

Common name:	YEMANE
Family:	VERBENACEAE
Scientific name(s):	Gmelina arborea
Note:	Also called GMELINA, used for reforestation outside its native area.

LOG DESCRIPTION		WOOD DESCRIPTION	
Diameter:	from 40 to 80 cm	Colour:	Light yellow
Thickness of sapwood:	from 5 to 7 cm	Sapwood:	Not clearly demarcated
Floats:	no	Texture:	Medium
Durability in forest :	Moderate (treatment recommended)	Grain:	Interlocked
		Interlocked grain:	Slight
Note:	Wood light yellow to yellow brown with reddish or brownish veins. Oily to the touch. Presence of knots of variable sizes.		

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		mean	standard deviation
Density *:	0.49 g/cm <sup>3</sup>	0.03			
Monnin hardness*:	1.9	0.3	Crushing strength *:	32 MPa	7
Coef of volumetric shrinkage:	0.45 %	0.08	Static bending strength *:	64 MPa	9
Total tangential shrinkage:	5.9 %	0.5	Modulus of elasticity *:	9120 MPa	1711
Total radial shrinkage:	2.8 %	0.3			
Fibre saturation point:	26 %				
Stability:	Moderately stable to stable (* : at 12 % moisture content ; 1 MPa = 1 N/mm <sup>2</sup> )				
Note:	Properties of plantation timbers and timbers from natural forest are often similar, on condition that planted trees have reach enough maturity.				

**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 4 - poorly durable	* ensured by natural durability (according EN standards).
Dry wood borers:	Susceptible; sapwood not or slightly demarcated (risk in all the wood)	
Termites:	Class S - Susceptible	
Treatability:	3 - poorly permeable	
Use class*:	1 - inside (no dampness)	
Note:	Wood poorly to moderately resistant to fungi.	

MAIN LOCAL NAMES	
Countries	Local names
India	GAMARI
India	GUMARI
India	GUMHAR
India	GUMHU
India	SEWAN
Laos	MAI SO
Myanmar	YEMANE
Thailand	SAW
Thailand	SOR
France	GMELINA

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YEMANE

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**REQUIREMENT OF A PRESERVATIVE TREATMENT**

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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

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**DRYING**

Possible drying schedule

Drying rate:	Slow	Temperature (°C)			Air humidity (%)
		M.C. (%)	dry-bulb	wet-bulb	
Risk of distortion:	No risk or very slight risk	Green	42	41	94
Risk of casehardening:	Yes	50	48	43	74
Risk of checking:	No risk or very 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.

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**SAWING AND MACHINING**

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Blunting effect: Normal  
Sawteeth recommended: Ordinary or alloy steel  
Cutting tools: Ordinary  
Peeling: Good  
Slicing: Good

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**ASSEMBLING**

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Nailing / Screwing: Poor  
Gluing: Correct

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**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).

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Sliced veneer  
Current furniture or furniture components  
Boxes and crates  
Matches  
Veneer for interior of plywood  
Interior joinery  
Interior panelling  
Musical instruments  
Fiber or particle boards  
Pulp  
Sculpture  
Pencils

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