

## Dukali / amapa\*

Family. Apocynaceae

Botanical Name(s).

*Parahancornia fasciculata*

Continent. Latin America

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

Notes. Dukali is the pilot name mentioned in the General Nomenclature of Tropical Timber, Amapa is the common trade name. Sandé (white wood Brosimum) is also commercialized under the name Amapa (or Amapa doce).

### Description of logs

Diameter. From 40 to 50 cm

Thickness of sapwood. -

Floats. Yes

Log durability. Low (treatment necessary)

### Description of wood

Colour reference. Creamy white

Sapwood. Not demarcated

Texture. Fine

Grain. Straight

Interlocked grain. Absent

Notes. Cream white. Silver figure very fine.

### 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 <sup>1</sup>	0.52
Monnin hardness <sup>1</sup>	2.0
Coefficient of volumetric shrinkage	0.39 % per %
Total tangential shrinkage (St)	7.7 %
Total radial shrinkage (Sr)	4.3 %
Ratio St/Sr	1.8
Fibre saturation point	31 %
Thermal conductivity (λ)	0.18 W/(m.K)
Lower heating value	
Crushing strength <sup>1</sup>	44 MPa
Static bending strength <sup>1</sup>	80 MPa
Modulus of elasticity <sup>1</sup>	13,140 MPa

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



Flat sawn



Quarter sawn

## Natural durability and preservation

Resistance to fungi. Class 5 - not durable

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

Resistance to termites. Class S - susceptible

Treatability. Class 2 - moderately permeable

Use class ensured by natural durability.

Class 1 - inside (no dampness)

## 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. Requires appropriate preservative treatment

## Drying

Drying rate. Rapid

Risk of distorsion. Slight 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 (%)
<b>Prewarm 1</b>		> 50	50	86	16.5
<b>Prewarm 2</b>	3	> 50	52	85	16.0
<b>Drying</b>		> 50	55	82	14.7
		50 - 40	55	80.0	13.8
		40 - 35	55	75.0	12.6
		35 - 30	56	73.0	12.0
		30 - 27	58	67.0	10.5
		27 - 24	60	58.0	8.9
		24 - 21	62	50.0	7.5
		21 - 18	64	45.0	6.8
		18 - 15	65	37.0	5.7
		15 - 12	65	34.0	5.3
		12 - 9	65	28.0	4.5
		9 - 6	65	24.0	4.0
<b>Conditioning</b>	6		58	(3)	(2)
<b>Cooling</b>	(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. Normal

Sawteeth recommended. Ordinary or alloy steel

Cutting tools. Ordinary

Peeling. Good

Slicing. Not recommended or without interest

## Assembling

Nailing and screwing. Good

## 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

- Boxes and crates
- Current furniture or furniture components
- Interior joinery
- Interior panelling
- Light carpentry
- Matches
- Moulding
- Rolling shutters
- Veneer for back or face of plywood
- Veneer for interior of plywood

## Main local names

Country	Local name
Brazil	Amapa amargoso
Brazil	Amapazinho
French Guiana	Mapa
Guyana	Dukali
Peru	Naranja podrida
Suriname	Mapa