

ABIURANA VERMELHA

Abiurana vermelha

Family. Sapotaceae

Botanical Name(s).

Pouteria caimito
Pouteria guianensis

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 5 to 9 cm

Floats. No

Log durability. Good

Description of wood

Colour reference. Red brown Sapwood. Clearly demarcated

Texture. Medium

Grain. Straight, sometimes slightly interlocked

Interlocked grain. Slight

Notes. Heartwood reddish brown, somewhat striped or flame-like figured, distinct from the yellowish brown sapwood. Growth rings not very visible.

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 | 1.09 |
| Monnin hardness ¹ | 11.0 |
| Coefficient of volumetric shrinkage | 0.64 % per % |
| Total tangential shrinkage (St) | 9.1 % |
| Total radial shrinkage (Sr) | 6.8 % |
| Ratio St/Sr | 1.3 |
| Fibre saturation point | 24 % |
| Thermal conductivity (λ) | 0.34 W/(m.K) |
| Lower heating value | |
| Crushing strength ¹ | 89 MPa |
| Static bending strength ¹ | 164 MPa |
| Modulus of elasticity ¹ | 28,000 MPa |
| | |

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

Natural durability and preservation



Flat sawn





ABIURANA VERMELHA

Resistance to fungi. Class 1 - very durable

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

Resistance to termites. Class D - durable Treatability. Class 4 - not permeable Use class ensured by natural durability.

Class 4 - in ground or fresh water contact

Notes. This species covers use class 5 (wood immersed in salt water on a regular or permanent basis).

Requirement of a preservative treatment

Against dry wood borer. Does not require any preservative treatment
In case of temporary humidification. Does not require any preservative treatment
In case of permanent humidification. Does not require any preservative treatment

Drying

Drying rate. Rapid to normal Risk of distorsion. Medium risk

Risk of casehardening. No known specific risk

Risk of checking. Slight risk

Risk of collapse. No known specific risk

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.

Sawing and machining

Blunting effect. High

Sawteeth recommended. Stellite-tipped

Cutting tools. Tungsten carbide

⁽²⁾ UGL = final H% \times 0,8 to 0,9.

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





Peeling. Not recommended or without interest

Slicing. Good

Assembling

Nailing and screwing. Good but pre-boring necessary

Commercial grading

Appearance grading for sawn timbers.

According to ATIBT grading rules, possible grade: FAS (First And Second), n°1 Common and select, n°2 Common

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

- Bridges (parts in contact with water or ground)
- Cabinetwork (high class furniture)
- Cladding
- Decking
- Heavy carpentry
- Hydraulic works (fresh water)
- Hydraulic works (seawater)
- Industrial or heavy flooring
- Poles
- Sliced veneer
- Wood-ware



Piles of Abiurana vermelha (Vandecasteele Houtimport), Aalbeke, Belgium (© Dirk Debussche)
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ABIURANA VERMELHA

Main local names

Country Local nameBrazil Abieiro

Brazil Abieiro da mata

Brazil Abiu

Brazil Abiu vermelho

Brazil Abiurana

Brazil Abiurana da mata
Brazil Abiurana da varzea

Brazil Guapeba Colombia Caimito French Guiana Akoinsiba French Guiana Jaune d'oeuf Suriname Jamboka Suriname Jan Snijder Venezuela Caimito morado Venezuela Carrizalero