LATI

Family: FABACEAE-CAESALPINIOIDEAE (angiosperm)

Scientific name(s): Amphimas ferrugineus
Amphimas pterocarpoides

Commercial restriction: no commercial restriction

WOOD DESCRIPTION

Color: yellow brown

Sapwood: not clearly demarcated

Texture: coarse

Grain: straight

Interlocked grain: absent

LOG DESCRIPTION

Diameter: from 80 to 100 cm

Thickness of sapwood: from 5 to 8 cm

Floats: yes

Log durability: low (must be treated)

Note: Heartwood cream white to yellow brown. The presence of parenchyma bands regularly spaced gives an aesthetic aspect to sawnwoods.

PHYSICAL PROPERTIES

MECHANICAL AND ACOUSTIC PROPERTIES

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

	Mean	Std dev.
Specific gravity *:	0,82	0,06
Monnin hardness *:	5,8	1,2
Coeff. of volumetric shrinkage:	0,69 %	0,05 %
Total tangential shrinkage (TS):	10,8 %	0,9 %
Total radial shrinkage (RS):	6,4 %	0,4 %
TS/RS ratio:	1,7	
Fiber saturation point:	30 %	

	Mean	Std dev.
Crushing strength *:	73 MPa	6 MPa
Static bending strength *:	128 MPa	8 MPa
Modulus of elasticity *:	16830 MPa	1420 MPa

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

Musical quality factor: 101,7 measured at 2852 Hz

Stability: moderately stable to poorly stable

Note: Hardness varies from fairly hard to hard.

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 - moderately durable

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

Termites (according to E.N. standards): class M - moderately durable

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: requires appropriate preservative treatment

In case of risk of permanent humidification: use not recommended

DRYING

Drying rate: slow

Risk of distortion: high risk

Risk of casehardening: yes

Risk of checking: high risk

Risk of collapse: no

Note: Initial surface drying prior to kiln drying is recommended.

Possible drying schedule: 6

M.C. (%)	Temperature (°C) dry-bulb	wet-bulb	Air humidity (%)
Green	42	41	94
50	48	43	74
30	54	46	63
20	60	51	62
15	60	51	62

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: not recommended or without interest

Slicing: nood

Note: Sawing may require power. Grain tearing in machining.

ASSEMBLING

Nailing / screwing: good but pre-boring necessary

Gluing: correct

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.

