**Family:** MYRISTICACEAE (angiosperm)

**Scientific name(s):**
- Scyphocephalium mannii
- Scyphocephalium ochocoa (synonymous)

**Commercial restriction:** no commercial restriction

---

### WOOD DESCRIPTION

<table>
<thead>
<tr>
<th>Color:</th>
<th>brown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sapwood:</td>
<td>not clearly demarcated</td>
</tr>
<tr>
<td>Texture:</td>
<td>medium</td>
</tr>
<tr>
<td>Grain:</td>
<td>straight or interlocked</td>
</tr>
<tr>
<td>Interlocked grain:</td>
<td>slight</td>
</tr>
</tbody>
</table>

**Log description**

- **Diameter:** from 50 to 70 cm
- **Thickness of sapwood:** from 5 to 15 cm
- **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.

<table>
<thead>
<tr>
<th>Property</th>
<th>Mean</th>
<th>Std dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific gravity *:</td>
<td>0.59</td>
<td>0.07</td>
</tr>
<tr>
<td>Monnin hardness *:</td>
<td>2.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Coeff. of volumetric shrinkage:</td>
<td>0.41 %</td>
<td>0.06 %</td>
</tr>
<tr>
<td>Total tangential shrinkage (TS):</td>
<td>6.5 %</td>
<td>1.0 %</td>
</tr>
<tr>
<td>Total radial shrinkage (RS):</td>
<td>3.5 %</td>
<td>0.6 %</td>
</tr>
<tr>
<td>TS/RS ratio:</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>Fiber saturation point:</td>
<td>25 %</td>
<td></td>
</tr>
</tbody>
</table>

**Stability:** moderately stable

### MECHANICAL AND ACOUSTIC PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Mean</th>
<th>Std dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crushing strength *:</td>
<td>46 MPa</td>
<td>8 MPa</td>
</tr>
<tr>
<td>Static bending strength *:</td>
<td>78 MPa</td>
<td>11 MPa</td>
</tr>
<tr>
<td>Modulus of elasticity *:</td>
<td>13300 MPa</td>
<td>2100 MPa</td>
</tr>
<tr>
<td>Musical quality factor:</td>
<td>145.4 measured at 2546 Hz</td>
<td></td>
</tr>
</tbody>
</table>

---

### NATURAL DURABILITY AND TREATABILTY

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**

- **Fungi (according to E.N. standards):** class 5 - not durable
- **Dry wood borers:** heartwood durable but sapwood not clearly demarcated
- **Termites (according to E.N. standards):** class 5 - susceptible
- **Treatability (according to E.N. standards):** class 2 - moderately 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 to normal
Risk of distortion: slight risk
Risk of casehardening: no
Risk of checking: slight risk
Risk of collapse: no

Possible drying schedule: 2

<table>
<thead>
<tr>
<th>M.C. (%)</th>
<th>Temperature (°C)</th>
<th>Air humidity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>dry-bulb 50</td>
<td>wet-bulb 47</td>
</tr>
<tr>
<td>40</td>
<td>50</td>
<td>45</td>
</tr>
<tr>
<td>30</td>
<td>55</td>
<td>47</td>
</tr>
<tr>
<td>20</td>
<td>70</td>
<td>55</td>
</tr>
<tr>
<td>15</td>
<td>75</td>
<td>58</td>
</tr>
</tbody>
</table>

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: ordinary or alloy steel
Cutting tools: ordinary
Peeling: good
Slicing: not recommended or without interest
Note: Peeling is easy but not often used because logs are often ill-formed and with several knots.

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

<table>
<thead>
<tr>
<th>Interior panelling</th>
<th>Flooring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interior joinery</td>
<td>Current furniture or furniture components</td>
</tr>
<tr>
<td>Moulding</td>
<td>Blockboard</td>
</tr>
<tr>
<td>Wood frame house</td>
<td>Sculpture</td>
</tr>
<tr>
<td>Turned goods</td>
<td>Boxes and crates</td>
</tr>
</tbody>
</table>
### MAIN LOCAL NAMES

<table>
<thead>
<tr>
<th>Country</th>
<th>Local name</th>
<th>Country</th>
<th>Local name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameroon</td>
<td>AKURNA</td>
<td>Cameroon</td>
<td>EBOUKZOK</td>
</tr>
<tr>
<td>Gabon</td>
<td>N'SUKU</td>
<td>Gabon</td>
<td>OSSOKO</td>
</tr>
<tr>
<td>Gabon</td>
<td>SORRO</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Specific Gravity

- **0.2** - Very light
- **0.3** - Light
- **0.4** - Medium
- **0.5** - Heavy
- **0.6** - Very heavy

### Monnin Hardness

- **1** - Very soft
- **2** - Soft
- **3** - Medium
- **4** - Hard
- **5** - Very hard

### Coefficient of Volumetric Shrinkage (%)

- **0.3** - Low
- **0.5** - Medium
- **0.6** - High

### Total Tangential Shrinkage (%)

- **4** - Low
- **5** - Medium
- **6** - High

### Total Radial Shrinkage (%)

- **2** - Low
- **5** - Medium
- **6** - High

### Crushing Strength (MPa)

- **0** - Low
- **30** - Medium
- **60** - High

### Static Bending Strength (MPa)

- **25** - Low
- **100** - Medium
- **150** - High

### Modulus of Elasticity (<1000 MPa)

- **6** - Low
- **10** - Medium
- **12** - High

### Resistance to Fungi

- Not durable
- Poorly durable
- Moderately durable
- Durable
- Very durable

### Resistance to Dry Wood Insects Borer

- 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

- 15% - Low
- 25% - Medium
- 35% - High
- 45% - Very hard