# IGAGANGA



Family: BURSERACEAE (angiosperm)
Scientific name(s): Dacryodes igaganga
Commercial restriction: no commercial restriction

## WOOD DESCRIPTION

Color: yellow brown
Sapwood: not clearly demarcated
Texture: fine
Grain: interlocked
Interlocked grain: slight
Note: Wood yellow to orangey brown, more or less deep. Grain sometimes wavy.

## LOG DESCRIPTION

Diameter: from 60 to 80 cm
Thickness of sapwood: from 2 to 4 cm
Floats: yes
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 *: | 0,61 | 0,03 |
| Monnin hardness *: | 3,2 | 0,7 |
| Coeff. of volumetric shrinkage: | 0,46 % | 0,13 % |
| Total tangential shrinkage (TS): | 7,8 % | 0,7 % |
| Total radial shrinkage (RS): | 5,0 % | 0,6 % |
| TS/RS ratio: | 1,6 | |
| Fiber saturation point: | 29 % | |

Stability: stable

| | Mean | Std dev. |
|---|---|---|
| Crushing strength *: | 57 MPa | 5 MPa |
| Static bending strength *: | 95 MPa | 8 MPa |
| Modulus of elasticity *: | 13060 MPa | 603 MPa |

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

Musical quality factor: 120,6 measured at 2747 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 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 3 - poorly permeable
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: use not recommended
In case of risk of permanent humidification: use not recommended

## DRYING

Drying rate: normal
Risk of distortion: slight risk
Risk of casehardening: no information available
Risk of checking: no risk or very slight risk
Risk of collapse: no information available

Possible drying schedule: 2

| M.C. (%) | Temperature (°C) dry-bulb | wet-bulb | Air humidity (%) |
|---|---|---|---|
| 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: high
Sawteeth recommended: stellite-tipped
Cutting tools: tungsten carbide
Peeling: good
Slicing: nood
Note: Equivalent to OKOUME (Aucoumea klaineana) for peeling. Sawing is quite difficult due to silica content.

## ASSEMBLING

Nailing / screwing: good
Gluing: correct

## COMMERCIAL GRADING

Appearance grading for sawn timbers: According to SATA grading rules (1996)
For the "General Purpose Market":
Possible grading for square edged timbers: choix I, choix II, choix III, choix IV
Possible grading for short length lumbers: choix I, choix II
Possible grading for short length rafters: choix I, choix II, choix III
For the "Special Market":
Possible grading for strips and small boards (ou battens): choix I, choix II, choix III
Possible grading for rafters: choix I, choix II, choix III

