

Common name: DUABANGA

Family: SONNERATIACEAE

Scientific name(s): Duabanga grandiflora
Duabanga moluccana

LOG DESCRIPTION

Diameter: from 60 to 90 cm

Thickness of sapwood: from to cm

Floats: yes

Durability in forest : Moderate (treatment recommended)

Note: Wood light yellow to light brown.

WOOD DESCRIPTION

Colour: Light brown

Sapwood: Not demarcated

Texture: Coarse

Grain: Straight or interlocked

Interlocked grain: Slight

PHYSICAL PROPERTIES

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

MECHANICAL PROPERTIES

	mean	standard deviation		mean	standard deviation
Density *:	0.50 g/cm ³		Crushing strength *:	39 MPa	
Monnin hardness*:	1.6		Static bending strength *:	64 MPa	
Coef of volumetric shrinkage:	0.44 %		Modulus of elasticity *:	9120 MPa	
Total tangential shrinkage:	6.7 %				
Total radial shrinkage:	3.5 %				
Fibre saturation point:	27 %				
Stability:	Moderately stable		(* : at 12 % moisture content ; 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.

Fungi:	Class 5 - not 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*:	1 - inside (no dampness)

* ensured by natural durability (according EN standards).

MAIN LOCAL NAMES

Countries	Local names
India	LAMPATI RAMDALA
Indonesia	KALAM
Malaysia (islands)	MAGAS
Malaysia (islands)	TAGAHAS
Peninsular Malaysia	MAGASAWITH
Peninsular Malaysia	PHAY-SUNG
Myanmar	MYAUKNGO
Papua New Guinea	DUABANGA
Philippines	LOKTOB
Thailand	LINKWAI
Thailand	PHAY
Vietnam	PHAY

DUABANGA

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

Possible drying schedule

Drying rate:	Rapid	Temperature (°C)			Air humidity (%)
		M.C. (%)	dry-bulb	wet-bulb	
Risk of distortion:	Slight risk	Green	42	41	94
Risk of casehardening:	No	50	48	43	74
Risk of checking:	Slight risk	30	54	46	63
Risk of collapse:	No	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: Sometimes, moderate risks of cracks and distortions.

SAWING AND MACHINING

Blunting effect:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Ordinary
Peeling:	Good
Slicing:	Good
Note:	Surface sometimes fuzzy. Keep sharp tools. Filing is necessary to obtain a good finish.

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).

Moulding

Interior joinery

Interior panelling

Veneer for interior of plywood

Veneer for back or face of plywood

Boxes and crates

Current furniture or furniture components

Sliced veneer

Fiber or particle boards

Blockboard

Pulp

Matches

Floats

Turned goods
