Common name:	MUKULUNGU
Family:	SAPOTACEAE
Scientific name(s):	Autranella congolensis
	Mimusops congolensis (synonymous)

LOG DESCRIPTION

Diameter:	from 80 to 120 cm
Thickness of sapwood:	from 2 to 3 cm
Floats:	no
Durability in forest :	Good
Note:	Heart of logs tends to split.

WOOD DESCRIPTION

Colour:	Red brown
Sapwood:	Clearly demarcated
Texture:	Fine
Grain:	Straight or interlocked
Interlocked grain:	Slight

Wood red brown with darker brown veins. Grain sometimes oblique.

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 *:	0.94 g/cm3	0.03
Monnin hardness*:	7.7	2.0
Coef of volumetric shrinkage:	0.66 %	0.04
Total tangential shrinkage:	8.4 %	0.3
Total radial shrinkage:	7.4 %	1.0
Fibre saturation point:	26 %	
Stability:	Poorly stable	

MECHANICAL PROPERTIES

	mean	standard deviation
Crushing strength *:	74 MPa	5
Static bending strength *:	119 MPa	17
Modulus of elasticity *:	17060 MPa	1660

(* : 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:	3 - poorly permeable
Use class*:	4 - in ground or fresh water contact
Note:	This species naturally covers the use class 5 (end-uses in marine environment or in brackish water) due to its high specific gravity and silica content. According to the European standard NF EN 335, performance length might be modified by the intensity of end-use exposition.

* ensured by natural durability (according EN standards).

MAIN LOCAL NAMES

Countries	Local names
Angola	KUNGULU
Cameroon	ELANG
Cameroon	ELANZOK
Central African Rep	BOUANGA
Congo	MFUA
Dem Rep of Congo	MUKULUNGU

MUKULUNGU

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:	Does not require any preservative treatment

DRYING

Drying rate:	Slow
Risk of distortion:	High risk
Risk of casehardening:	No information available
Risk of checking:	High risk
Risk of collapse:	No information available

Possible drying schedule

M.C. (%)	Temperature (°C) dry-bulb	wet-bulb	Air humidity (%)
Green	40	37	82
40	44	38	68
30	44	36	59
20	46	36	52
15	49	37	46

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: Must be dried carefully.

SAWING AND MACHINING

Blunting effect:	High
Sawteeth recommended:	Stellite-tipped
Cutting tools:	Tungsten carbide
Peeling:	Not recommended or without interest
Slicing:	Good
Note:	Requires power. Sawdust very irritant for throat and nose.

ASSEMBLING

Nailing / Screwing:	Good but pre-boring necessary
Gluing:	Correct (for interior only)

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).

Hydraulic works (seawater)
Sleepers
Bridges (parts in contact with water or ground)
Posts
Industrial or heavy flooring
Heavy carpentry
Flooring
Vehicle or container flooring
Stairs (inside)
Bridges (parts not in contact with water or ground)
Interior panelling
Sliced veneer
Exterior panelling
Cooperage
Resistant to one or several acids