

Family: APOCYNACEAE (angiosperm)

Scientific name(s): *Dyera costulata*

Dyera polyphylla

Dyera lowii (synonymous)

Commercial restriction: no commercial restriction

WOOD DESCRIPTION

Color: light yellow
Sapwood: not demarcated
Texture: fine
Grain: straight
Interlocked grain: absent
Note: Brittleheart.
Wood cream white to light yellow. Frequent presence of large latex canals.

LOG DESCRIPTION

Diameter: from 80 to 120 cm
Thickness of sapwood:
Floats: yes
Log durability: low (must be treated)

PHYSICAL PROPERTIES

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

	<u>Mean</u>	<u>Std dev.</u>
Specific gravity *:	0,45	
Monnin hardness *:	1,6	
Coeff. of volumetric shrinkage:	0,35 %	
Total tangential shrinkage (TS):	5,5 %	
Total radial shrinkage (RS):	2,3 %	
TS/RS ratio:	2,4	
Fiber saturation point:		
Stability: stable		

MECHANICAL AND ACOUSTIC PROPERTIES

	<u>Mean</u>	<u>Std dev.</u>
Crushing strength *:	27 MPa	
Static bending strength *:	45 MPa	
Modulus of elasticity *:	10040 MPa	
(*: at 12% moisture content, with 1 MPa = 1 N/mm ²)		

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 5 - not durable

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

Termites (according to E.N. standards): class S - susceptible

Treatability (according to E.N. standards): class 1 - easily permeable

Use class ensured by natural durability: class 1 - inside (no dampness)

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: rapid

Risk of distortion: no risk or very slight risk

Risk of casehardening: no

Risk of checking: slight risk

Risk of collapse: no

Note: Risks of surface checks due to latex canals. Risks of blue stain. Pocket moisture in thick material.

Possible drying schedule: 2

M.C. (%)	Temperature (°C)		Air humidity (%)
	dry-bulb	wet-bulb	
Green	50	47	84
40	50	45	75
30	55	47	67
20	70	55	47
15	75	58	44

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: good

Slicing: good

Note: The latex may clog sawteeth. Keep sharp cutting edges in order to obtain a smooth surface.

ASSEMBLING

Nailing / screwing: poor

Gluing: correct

COMMERCIAL GRADING

Appearance grading for sawn timbers: According to MGR grading rules (2009)

Possible grading: Prime, Select, Standard, Serviceable, Utility

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

Veneer for interior of plywood

Boxes and crates

Interior joinery

Blockboard

Matches

Sliced veneer

Veneer for back or face of plywood

Moulding

Interior panelling

Pencils

Current furniture or furniture components

Sculpture

Note: Can be used as substitute for OBECHÉ (Triplochiton scleroxylon) and POPLAR (Populus spp.).

MAIN LOCAL NAMES

<u>Country</u>	<u>Local name</u>	<u>Country</u>	<u>Local name</u>
Indonesia	DJELUTONG	Indonesia	JELUTONG
Indonesia	MELABUWAI	Peninsular Malaysia	ANDJAROETOENG
Peninsular Malaysia	JELUTONG	Peninsular Malaysia	JELUTONG BUKIT
Peninsular Malaysia	JELUTONG PAYA	Peninsular Malaysia	LETOENG
Peninsular Malaysia	PANTOENG	Malaysia (islands)	JELUTONG