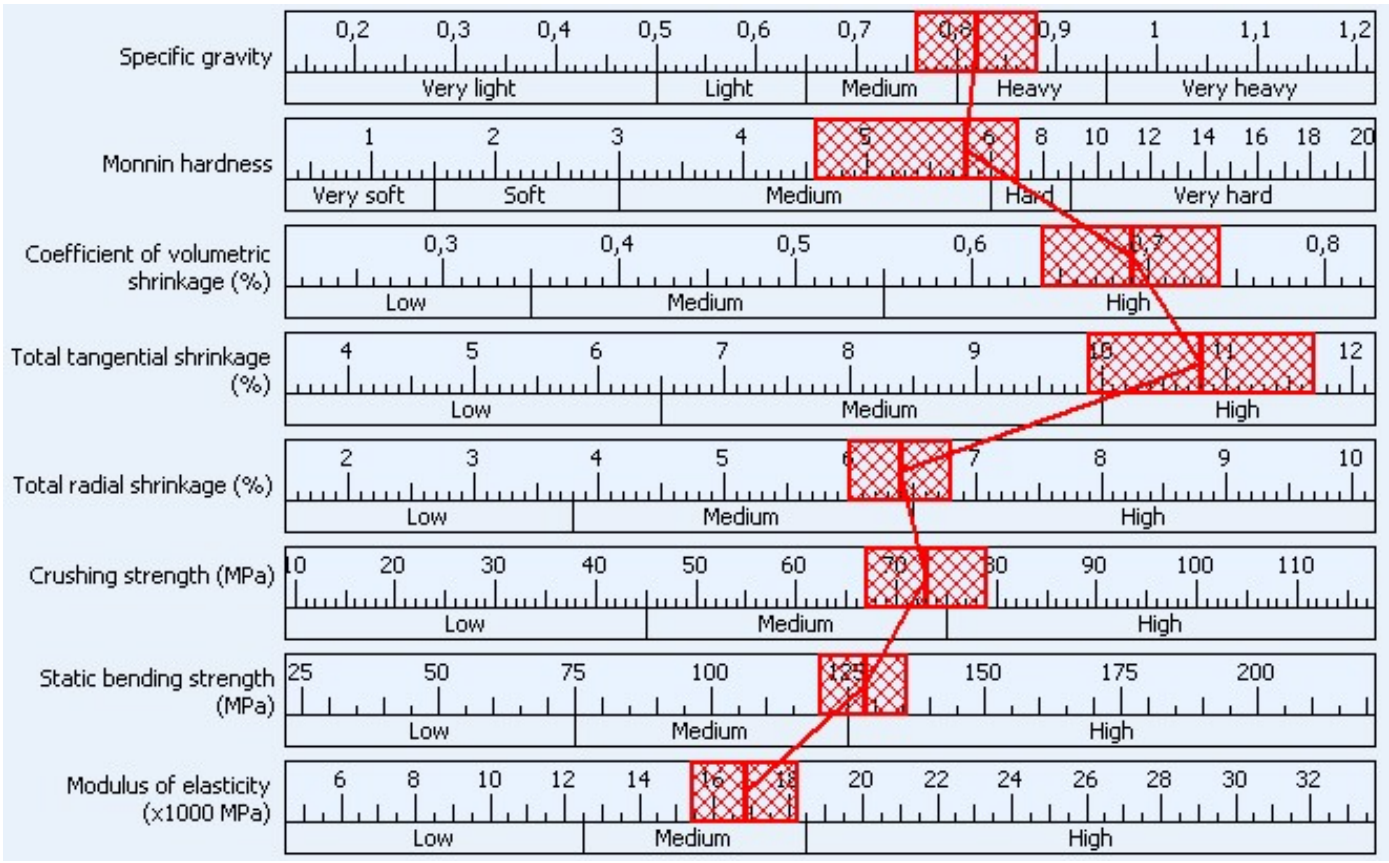
END-USES

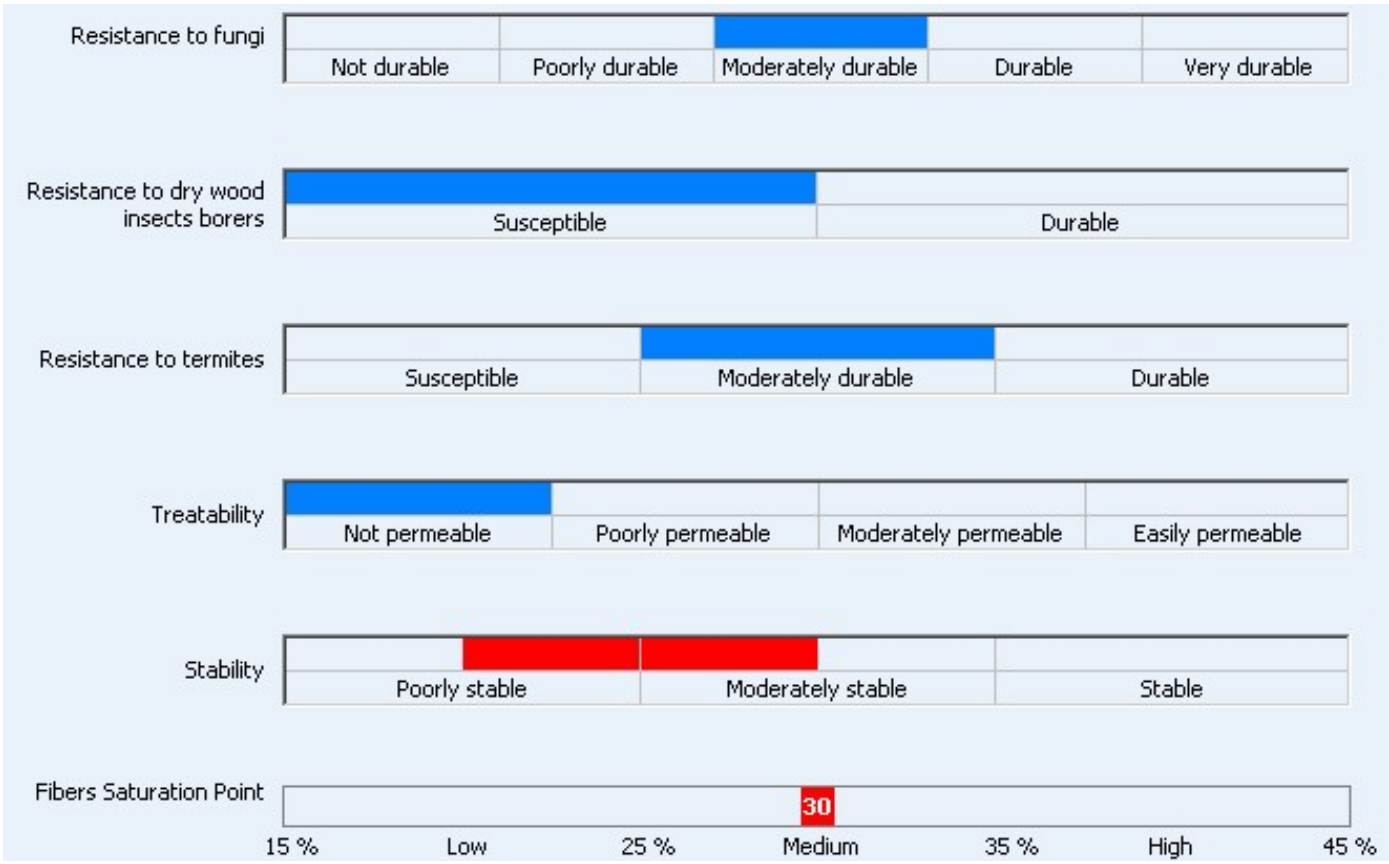
Interior joinery
Flooring
Current furniture or furniture components
Moulding
Sliced veneer
Interior panelling
Wood frame house
Boxes and crates

Note: Aspect quite similar to EYONG (Eribroma oblonga).

MAIN LOCAL NAMES

Country	Local name	Country	Local name
Cameroon	EDJIN	Cameroon	EDZIL
Congo	MUIZI	Ivory Coast	LATI
Gabon	EDZUI	Ghana	YAYA
Democratic Republic of the Congo	BOKANGA		


Specific gravity
0,2 0,3 0,4 0,5 0,6 0,7 0,8 0,9 1 1,1 1,2
Very light
Light
Medium
Heavy
Very heavy
Monnin hardness
1 2 3 4 5 6 8 10 12 14 16 18 20
Very soft
Soft
Medium
Hard
Very hard
Coefficient of volumetric shrinkage (%)
0,3 0,4 0,5 0,6 0,7 0,8
Low
Medium
High
Total tangential shrinkage (%)
4 5 6 7 8 9 10 11 12
Low
Medium
High
Total radial shrinkage (%)
2 3 4 5 6 7 8 9 10
Low
Medium
High
Crushing strength (MPa)
10 20 30 40 50 60 70 80 90 100 110
Low
Medium
High
Static bending strength (MPa)
25 50 75 100 125 150 175 200
Low
Medium
High
Modulus of elasticity (x1000 MPa)
6 8 10 12 14 16 18 20 22 24 26 28 30 32
Low
Medium
High


Resistance to fungi
Not durable
Poorly durable
Moderately durable
Durable
Very durable
Resistance to dry wood insects borers
Susceptible
Durable
Resistance to termites
Susceptible
Moderately durable
Durable
Treatability
Not permeable
Poorly permeable
Moderately permeable
Easily permeable
Stability
Poorly stable
Moderately stable
Stable
Fibers Saturation Point
30
15 %
Low
25 %
Medium
35 %
High
45 %