

Family: MELIACEAE (angiosperm)

Scientific name(s): Turraeanthus africanus

Commercial restriction: no commercial restriction

## WOOD DESCRIPTION

Color: light yellow  
 Sapwood: not demarcated  
 Texture: fine  
 Grain: straight or interlocked  
 Interlocked grain: slight

Note: Wood cream white or light yellow, lustrous aspect, turns to golden yellow with light. Moiré or ribbon like aspect on quartersawn.

## LOG DESCRIPTION

Diameter: from 50 to 70 cm  
 Thickness of sapwood:  
 Floats: yes  
 Log durability: low (must be treated)

## PHYSICAL PROPERTIES

Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions.

	<u>Mean</u>	<u>Std dev.</u>
Specific gravity *:	0,58	0,06
Monnin hardness *:	2,7	0,9
Coeff. of volumetric shrinkage:	0,36 %	0,11 %
Total tangential shrinkage (TS):	6,6 %	1,1 %
Total radial shrinkage (RS):	3,8 %	0,6 %
TS/RS ratio:	1,7	
Fiber saturation point:	39 %	
Stability: stable		

## MECHANICAL AND ACOUSTIC PROPERTIES

	<u>Mean</u>	<u>Std dev.</u>
Crushing strength *:	52 MPa	7 MPa
Static bending strength *:	94 MPa	15 MPa
Modulus of elasticity *:	12590 MPa	1550 MPa

(\*: at 12% moisture content, with 1 MPa = 1 N/mm<sup>2</sup>)

Musical quality factor: 128,8 measured at 2754 Hz

## NATURAL DURABILITY AND TREATABILITY

Fungi and termite resistance refers to end-uses under temperate climate. Except for special comments on sapwood, natural durability is based on mature heartwood. Sapwood must always be considered as non-durable against wood degrading agents.

E.N. = Euro Norm

Funghi (according to E.N. standards): class 4 - poorly durable

Dry wood borers: susceptible - sapwood not or slightly demarcated (risk in all the wood)

Termites (according to E.N. standards): class S - susceptible

Treatability (according to E.N. standards): class 4 - not permeable

Use class ensured by natural durability: class 2 - inside or under cover (dampness possible)

Species covering the use class 5: No

Note: This species is listed in the European standard NF EN 350-2.  
 Prone to blue stain.

## REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: requires appropriate preservative treatment

In case of risk of temporary humidification: use not recommended

In case of risk of permanent humidification: use not recommended

## DRYING

Drying rate: rapid to normal  
 Risk of distortion: high risk  
 Risk of casehardening: no  
 Risk of checking: slight risk  
 Risk of collapse: no

Note: Existing end checks tend to enlarge.

Possible drying schedule: 2

M.C. (%)	Temperature (°C)		Air humidity (%)
	dry-bulb	wet-bulb	
Green	50	47	84
40	50	45	75
30	55	47	67
20	70	55	47
15	75	58	44

This schedule is given for information only and is applicable to thickness lower or equal to 38 mm.

It must be used in compliance with the code of practice.

For thickness from 38 to 75 mm, the air relative humidity should be increased by 5 % at each step.

For thickness over 75 mm, a 10 % increase should be considered.

## SAWING AND MACHINING

Blunting effect: normal  
 Sawteeth recommended: ordinary or alloy steel  
 Cutting tools: ordinary  
 Peeling: bad  
 Slicing: nood

Note: Poor aptitude for peeling (irregular logs). Very irritant sawdust; good ventilation required. Sometimes tearing in planing.

## ASSEMBLING

Nailing / screwing: good but pre-boring necessary

Gluing: correct

Note: Slight tendency to split when nailing.

## COMMERCIAL GRADING

Appearance grading for sawn timbers: According to SATA grading rules (1996)

For the "General Purpose Market":

Possible grading for square edged timbers: choix I, choix II, choix III, choix IV

Possible grading for short length lumbers: choix I, choix II

Possible grading for short length rafters: choix I, choix II, choix III

For the "Special Market":

Possible grading for strips and small boards (ou battens): choix I, choix II, choix III

Possible grading for rafters: choix I, choix II, choix III

## FIRE SAFETY

Conventional French grading: Thickness > 14 mm : M.3 (moderately inflammable)  
 Thickness < 14 mm : M.4 (easily inflammable)

Euroclasses grading: D s2 d0

Default grading for solid wood, according to requirements of European standard EN 14081-1 annex C (April 2009). It concerns structural graded timber in vertical uses with mean density upper 0.35 and thickness upper 22 mm.

## END-USES

Cabinetwork (high class furniture)

Interior joinery

Current furniture or furniture components

Moulding

Note: Substitute for SYCOMORE (Acer spp.) for furnitures.

Sliced veneer

Interior panelling

Musical instruments

## MAIN LOCAL NAMES

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<u>Country</u>	<u>Local name</u>	<u>Country</u>	<u>Local name</u>
Cameroon	ASAMA	Ivory Coast	AVODIRE
Ghana	APAPAYA	Ghana	AVODIRE
Liberia	BLIMA-PU	Nigeria	APAYA
Democratic Republic of the Congo	LUSAMBA	Democratic Republic of the Congo	M'FUBE
Belgium	LUSAMBA		

