Family: FABACEAE-CAESALPINIOIDEAE (angiosperm)
Scientific name(s): Didelotia africana
Didelotia idae
Didelotia letouzeyi
Didelotia brevipaniculata
Commercial restriction: no commercial restriction

<table>
<thead>
<tr>
<th>WOOD DESCRIPTION</th>
<th>LOG DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color: orange - yellow</td>
<td>Diameter: from 80 to 100 cm</td>
</tr>
<tr>
<td>Sapwood: clearly demarcated</td>
<td>Thickness of sapwood: from 5 to 10 cm</td>
</tr>
<tr>
<td>Texture: coarse</td>
<td>Floats: yes</td>
</tr>
<tr>
<td>Grain: interlocked</td>
<td>Log durability: low (must be treated)</td>
</tr>
<tr>
<td>Interlocked grain: marked</td>
<td></td>
</tr>
</tbody>
</table>

Note: Heartwood pink orangey with sometimes greenish brown veins. Strong odour when green.

**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></th>
<th>Mean</th>
<th>Std dev.</th>
<th>Mean</th>
<th>Std dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific gravity *:</td>
<td>0,64</td>
<td>0,05</td>
<td>Crushing strength *:</td>
<td>54 MPa</td>
</tr>
<tr>
<td>Monnin hardness *:</td>
<td>2,8</td>
<td>0,7</td>
<td>Static bending strength *:</td>
<td>90 MPa</td>
</tr>
<tr>
<td>Coeff. of volumetric shrinkage:</td>
<td>0,50 %</td>
<td>0,09 %</td>
<td>Modulus of elasticity *:</td>
<td>13940 MPa</td>
</tr>
<tr>
<td>Total tangential shrinkage (TS):</td>
<td>8,6 %</td>
<td>0,9 %</td>
<td>(*: at 12% moisture content, with 1 MPa = 1 N/mm²)</td>
<td></td>
</tr>
<tr>
<td>Total radial shrinkage (RS):</td>
<td>4,6 %</td>
<td>0,9 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TS/RS ratio:</td>
<td>1,9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiber saturation point:</td>
<td>32 %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stability: moderately stable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**MECHANICAL AND ACOUSTIC PROPERTIES**

Musical quality factor: 107,5 measured at 2686 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

- **Fungi (according to E.N. standards):** class 4 - poorly durable
- **Dry wood borers:** durable - sapwood demarcated (risk limited to sapwood)
- **Termites (according to E.N. standards):** class 5 - susceptible
- **Treatability (according to E.N. standards):** class 3 - poorly permeable
- **Use class ensured by natural durability:** class 1 - inside (no dampness)
- **Species covering the use class 5:** No

Note: Low to moderate resistance to decay.

**REQUIREMENT OF A PRESERVATIVE TREATMENT**

- Against dry wood borer attacks: does not require any 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: normal
Risk of distortion: slight risk
Risk of casehardening: yes
Risk of checking: slight risk
Risk of collapse: no

Note: Possible risks of casehardening with thick boards. Avoid quick drying in order to reduce the risks of cracks (high shrinkage).

Possible drying schedule: 2

<table>
<thead>
<tr>
<th>M.C. (%)</th>
<th>Temperature (°C) dry-bulb</th>
<th>Temperature (°C) wet-bulb</th>
<th>Air humidity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>50</td>
<td>47</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>50</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>55</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>70</td>
<td>55</td>
</tr>
<tr>
<td></td>
<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: normal
Sawteeth recommended: ordinary or alloy steel
Cutting tools: ordinary
Peeling: good
Slicing: nod

Note: Keep sharp cutters in order to obtain a good finish in case of interlocked grain. Veneers quality is medium.

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
Sliced veneer
Boxes and crates
Interior panelling
Current furniture or furniture components
Light carpentry
Vehicle or container flooring

Veneer for back or face of plywood
Formwork
Interior joinery
Exterior joinery
Seats
Wood frame house
### 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>EKOP-GOMBE</td>
<td>Cameroon</td>
<td>GOMBE</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>BROUTOU</td>
<td>Gabon</td>
<td>ANGOK</td>
</tr>
<tr>
<td>Liberia</td>
<td>BONDU</td>
<td>Sierra Leone</td>
<td>TIMBA</td>
</tr>
</tbody>
</table>