Meliaceae

Swietenia humilis

Zucc. 1

Commercial names:
engl.: Mahogany
esp.: Caoba mexicana, Caoba de la costa del Pacífico
fr.: Acajou de Mexique

Common names:
Zopilote, Gateado (México); Caoba de Honduras, Cóbano, Zapatón (Guatemala); Caobach, Cuabilla, Flor de venadillo, Guayach, Mabu, Mova, Palo de zopilote, Venadillo

Scientific synonyms:
Swietenia bijuga Preuss.
Swietenia cirrhata S.F. Blake

Subject to CITES regulations:
All parts and derivatives, except seeds, spores, pollen (including pollinia), seedling or tissue cultures obtained in vitro, in solid or liquid media, transported in sterile containers and cut flowers of artificially propagated plants.

Macroscopic characteristics of the wood:
Wood: brown, diffuse porous, growth rings distinct, marked by marginal parenchyma. Well-distinguished sapwood and heartwood. The sapwood is greyish brown, and the heartwood is light reddish brown with gentle grain, partially created by the growth rings. Slight aromatic smell. Fibres interlocked and slightly wavy. The vessels and wood rays are visible to the naked eye.
Hardness: hard
Grain: medium
Specific weight: 0.61 g/cm^3

Microscopic characteristics of the wood:
Wood diffuse porous. Vessels in radial multiples of 2 to 3, occasionally solitary, few, 5 per mm^2 and medium sized, with an average tangential diameter of 176 µm. Vesels members are medium sized, on average 480 µm long, with bordered intervascular pits, alternate and minute. Perforation plates simple. Gum or deposits present. Parenchyma apotracheal, in short bands of 4 – 6 cells wide, marginal parenchyma bands 2 – 6 cells wide. Moderately numerous wood rays, 4 per mm^2, heterocellular, uni- or up to triseriate; the cells contain gum and crystals. Libriform fibres septate, with thick walls.

Characteristics of the trees:
S. humilis is a tree with a straight trunk, which grows up to 25 metres tall and 80 centimetres in diameter. It grows in dry semideciduous forests and savannas up to 1200 metres above sea level.

Characteristics of trade:
Mahogany is the wood for which the largest number of species have been sought as substitutes. There are more than several hundred timber-producing species that have some similarity with Mahogany, at least in appearance, although without the quality for which it is known: dimensional stability. These “false” mahoganies are frequently sold under the name mahogany, with the addition of the country of origin.

Distribution: Costa Rica, El Salvador, Guatemala, Honduras, Mexico and Nicaragua

Use: High-quality furniture, interior finishing, pianos, industrial pattern making, woodcut blocks, musical instruments, boat interiors, carvings and sculptures.

Similar species: There are three species in this genus in tropical America: *Swietenia humilis*, *S. macrophylla* and *S. mahagoni*. There are several hybrids in Central and South America: *S. macrophylla* x *S. humilis*; *S. macrophylla* x *S. mahagoni* (probably a synonym of *S.* x *aubrevilleana* Stehlé & Cusin). In addition to these species, there are other similar species of African origin, generically called African mahoganies.

Other similar species	**Distribution**	**Common name**
Swietenia macrophylla King	Central and South America	American mahogany
S. mahagoni (L.) Jacq.	Caribbean and Florida	Cuban mahogany
Entandrophragma angolense (Welw.) C. DC.	Africa	Gedu nohor, Tiama, Kalungi
E. candollei Harms	Africa	Kosipo, Omu
E. cylindricum (Sprague) Sprague	Africa	Sapele
E. utile (Dawe & Sprague) Sprague	Africa	Utile
Khaya anthotheca (Welw.) C. DC.	Africa	African mahogany, white khaya
K. grandifoliola C. DC.	Africa	African mahogany, bigleaf khaya
K. ivorensis A. Chev.	Africa	African mahogany, red khaya
K. nyasica Stapf	Africa	Mozambique mahogany, Umbawa
K. senegalensis (Desr.) A. Juss.	Africa	African or Senegal mahogany
Carapa guianensis Aubl.	Central and South America	Andiroba, Crabwood

(See *Swietenia macrophylla* for a more detailed comparison of these species)

The work on the timber manual was carried out under the supervision of Prof. Dr M. Clemente
(text and slides: Dr Miguel A. Vales, Prof. Dr Margarita Clemente, Dr Luis García Esteban)
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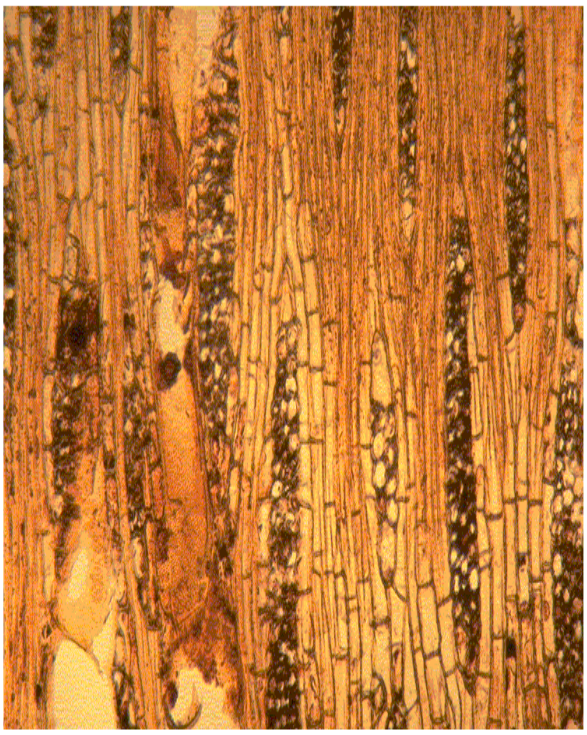
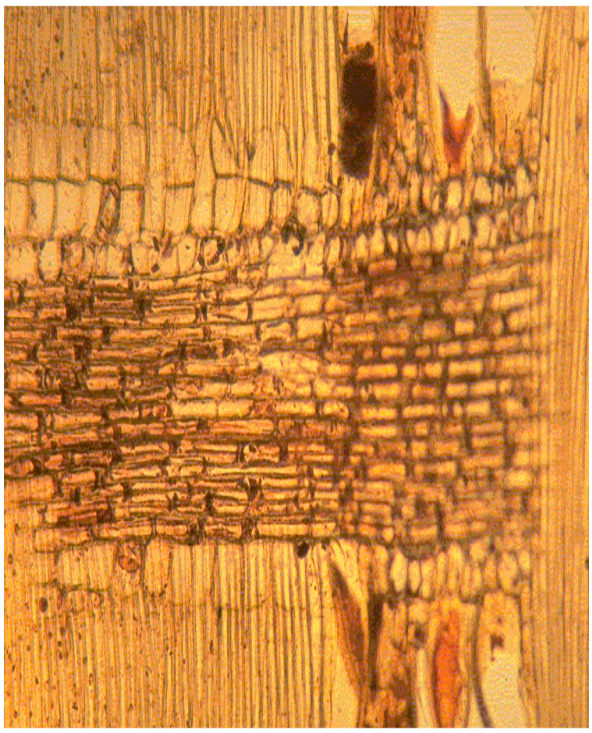
the Ministry of Developmental Aid of the Netherlands and the European Commission

Swietenia humilis

transverse section



tangential section



radial section

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