

Ovangkol

Atibt

Ovèngkol NEN-EN 13556: ovangkol (GB), ovangkol (F), Ovéngkol (D), Code GUEH

Other names

Ovangkol, ovèngkol (Gabon), anokye, hyeduanini, ehie (Ghana), palissandro (a misleading and objectionable name), mongoy (vener), ovangkol (Guinea), amazakoué, amazoué, whimawe (Ivory Coast).

Botanic name

Guibourthia ehie (A. Chev.) J. Leonard

Family

Leguminosae (Caesalpinaceae).

Growth area

Tropical West Africa.



Tree Description

Height 25-30 m, maximum 40 m. The slightly grooved 20-25 m long, straight cylindrical branch-free trunk at the base is 0.6-0.8 m in diameter.

Supply

Round (vener) and sawn (edged) lumber.

Wood Description

Heartwood is yellowish brown to chocolate brown with grayish to almost black streaks or flames. The outer heartwood seems to be more intensely colored than the inner. Thus, dark wood with black veining is more common in older trees than in younger ones. Given the above, the markings of ovangkol can vary widely from gray nutty to beautifully flamed and/or veined. The sapwood, which grows 40-80 mm wide, is grayish yellow in color, becoming grayish after drying. Fresh, the wood has an unpleasant acidic odor that, however, gradually disappears after drying. Ovangkol has some resemblance to walnut, mutenye, bubinga and teak.

Wood Recognition

Brown in color with dark color streaks, fresh sour odor, on head plane aliform parenchyma around the vessels. The related species bubinga and mutenye also have the dark streaks but ovangkol is the most yellowish of the three, mutenye has high gloss and narrower color streaks while bubinga is pinkish red in color. Teak and walnut also bear some resemblance to ovangkol and walnut by half-ring pores and thin parenchyma bands.

Grain

Cross wire or wavy wire.

Texture

Fine to moderately coarse.

Voluminous mass

(720-)780(-820) kg/m³ at 12% moisture content, fresh 1000-1100 kg/m³ (moisture content about 50%).

Shrinkage

Radial 2.2% and tangential 4.5%.



Drying	Slow, with generally little loss of quality. Drying should be done slowly and carefully, as there is a tendency for cracking especially with thicker wood. A calibration line for making electrical wood moisture measurements is not available.
Hardness	Longitudinal plane not known.
Machinability	Good. Straight-grained wood can be machined without much difficulty. Cross-threaded or wavy wire presents difficulties when planing, unless a reduced cutting angle (15°) is used. Furthermore, ovankol turns well and also cuts well into veneers.
Nailing & Screwing	Well, pre-drilling is recommended.
Adhesives	Good.
Bend	Not known.
Surface finish	Good.
Impregnability	Heartwood 3, sapwood 1 (according to NEN-EN 350).
Details	Sometimes white spots occur on the wood; these can usually be brushed away with hot water.
Applications	As a veneer for furniture and wall coverings, its wavy grain can create a beautiful pattern and this is highly sought after for decorative applications. Solid for interior and exterior paneling, windows, doors frames, stairs, parquet, paneling, luxury objects, musical instruments, sculpture and turned goods. Widely used in Spain, Italy and France for carving veneer and furniture but also for parquet, paneling and turned goods.
Strength class	Classified in D35 depending on origin and quality (see Table D).

Sustainability

Relative resistance to mold

Heartwood class 2 (NEN-EN 350: practical experience and field research).

Relative resistance to animal organisms

Heartwood: drywood borers D, termites D and marine borers S (NEN-EN 350).