

Family: FABACEAE-CAESALPINIOIDEAE (angiosperm)

Scientific name(s): Dimorphandra polyandra

Commercial restriction: no commercial restriction

WOOD DESCRIPTION

Color: brown
Sapwood: not clearly demarcated
Texture: coarse
Grain: straight or interlocked
Interlocked grain: slight

Note: Logs are frequently irregularly shaped. Frequent brittleheart.

Wood light yellow when sawn, quickly turning light brown to brown or reddish brown. Grain usually straight but sometimes slight irregular interlocked grain.

LOG DESCRIPTION

Diameter: from 60 to 75 cm
Thickness of sapwood: from 4 to 6 cm
Floats: no
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.

	Mean	Std dev.
Specific gravity *:	0,71	0,02
Monnin hardness *:	3,9	0,7
Coeff. of volumetric shrinkage:	0,57 %	0,08 %
Total tangential shrinkage (TS):	8,2 %	1,1 %
Total radial shrinkage (RS):	4,6 %	1,3 %
TS/RS ratio:	1,8	
Fiber saturation point:	27 %	
Stability: moderately stable to stable		

MECHANICAL AND ACOUSTIC PROPERTIES

	Mean	Std dev.
Crushing strength *:	62 MPa	4 MPa
Static bending strength *:	107 MPa	81 MPa
Modulus of elasticity *:	15100 MPa	1221 MPa
(*: at 12% moisture content, with 1 MPa = 1 N/mm ²)		
Musical quality factor:	137,7 measured at 2537 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 - 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): no information available
Use class ensured by natural durability: class 2 - inside or under cover (dampness possible)
Species covering the use class 5: No

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: normal

Risk of distortion: high risk

Risk of casehardening: no

Risk of checking: slight risk

Risk of collapse: no

SAWING AND MACHINING

Blunting effect: normal

Sawteeth recommended: ordinary or alloy steel

Cutting tools: ordinary

Peeling: not recommended or without interest

Slicing: not recommended or without interest

Note: Possible presence of internal stresses. Low yield < 30 % (brittleheart).

ASSEMBLING

Nailing / screwing: good

Gluing: correct

COMMERCIAL GRADING

Appearance grading for sawn timbers: According to NHLA grading rules (January 2007)

Possible grading: FAS, Select, Common 1, Common 2, Common 3

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

Exterior joinery

Current furniture or furniture components

Boxes and crates

Interior joinery

Light carpentry

MAIN LOCAL NAMES

<u>Country</u>	<u>Local name</u>	<u>Country</u>	<u>Local name</u>
Guyana	DAKAMA	French Guiana	AIEOUEKO
Suriname	ANJAMA		

