Meliaceae

Swietenia mahagoni (L.) Jacq. 1

Commercial names:

engl.: Mahogany, Cuban Mahogany
esp.: Caoba, Caoba de Cuba, Caoba española
fr.: Acajou de Cuba, Acajou San Domingo

Common names:

Aguano, Caobilla, Chiculte, Cóbano, Coabillo, Dominican mahagoni, Gateado, Jamaican mahagoni, Madeira, Mahog, Mogno, Orura

Scientific synonyms:

Cedrela mahagoni L.
Cedrus mahogani L.
Swietenia mahogoni Lamarck
Swietenia fabrilis Salisbury
Swietenia acutifolia Stokes
Swietenia mahogani C. DC.
Swietenia mahogani var. *praecociflora* Hemsley in Hooker

Subject to CITES regulations:

Only logs, sawn wood and veneer sheets

Macroscopic characteristics: of the wood:

Wood: brown, diffuse porous, growth rings distinct. Clearly distinguishable sapwood and heartwood. The sapwood is very narrow and light in colour, almost white, the heartwood is bright pink immediately after being cut, but darkens with exposure to light, passing to reddish brown. Odourless. Fibres straight with a tendency to be interlocked and irregular. The vessels and wood rays are visible to the naked eye.
Hardness: hard
Grain: uniform and fine to moderately coarse, but finer and more uniform than the African mahoganies
Specific weight: 0.7 – 0.8 g/cm^3

Microscopic characteristics: of the wood:

Wood diffuse porous. Growth rings distinct. Vessels moderately numerous, 11 per mm^2, solitary and in radial multiples. Tangential diameter of the solitary vessels (114 –) 143 (–198) µm. Intervascular pits bordered and minute, polygonal and alternate. Perforation plates simple. Vessel elements short, (330 –) 340 – (409) µm. Parenchyma vasicentric paratracheal; frequently also terminal, strands 4 – 9 cells long. Heterogenous rays moderately numerous, uniseriate and multiseriate, 2 – 3 (– 4) cells wide. Libriform fibres with very thin, short septa, (875 –) 1035 (– 1175) µm long.

Characteristics of the trees:

Trees that can grow up to 25 metres in height with a stem diameter of 1.5 metres. The trunks are sold stripped of branches and can reach lengths of up to 23 metres. New branches are glabrous and have abundant lenticels.

Characteristics of trade:

Mahogany is the wood for which many species have been sought as substitutes. There are more than 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. Frequently, 'false' mahoganies are sold with the addition of the name of the country of origin.

Distribution: Florida (United States of America), the Bahamas, Cuba, the Dominican Republic and Jamaica (also introduced on other islands in the Caribbean)

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*. It is also known under the name caoba. 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, which are generically called African mahoganies.

	Distribution	**Common name**
S. macrophylla	South and Central America	American mahogany
S. humilis	Central America	Cuban mahogany
Entandrophragma angolense	Africa	Gedu nohor, Tiama, Kalungi
E. candollei	Africa	Kosipo, omu
E. cylindricum	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, red khaya
K. ivorensis A. Chev.	Africa	Acajou blanco
K. nyasica Stapf	Africa	Mozambique mahogany, Umbawa
K. senegalensis (Desr.) A. Juss.	Africa	African of Senegal mahogany
Carapa guianensis Aubl.	South and Central 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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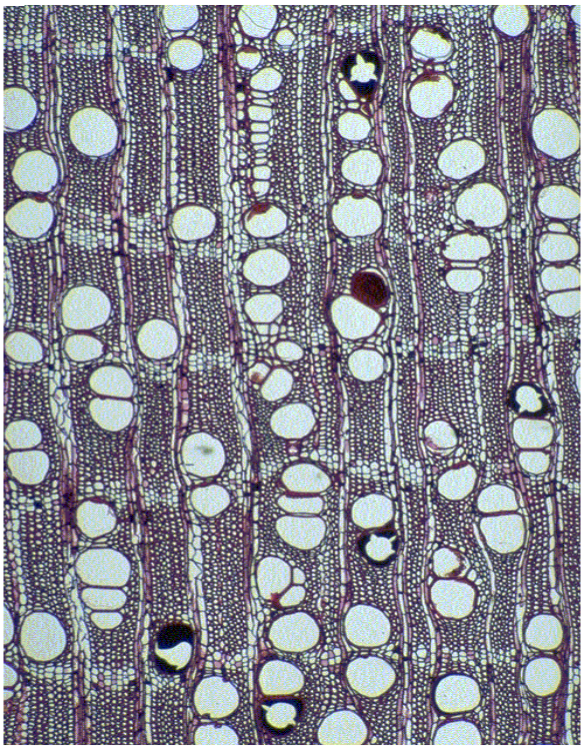
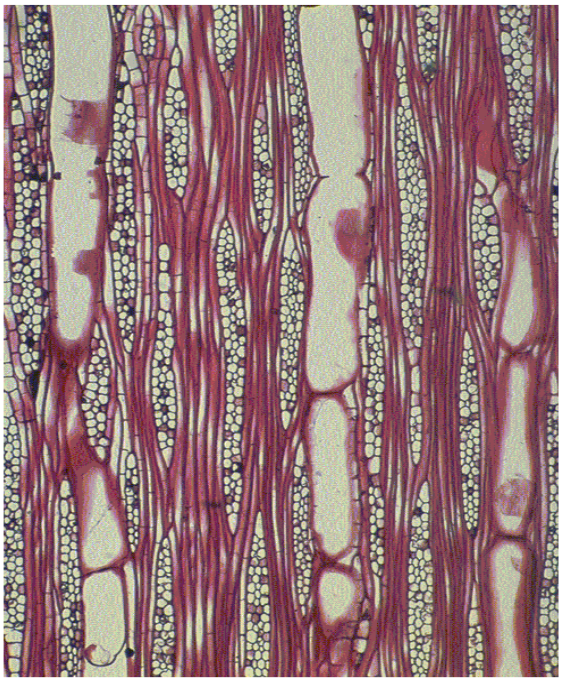
the Ministry of Developmental Aid of the Netherlands and the European Commission

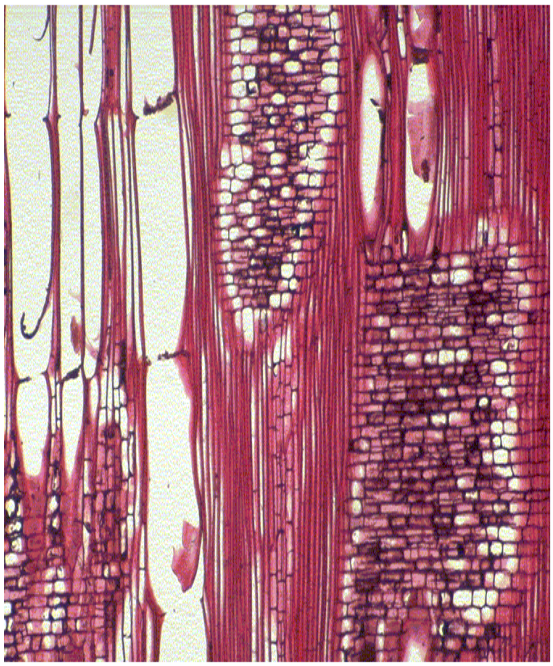
Swietenia mahagoni



transverse section



tangential section



radial section

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