

Musizi

Family. Rhamnaceae

Botanical Name(s).

Maesopsis eminii

Continent. Africa

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

Description of logs

Diameter. From 50 to 100 cm

Thickness of sapwood. From 3 to 8 cm

Floats. Yes

Log durability. Low (treatment necessary)

Description of wood

Colour reference. Brown

Sapwood. Clearly demarcated

Texture. Coarse

Grain. Straight or interlocked

Interlocked grain. Marked

Notes. Sapwood white. Heartwood bright yellow-green or green-brown, turns a pale golden brown on exposure. Stripe or ribbon figure when quarter-sawn due to interlocked grain. Large knots near the core.

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	0.52
Monnin hardness ¹	2.3
Coefficient of volumetric shrinkage	0.35 % per %
Total tangential shrinkage (St)	4.9 %
Total radial shrinkage (Sr)	3.0 %
Ratio St/Sr	1.6
Fibre saturation point	25 %
Thermal conductivity (λ)	0.18 W/(m.K)
Lower heating value	
Crushing strength ¹	40 MPa
Static bending strength ¹	75 MPa
Modulus of elasticity ¹	11,030 MPa

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

Natural durability and preservation



Quarter sawn



Half-quarter sawn

Resistance to fungi. Class 4 - poorly durable

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

Resistance to termites. Class S - susceptible

Treatability. Class 1 - easily 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. Use not recommended

In case of permanent humidification. Use not recommended

Drying

Drying rate. Rapid

Risk of distortion. Slight risk

Risk of casehardening. No known specific risk

Risk of checking. High risk

Risk of collapse. No known specific risk

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
Prewarm 1		> 50	50	86	16.5
Prewarm 2	3	> 50	52	85	16.0
Drying		> 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
Conditioning	6		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. Normal

Sawteeth recommended. Ordinary or alloy steel

Cutting tools. Ordinary

Peeling. Good

Slicing. Not recommended or without interest

Assembling

Nailing and screwing. Poor

Commercial grading

Appearance grading for sawn timbers.

According to the ATIBT grading rules (2017), the main choices are: FAS (First And Second), n°1 Common and select, n°2 Common (see details of these rules on the ATIBT website).

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
- Boxes and crates
- Current furniture or furniture components
- Flooring
- Glued laminated
- Interior joinery
- Interior panelling
- Matches
- Moulding
- Veneer for back or face of plywood
- Veneer for interior of plywood
- Wood frame house

Notes. Needs filling before polishing.

Main local names

Country	Local name
Cameroon	N'kanguelé
Democratic Republic of the Congo	Ndunga
Gabon	N'kanguelé
Kenya	Musizi
Tanzania	Musira
Uganda	Musizi