Family: ERYTHROXYLACEAE (angiosperm)
Scientific name(s): Erythrophleum suaveolens
Erythrophleum ivorense
Commercial restriction: no commercial restriction

WOOD DESCRIPTION

<table>
<thead>
<tr>
<th>Color</th>
<th>Diameter: from 60 to 90 cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sapwood: clearly demarcated</td>
<td>Thickness of sapwood: from 3 to 6 cm</td>
</tr>
<tr>
<td>Texture: coarse</td>
<td>Floats: no</td>
</tr>
<tr>
<td>Grain: interlocked</td>
<td>Log durability: good</td>
</tr>
<tr>
<td>Interlocked grain: marked</td>
<td></td>
</tr>
</tbody>
</table>

Note: Wood orangey yellow brown to reddish brown. Tali from East Africa has a lighter colour.

LOG DESCRIPTION

<table>
<thead>
<tr>
<th>MECHANICAL AND ACOUSTIC PROPERTIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Specific gravity *:</td>
</tr>
<tr>
<td>Monnin hardness *:</td>
</tr>
<tr>
<td>Coeff. of volumetric shrinkage:</td>
</tr>
<tr>
<td>Total tangential shrinkage (TS):</td>
</tr>
<tr>
<td>Total radial shrinkage (RS):</td>
</tr>
<tr>
<td>TS/RS ratio:</td>
</tr>
<tr>
<td>Fiber saturation point:</td>
</tr>
</tbody>
</table>

PHYSICAL AND ACOUSTIC PROPERTIES

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

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 1 - very 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 4 - not permeable
- **Use class ensured by natural durability:** class 4 - in ground or fresh water contact
  - 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: does not require any preservative treatment
DRYING

Drying rate: 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 in order to reduce defects.

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: bad
Slicing: not recommended or without interest
Note: Requires power. Difficulties due to interlocked grain in planing.

ASSEMBLING

Nailing / screwing: good but pre-boring necessary
Gluing: correct (for interior only)
Note: With dampness, assembling of iron pieces are not advisable because of risks of reciprocal attack between wood and iron.

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

Sleepers
Hydraulic works (fresh water)
Stakes
Industrial or heavy flooring
Bridges (parts not in contact with water or ground)
Heavy carpentry
Poles
Bridges (parts in contact with water or ground)
Vehicle or container flooring
Note: Can be used as a substitute for AZOBE (Lophira alata).
## 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>ELONE</td>
<td>Congo</td>
<td>N’ KASSA</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>ALUI</td>
<td>Ivory Coast</td>
<td>TALI</td>
</tr>
<tr>
<td>Gabon</td>
<td>ELOUN</td>
<td>Ghana</td>
<td>POTRODOM</td>
</tr>
<tr>
<td>Guinea-Bissau</td>
<td>MANCONE</td>
<td>Equatorial Guinea</td>
<td>ELONDO</td>
</tr>
<tr>
<td>Mozambique</td>
<td>MISSANDA</td>
<td>Nigeria</td>
<td>ERUN</td>
</tr>
<tr>
<td>Nigeria</td>
<td>SASSWOOD</td>
<td>Democratic Republic of the Congo</td>
<td>KASSA</td>
</tr>
<tr>
<td>Senegal</td>
<td>TALI</td>
<td>Sierra Leone</td>
<td>GOGBEI</td>
</tr>
<tr>
<td>Tanzania</td>
<td>MWAVI</td>
<td>Zambia</td>
<td>MUAVE</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>MISSANDA</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
- 0.4: Medium
- 0.5: High

### Total Tangential Shrinkage (%)

- 4: Low
- 5: Medium
- 6: High

### Total Radial Shrinkage (%)

- 2: Low
- 3: Medium
- 4: High

### Crushing Strength (MPa)

- 10: Low
- 20: Medium
- 30: High

### Static Bending Strength (MPa)

- 25: Low
- 50: Medium
- 75: High

### Modulus of Elasticity (<1000 MPa)

- 6: Low
- 8: Medium
- 10: 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%: High