## FIRE SAFETY

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

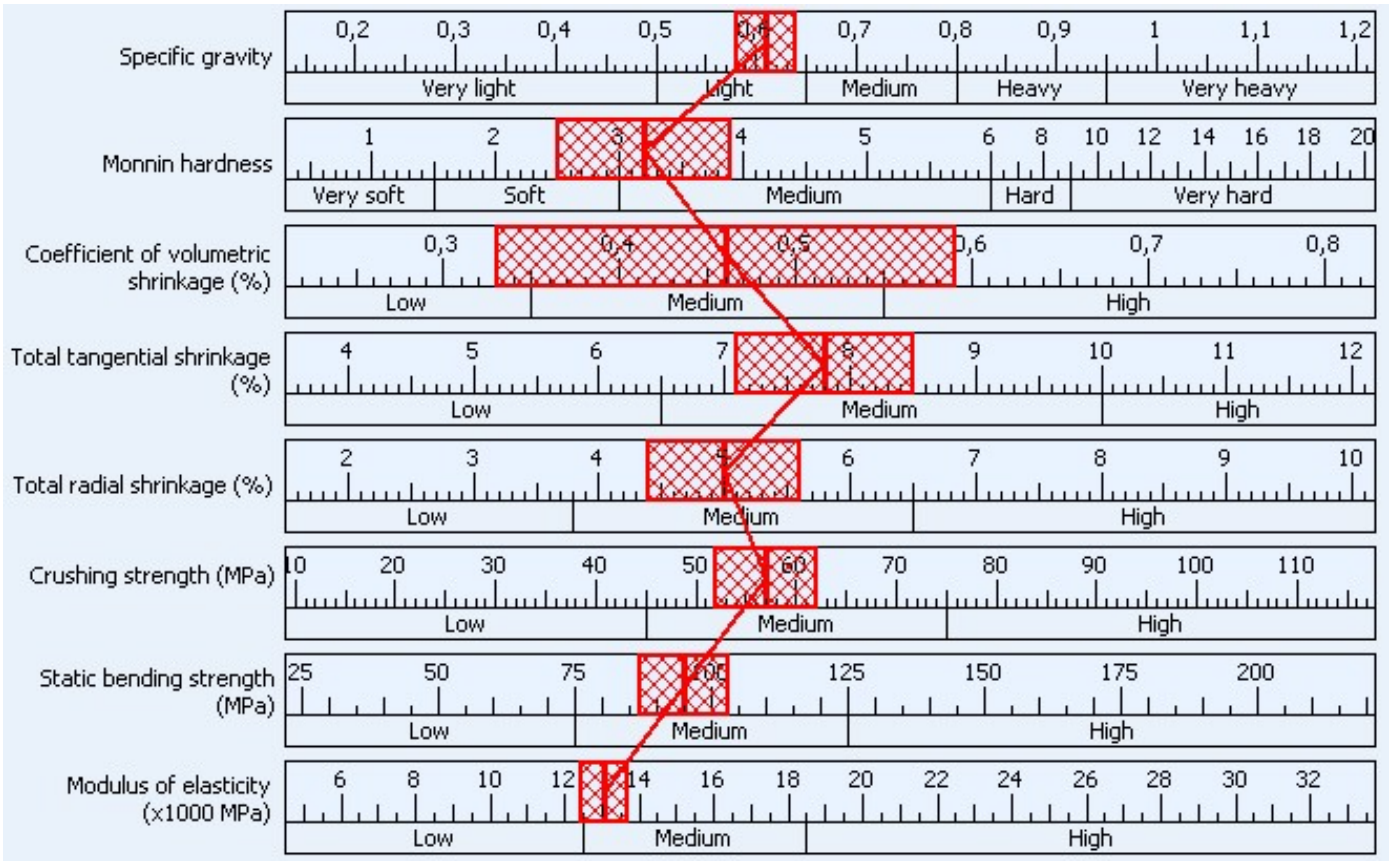
Euroclasses grading: D s2 d0
Default grading for solid wood, according to requirements of European standard EN 14081-1 annex C (April 2009). It concerns structural graded timber in vertical uses with mean density upper 0.35 and thickness upper 22 mm.

