

Danta

Family. Malvaceae

Botanical Name(s).

Nesogordonia fouassieri

Nesogordonia kabingaensis

Nesogordonia leplaei

Nesogordonia papaverifera

Cistanthera papaverifera (synonymous)

Continent. Africa

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

Description of logs

Diameter. From 50 to 80 cm

Thickness of sapwood. From 2 to 5 cm

Floats. No

Log durability. Low (treatment necessary)

Description of wood

Colour reference. Red brown

Sapwood. Clearly demarcated

Texture. Fine

Grain. Straight or interlocked

Interlocked grain. Slight

Notes. Wood light brown to reddish brown. Moiré and ribbon like aspect on quartersawn. Sometimes presence of very small knots.

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	0.76
Monnin hardness ¹	5.0
Coefficient of volumetric shrinkage	0.50 % per %
Total tangential shrinkage (St)	7.5 %
Total radial shrinkage (Sr)	5.1 %
Ratio St/Sr	1.5
Fibre saturation point	30 %
Thermal conductivity (λ)	0.25 W/(m.K)
Lower heating value	18,470 kJ/kg
Crushing strength ¹	67 MPa
Static bending strength ¹	120 MPa
Modulus of elasticity ¹	13,020 MPa

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



Quarter sawn



Half-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)

Notes. This species is listed in the European standard NF EN 350 (2016). Variable natural durability towards fungi.

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. Slow

Risk of distorsion. Slight risk

Risk of casehardening. Yes

Risk of checking. Slight risk

Risk of collapse. No known specific risk

Notes. Risks of casehardening if drying is too fast. Initial surface drying prior to kiln drying is recommended.

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. Fairly high

Sawteeth recommended. Stellite-tipped

Cutting tools. Tungsten carbide

Peeling. Good

Slicing. Good

Notes. Requires power. Blunting effect due to hardness. Tends to clog sawteeth when green. Sometimes difficulties due to interlocked grain.

Assembling

Nailing and screwing. Good

Notes. Pre-boring is sometimes necessary. Tends to stain when gluing.

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

- Cabinetwork (high class furniture)
- Current furniture or furniture components
- Exterior joinery
- Flooring
- Indoor staircases
- Interior joinery
- Interior panelling
- Sculpture
- Sliced veneer
- Tool handles (resilient woods)
- Turned goods
- Vehicle or container flooring
- Veneer for back or face of plywood
- Veneer for interior of plywood

Notes. A careful sanding is necessary in presence of interlocked grain.



Kitchen flooring – by Brenco Exotic Woods (United States).
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Main local names

Country	Local name
Angola	Kissinhungo
Cameroon	Ovoé
Cameroon	Ovoui
Central African Republic	Naouya
Côte d'Ivoire	Kotibé
Democratic Republic of the Congo	Kondofindo
Gabon	Aborbora
Ghana	Danta
Nigeria	Otutu
United Kingdom (importated tropical timber)	Danta