

Quarter sawn

Flat sawn

Family. Fabaceae-Mimosoideae

Botanical Name(s).

Zygia racemosa

Marmaroxylon racemosum (synonymous)

Pithecellobium racemosum (synonymous)

Continent. Latin America

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

Description of logs

Diameter. From 25 to 60 cm

Thickness of sapwood. From 2 to 3 cm

Floats. No

Log durability. Moderate (treatment recommended)

Description of wood

Colour reference. Orange - yellow

Sapwood. Not clearly demarcated

Texture. Medium

Grain. Straight or interlocked

Interlocked grain. Slight

Notes. Heartwood with irregular dark brown veins.These veins are not present in sapwood. Sometimes wavy grain.

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]	1.03
Monnin hardness[1]	10.6
Coefficient of volumetric shrinkage	0.74 % per %
Total tangential shrinkage (St)	10.5 %
Total radial shrinkage (Sr)	6.0 %
Ratio St/Sr	1.8
Fibre saturation point	28 %
Thermal conductivity (λ)	0.33 W/(m.K)
Lower heating value	
Crushing strength[1]	83 MPa
Static bending strength[1]	150 MPa
Modulus of elasticity[1]	27,030 MPa

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

Natural durability and preservation

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Resistance to fungi. Class 3 - moderately durable

Resistance to dry wood borers. Class S - susceptible (risk in all the wood)

Resistance to termites. Class D - durable

Treatability. Class 3 - poorly permeable

Use class ensured by natural durability.

Class 2 - inside or under cover (dampness possible)

Requirement of a preservative treatment

Against dry wood borer. Requires appropriate preservative treatment

In case of temporary humidification. Requires appropriate preservative treatment

In case of permanent humidification. Use not recommended

Drying

Drying rate. Normal to slow

Risk of distorsion. Slight risk

Risk of casehardening. No known specific risk

Risk of checking. High risk

Risk of collapse. No known specific risk

Notes. Drying must be done with care to reduce the risks of checks.

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
Prewarm 1		> 50	40	86	17.0
Prewarm 2	4	> 50	43	85	16.5
Drying		> 50	45	83	15.7
		50 - 40	45	80.0	14.6
		40 - 35	45	77.0	13.8
		35 - 30	45	74.0	12.9
		30 - 27	47	69.0	11.5
		27 - 24	49	61.0	9.9
		24 - 21	50	52.0	8.4
		21 - 18	53	48.0	7.7
		18 - 15	56	41.0	6.6
		15 - 12	59	36.0	5.9
		12 - 9	61	30.0	5.0
		9 - 6	65	29.0	4.7
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

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Peeling. Not recommended or without interest

Slicing. Good

Notes. Requires power. Some difficulties due to hardness and interlocked grain.

Assembling

Nailing and screwing. Good but pre-boring necessary

Notes. Very high specific gravity: gluing must be especially performed in compliance with the code of practice.

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 "Bois Serpent". 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

- Cabinetwork (high class furniture)
- Current furniture or furniture components
- Flooring
- Hydraulic works (seawater)
- Interior panelling
- Sliced veneer
- Turned goods
- Wood-ware

Electric guitar top in Angelim rajado – Design by Cosmik Guitare, Lille (France).
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Main local names

Country	Local name
Brazil	Angelim rajado
Brazil	Ingarana
Brazil	Ingarana da terra firma
French Guiana	Bois serpent
Guyana	Snakewood
Suriname	Bostamarinde
Suriname	Sneki oedoe

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