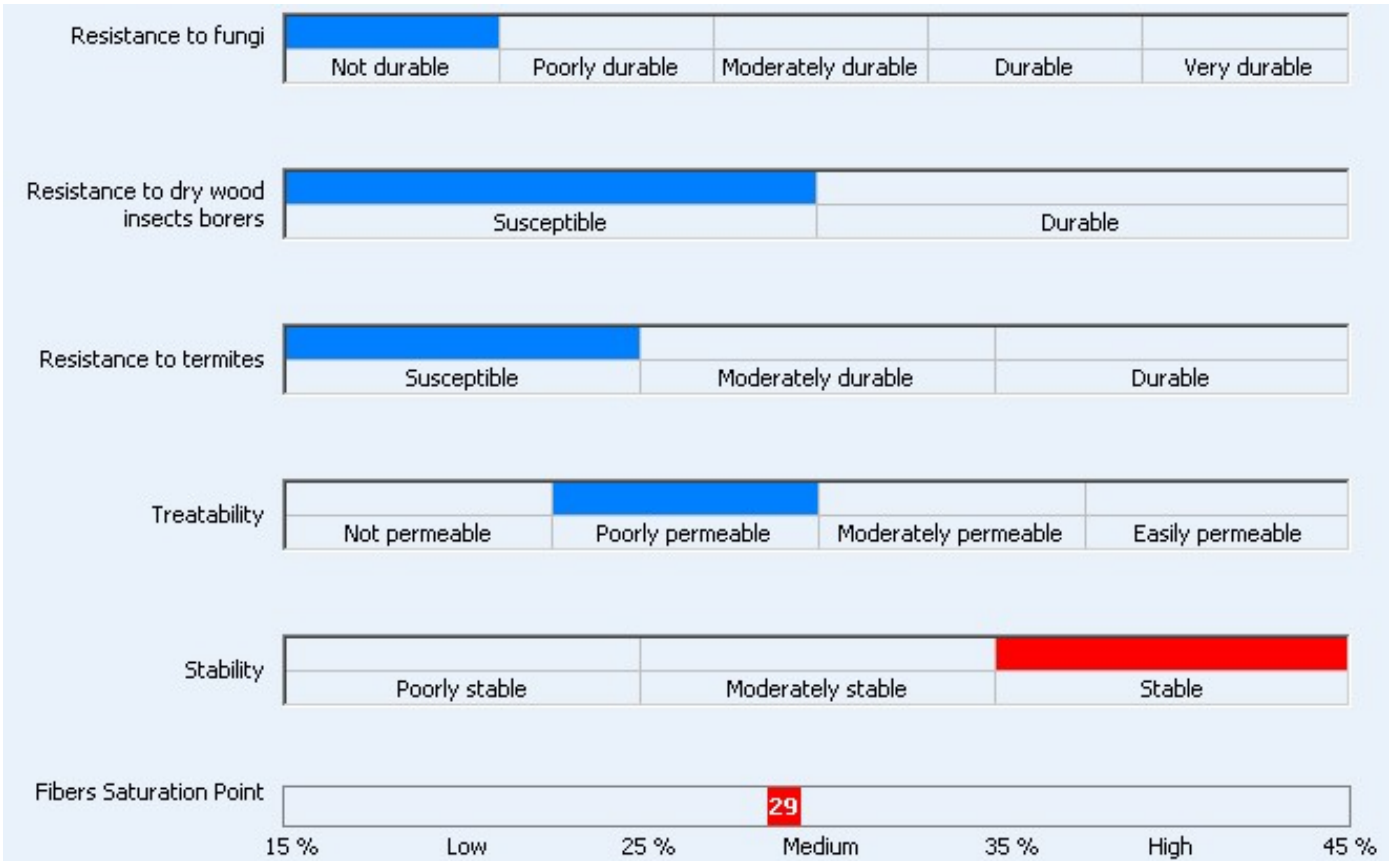
## END-USES

Veneer for interior of plywood
Blockboard
Stairs (inside)
Glued laminated
Wood frame house
Interior joinery
Wood-ware
Veneer for back or face of plywood
Flooring
Boxes and crates
Sliced veneer
Moulding
Current furniture or furniture components
Turned goods

## MAIN LOCAL NAMES

| Country | Local name | Country | Local name |
|---|---|---|---|
| Cameroon | ASSAS | Cameroon | BAMISA |
| Cameroon | BEUHAGO | Cameroon | BOSO |
| Cameroon | MOKOBA | Gabon | IGAGANGA |
| Nigeria | IBAGHO | Nigeria | ONUMU |
| Nigeria | ORUMU | | |


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 10 11 12
Low
Medium
High
Total radial shrinkage (%)
2 3 4 5 6 7 8 9 10
Low
Medium
High
Crushing strength (MPa)
10 20 30 40 50 60 70 80 90 100 110
Low
Medium
High
Static bending strength (MPa)
25 50 75 100 125 150 175 200
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
29
15 %
Low
25 %
Medium
35 %
High
45 %