BACURI

Family: CLUSIACEAE (angiosperm)
Scientific name(s): Platonia insignis
Commercial restriction: no commercial restriction

WOOD DESCRIPTION

Color: yellow brown
Sapwood: clearly demarcated
Texture: coarse
Grain: straight
Interlocked grain: absent
Note: Presence of ringshakes in logs.

LOG DESCRIPTION

Diameter: from 60 to 80 cm
Thickness of sapwood: from 3 to 9 cm
Floats: no
Log durability: moderate (treatment recommended)

PHYSICAL PROPERTIES

MECHANICAL AND ACOUSTIC 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 *:	0,85	0,05
Monnin hardness *:	6,2	1,8
Coeff. of volumetric shrinkage:	0,68 %	0,07 %
Total tangential shrinkage (TS):	10,0 %	0,8 %
Total radial shrinkage (RS):	5,4 %	0,4 %
TS/RS ratio:	1,9	
Fiber saturation point:	27 %	
Stability:	poorly stable	

	Mean	Std dev.
Crushing strength *:	73 MPa	3 MPa
Static bending strength *:	147 MPa	17 MPa
Modulus of elasticity *:	22610 MPa	3100 MPa

(*: at 12% moisture content, with 1 MPa = 1 N/mm²)

Musical quality factor: 138 measured at 2861 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 2 - durable
Dry wood borers: durable - sapwood demarcated (risk limited to sapwood)
Termites (according to E.N. standards): class D - durable
Treatability (according to E.N. standards): class 3 - poorly permeable
Use class ensured by natural durability: class 3 - not in ground contact, outside
Species covering the use class 5: No
Note: According to the European standard NF EN 335, performance length might be modified by the intensity of end-use exposition.

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: does not require any preservative treatment
In case of risk of temporary humidification: does not require any preservative treatment
In case of risk of permanent humidification: use not recommended

DRYING

Drying rate: normal to slow
Risk of distortion: high risk
Risk of casehardening: no
Risk of checking: high risk
Risk of collapse: no
Note: Must be dried slowly and carefully.

Possible drying schedule: 4

M.C. (%)	Temperature (°C) dry-bulb	wet-bulb	Air humidity (%)
Green	42	39	82
50	48	43	74
40	48	43	74
30	48	43	74
15	54	46	63

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: fairly high
Sawteeth recommended: stellite-tipped
Cutting tools: tungsten carbide
Peeling: not recommended or without interest
Slicing: nood
Note: Requires power. Silica content is variable.

ASSEMBLING

Nailing / screwing: good but pre-boring necessary
Gluing: correct (for interior only)

COMMERCIAL GRADING

Appearance grading for sawn timbers: According to NHLA grading rules (January 2007)
Possible grading: FAS, Select, Common 1, Common 2, Common 4
In French Guiana, the local name of this species is "PARCOURI". Grading is done according to local rules "Bois guyanais classés".
Possible grading: Choix 1, choix 2, choix 3, choix 4

FIRE SAFETY

Conventional French grading: Thickness > 14 mm : M.3 (moderately inflammable)
Thickness < 14 mm : M.4 (easily inflammable)

