

Family: MELIACEAE (angiosperm)

Scientific name(s): Lovoia trichilioides

Lovoia klaineana (synonymous)

Commercial restriction: no commercial restriction

WOOD DESCRIPTION

Color: brown
 Sapwood: clearly demarcated
 Texture: fine
 Grain: interlocked
 Interlocked grain: slight

Note: Ring shakes and brittleheart possible in some logs.

Wood yellow brown or grey brown, with black streaks or veins taking a golden glint. Black deposits in the pores.

LOG DESCRIPTION

Diameter: from 60 to 120 cm
 Thickness of sapwood: from 3 to 7 cm
 Floats: yes
 Log durability: moderate (treatment recommended)

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 *:	0,53	0,06
Monnin hardness *:	2,3	0,7
Coeff. of volumetric shrinkage:	0,43 %	0,11 %
Total tangential shrinkage (TS):	5,8 %	0,5 %
Total radial shrinkage (RS):	3,7 %	0,9 %
TS/RS ratio:	1,6	
Fiber saturation point:	27 %	
Stability: stable		

MECHANICAL AND ACOUSTIC PROPERTIES

	<u>Mean</u>	<u>Std dev.</u>
Crushing strength *:	47 MPa	8 MPa
Static bending strength *:	72 MPa	13 MPa
Modulus of elasticity *:	10460 MPa	946 MPa

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

Musical quality factor: 109,5 measured at 2693 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 3-4 - moderately to poorly durable

Dry wood borers: durable - sapwood demarcated (risk limited to sapwood)

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

Treatability (according to E.N. standards): class 3-4 - poorly or 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.

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: does not require any preservative treatment

In case of risk of temporary humidification: requires appropriate preservative treatment

In case of risk of permanent humidification: use not recommended

DRYING

Drying rate: rapid to normal

Possible drying schedule: 2

Risk of distortion: slight risk

Risk of casehardening: no

Risk of checking: slight risk

Risk of collapse: no

Note: Existing shakes tend to slightly extend.

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: good

Slicing: good

Note: Difficulties due to interlocked grain in planing (tearing). Keep sharp tools. Ribbon like aspect on quartersawn. Sawdust may be irritant.

ASSEMBLING

Nailing / screwing: good

Gluing: correct

Note: Risks of end checks.

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)

Sliced veneer

Veneer for back or face of plywood

Turned goods

Light carpentry

Note: Should not be confused with WALNUT (*Juglans* spp.), only colours are similar.

Current furniture or furniture components

Interior panelling

Interior joinery

Seats

MAIN LOCAL NAMES

<u>Country</u>	<u>Local name</u>	<u>Country</u>	<u>Local name</u>
Cameroon	BIBOLO	Congo	BOSSO
Ivory Coast	DIBETOU	Gabon	EYAN
Ghana	AFRICAN WALNUT	Ghana	DUBINI-BIRI
Ghana	MPENGWA	Equatorial Guinea	M'BERO
Equatorial Guinea	N'VERO	Nigeria	ANAMENILA
Nigeria	APOPO	Nigeria	SIDA
Central African Republic	BOYO KONDI	Democratic Republic of the Congo	BOMBULU
Democratic Republic of the Congo	LIFAKI MUINDU	Sierra Leone	WNAIMEI
France	NOYER D'AFRIQUE	France	NOYER DU GABON
United Kingdom	AFRICAN WALNUT	United Kingdom	TIGERWOOD
United States of America	CONGOWOOD	United States of America	TIGERWOOD

