

Common name:	AYOUS
Family:	STERCULIACEAE
Scientific name(s):	Triplochiton scleroxylon

LOG DESCRIPTION

Diameter:	from 60 to 140 cm
Thickness of sapwood:	from to cm
Floats:	yes
Durability in forest :	Low (must be treated)

WOOD DESCRIPTION

Colour:	Light yellow
Sapwood:	Not demarcated
Texture:	Medium
Grain:	Straight or interlocked
Interlocked grain:	Slight

Note: Black holes, brittleheart, ring shakes and grub holes in some logs.
Yellowish white to light yellow, heartwood sometimes darker. Ribbon like aspect on quartersawn. Grain sometimes irregular.

PHYSICAL PROPERTIES

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

	mean	standard deviation
Density *:	0.38 g/cm ³	0.05
Monnin hardness*:	1.1	0.4
Coef of volumetric shrinkage:	0.36 %	0.11
Total tangential shrinkage:	5.0 %	0.5
Total radial shrinkage:	2.9 %	0.4
Fibre saturation point:	29 %	
Stability:	Moderately stable to stable	

MECHANICAL PROPERTIES

	mean	standard deviation
Crushing strength *:	30 MPa	4
Static bending strength *:	52 MPa	9
Modulus of elasticity *:	7260 MPa	1574

(* : at 12 % moisture content ; 1 MPa = 1 N/mm²)

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.

Fungi:	Class 5 - not durable
Dry wood borers:	Susceptible; sapwood not or slightly demarcated (risk in all the wood)
Termites:	Class S - Susceptible
Treatability:	3 - poorly permeable
Use class*:	1 - inside (no dampness)

* ensured by natural durability (according EN standards).

Note: This species is listed in the European standard NF EN 350-2.
Poorly to moderately permeable to preservative treatment. Prone to blue stain and dote.

MAIN LOCAL NAMES

Countries	Local names
Benin	XWETIN
Cameroon	AYOUS
Cameroon	AYUS
Central African Rep	BADO
Central African Rep	M'BADO
Côte d'Ivoire	SAMBA
Equatorial Guinea	AYOUS
Equatorial Guinea	AYUS
Ghana	WAWA
Nigeria	ARERE
Nigeria	OBECHÉ
France	AYOUS
France	OBECHÉ
Germany	ABACHI
United Kingdom	AYOUS
United Kingdom	OBECHÉ
United Kingdom	WAWA

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks:	Requires appropriate preservative treatment
In case of temporary humidification risk:	Use not recommended
In case of permanent humidification risk:	Use not recommended

DRYING

Possible drying schedule

Drying rate:	Rapid	Temperature (°C)			Air humidity (%)
		M.C. (%)	dry-bulb	wet-bulb	
Risk of distortion:	No risk or very slight risk				
Risk of casehardening:	No				
Risk of checking:	No risk or very slight risk	Green	60	56	81
Risk of collapse:	No	30	68	58	61
		20	74	60	51
		15	80	61	41

This schedule is given for information only and is applicable to thickness < 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.

Note: During air drying, it is recommended to use large spacer sticks to allow a good air circulation.

SAWING AND MACHINING

Blunting effect:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Ordinary
Peeling:	Good
Slicing:	Good
Note:	Tends to crumble when machining end grain and tends to tear in mortising (it is recommended to keep sharp edges and to reduce the cutting angle). Filling recommended.

ASSEMBLING

Nailing / Screwing:	Poor
Gluing:	Correct
Note:	Gluing must be done carefully: absorbent wood.

END-USES

Main known end-uses; they must to be implemented according to the code of practice.

Important remark: some end-uses are mentionned for information (traditional, regional or ancient end-uses).

Note: Substitute for POPLAR (Populus spp.) for several end-uses: light furniture, panneling....

Moulding

Veneer for interior of plywood

Veneer for back or face of plywood

Current furniture or furniture components

Boxes and crates

Interior joinery

Interior panneling

Fiber or particle boards

Blockboard

Sculpture

Matches

Sliced veneer

Pencils