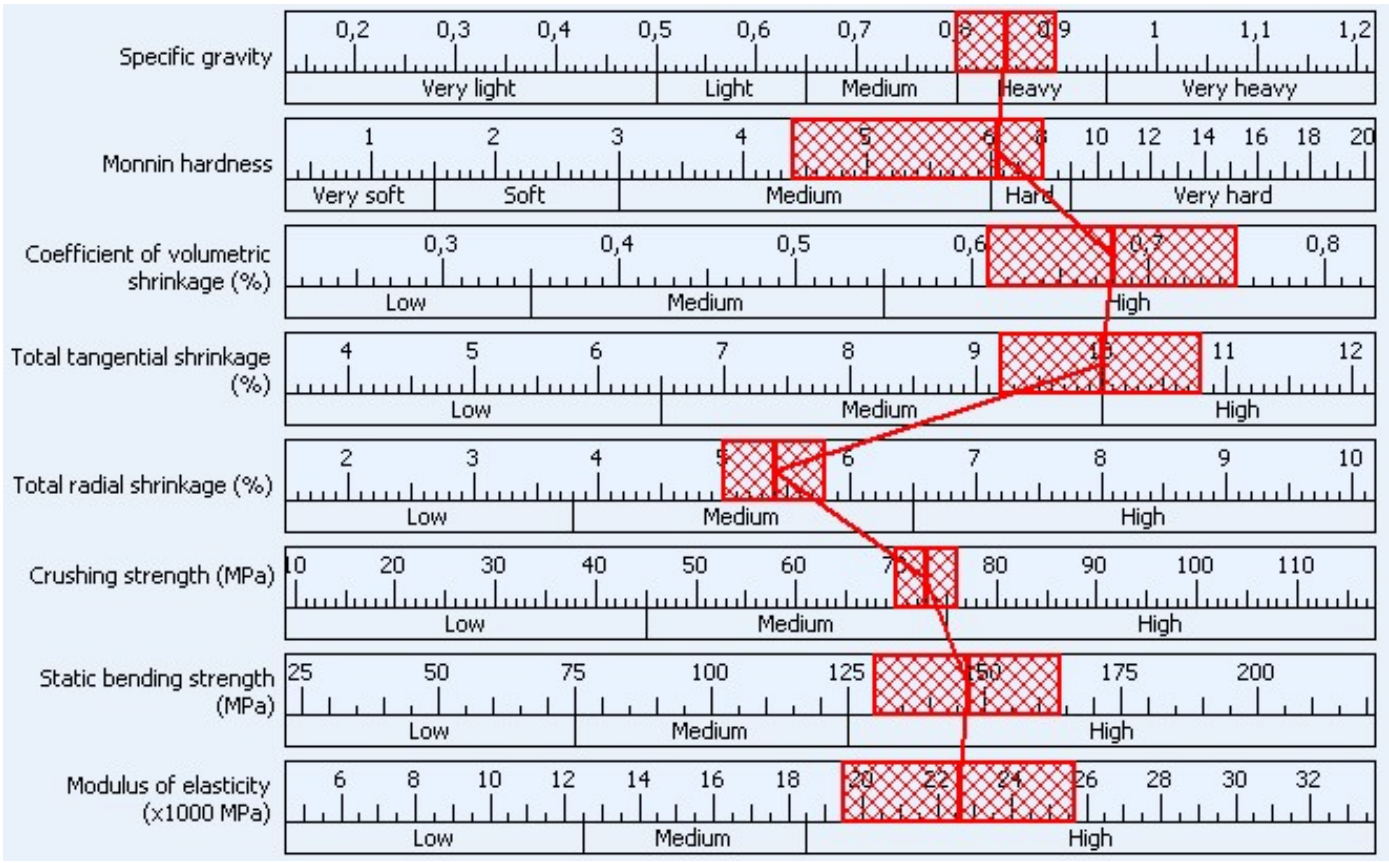
Euroclasses grading: D s2 d0
Default grading for solid wood, according to requirements of European standard EN 14081-1 annex C (April 2009). It concerns structural graded timber in vertical uses with mean density upper 0.35 and thickness upper 22 mm.

