Common name:	BETE
Family:	STERCULIACEAE
Scientific name(s):	Mansonia altissima
Note:	Also called MANSONIA.

LOG DESCRIPTION

Diameter:	from 40 to 70 cm
Thickness of sapwood:	from 2 to 5 cm
Floats:	no
Durability in forest :	Moderate (treatment recommended)
Note:	Logs are almost floatable.

WOOD DESCRIPTION

Colour:	Brown
Sapwood:	Clearly demarcated
Texture:	Fine
Grain:	Straight
Interlocked grain:	Absent

Wood yellowish brown to dark grey brown with purplish glints. Veins more or less visible.

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 *:	0.66 g/cm3	0.03
Monnin hardness*:	3.8	0.9
Coef of volumetric shrinkage:	0.44 %	0.06
Total tangential shrinkage:	7.4 %	0.6
Total radial shrinkage:	4.6 %	0.4
Fibre saturation point:	28 %	
Stability:	Poorly stable	

	mean	standard deviation
Crushing strength *:	60 MPa	6
Static bending strength *:	110 MPa	10
Modulus of elasticity *:	13620 MPa	1224

(* : 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 1 - very durable
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)
Termites:	Class D - Durable
Treatability:	4 - not permeable
Biological hazard class*:	3 - not in ground contact, outside exposed
Note:	Although BETE is mentioned in the natural durability class 1 towards fungi (very durable) in the standard NF EN 350-2, it is important to know that it is sensible to white rot "Coriolus versicolor" attacks, hence, its classification in class 2 (durable).

* ensured by natural durability (according EN standards).

COUNTRIES - LOCAL NAMES

Countries	Local names
Cameroon	KOUL
Côte d'Ivoire	BETE
Ghana	APRONO
Ghana	MANSONIA
Nigeria	OFUN
France	BETE
United Kingdom	MANSONIA

BETE

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks:	Does not require any preservative treatment
In case of temporary humidification risk:	Does not require any preservative treatment
In case of permanent humidification risk:	Use not recommended

DRYING

Drying rate:	Normal
Risk of distortion:	No risk or very slight 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	50	47	84
40	50	45	75
30	55	47	67
20	70	55	47
15	75	58	44

This shedule 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.

SAWING AND MACHINING

Blunting effect:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Ordinary
Peeling:	Good
Slicing:	Good
Note:	Sawdust may cause dermatitis or mucosa irritation.

ASSEMBLING

Nailing / Screwing:	Good
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).

Cabinetwork (high class furniture)
Sliced veneer
Veneer for back or face of plywood
Interior joinery
Interior panelling
Moulding
Flooring
Turned goods
Exterior joinery
Rolling shutters
Shingles
Ship building (planking and deck)
Light carpentry
Glued laminated
Resistant to one or several acids