Common name:	EKABA
Family:	CAESALPINIACEAE
Scientific name(s):	Tetraberlinia bifoliolata Berlinia bifoliolata (synonymous) Tetraberlinia tubmaniana
Note:	EKABA is often confused with ANDOUNG (Monopetalanthus spp.).

LOG DESCRIPTION

Diameter:	from 70 to 100 cm
Thickness of sapwood:	from 2 to 12 cm
Floats:	yes
Durability in forest :	Moderate (treatment recommended)
Note:	Possible presence of wind shakes.

WOOD DESCRIPTION

Colour:	Pinkish brown
Sapwood:	Not clearly demarcated
Texture:	Medium
Grain:	Straight or interlocked
Interlocked grain:	Slight

PHYSICAL PROPERTIES

MECHANICAL 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 *:	0.62 g/cm3	0.07
Monnin hardness*:	3.0	0.6
Coef of volumetric shrinkage:	0.50 %	0.07
Total tangential shrinkage:	7.8 %	1.2
Total radial shrinkage:	4.1 %	0.7
Fibre saturation point:	27 %	

	mean	standard deviation
Crushing strength *:	56 MPa	8
Static bending strength *:	90 MPa	15
Modulus of elasticity *:	13760 MPa	2030

Stability: Moderately stable

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

Note: T. bifoliolata has lower physical and mechanical properties than T. tubmaniana .

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 3 moderately durable
Dry wood borers:	Susceptible; sapwood not or slightly demarcated (risk in all the wood)
Termites:	Class S - Susceptible
Treatability:	2 - moderately permeable
Use class*:	2 - inside or under cover (dampness possible)

* ensured by natural durability (according EN standards).

MAIN LOCAL NAMES

Countries	Local names
Cameroon	EKOP-RIBI
Congo	EKO-ANDOUNG
Equatorial Guinea	EKOP
Gabon	EKO-ANDOUNG
Liberia	HOH
Liberia	SIKON
Germany	EKOP
Netherlands	EKOP
Spain	EKABAN
United Kingdom	TETRABERLINIA

EKABA

REQUIREMENT OF A PRESERVATIVE TREATMENT

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

DRYING

Drying rate:	Normal to slow
Risk of distortion:	High risk
Risk of casehardening:	No
Risk of checking:	High risk
Risk of collapse:	No

Possible drying schedule

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 < 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: Risks of discoloration during drying.

SAWING AND MACHINING

Blunting effect:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Ordinary
Peeling:	Good
Slicing:	Not recommended or without interest
Note:	Risks of grain tearing in presence of interlocked grain; a reduced cutting angle is then recommended.

ASSEMBLING

Nailing / Screwing:	Poor
Gluing:	Correct

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).

Veneer for interior of plywood
Veneer for back or face of plywood
Blockboard
Light carpentry
Glued laminated
Wood frame house
Moulding
Boxes and crates
Formwork
Current furniture or furniture components
Turned goods
Exterior joinery
Exterior panelling
Interior joinery
Interior panelling