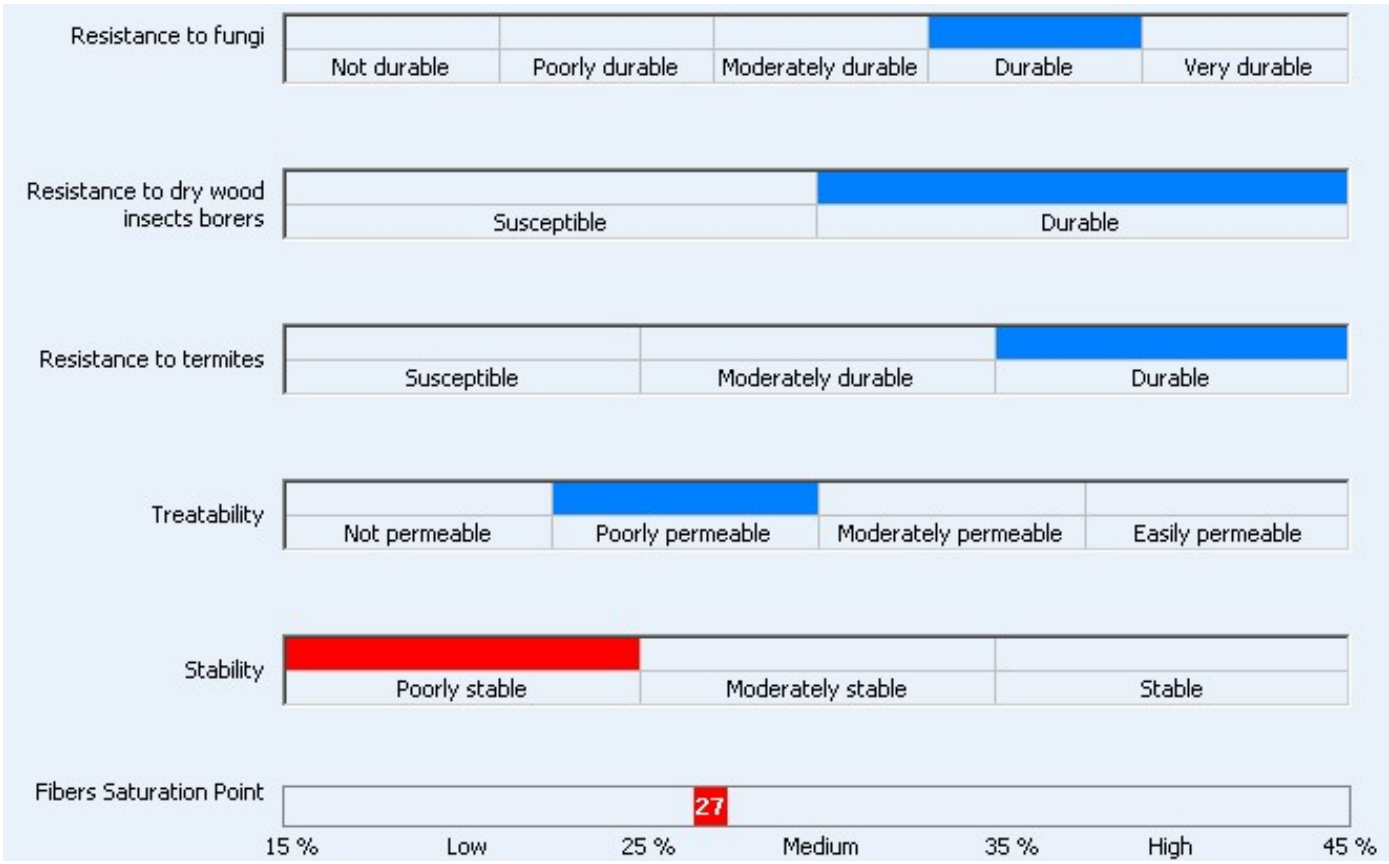
END-USES

Stairs (inside)
Cabinetwork (high class furniture)
Exterior joinery
Heavy carpentry
Flooring
Current furniture or furniture components
Interior joinery
Sliced veneer

MAIN LOCAL NAMES

Country	Local name	Country	Local name
Brazil	BACURI	Brazil	BACURI-AÇU
Brazil	BACURIUBA	Ecuador	MATAZAMA
Guyana	PAKURI	French Guiana	PARCOURI
Suriname	GOELHART	Suriname	PAKOELI


Specific gravity
0,2 0,3 0,4 0,5 0,6 0,7 0,8 0,9 1 1,1 1,2
Very light
Light
Medium
Heavy
Very heavy
Monnin hardness
1 2 3 4 5 6 8 10 12 14 16 18 20
Very soft
Soft
Medium
Hard
Very hard
Coefficient of volumetric shrinkage (%)
0,3 0,4 0,5 0,6 0,7 0,8
Low
Medium
High
Total tangential shrinkage (%)
4 5 6 7 8 9 11 12
Low
Medium
High
Total radial shrinkage (%)
2 3 4 6 7 8 9 10
Low
Medium
High
Crushing strength (MPa)
10 20 30 40 50 60 80 90 100 110
Low
Medium
High
Static bending strength (MPa)
25 50 75 100 125 175 200
Low
Medium
High
Modulus of elasticity (x1000 MPa)
6 8 10 12 14 16 18 20 22 24 26 28 30 32
Low
Medium
High


Resistance to fungi
Not durable
Poorly durable
Moderately durable
Durable
Very durable
Resistance to dry wood insects borers
Susceptible
Durable
Resistance to termites
Susceptible
Moderately durable
Durable
Treatability
Not permeable
Poorly permeable
Moderately permeable
Easily permeable
Stability
Poorly stable
Moderately stable
Stable
Fibers Saturation Point
27
15 %
Low
25 %
Medium
35 %
High
45 %