



Tei

Tila cordata Mill. Syn.- *T. parviflora* Ehrh. *Tila europaea* L. *Tila platyphyllos* Scop. Syn.- *T. grandifolia* Moench. *Tilia* spp.

Commercial names:

Spanish:	Tilo. Tilo europeo (T. platyphylla). Tilo silvestre (T. cordata)
English:	Lime. Large-leaved limetree, Broad-leaved limetree (T. platyphylla). Small-leaved European limetree, Common lime (T. cordata)
French:	Tilleul. Tilleul à grandes feuilles (T. platyphylla). Tilleul à petites feuilles, Tilleul sauvage (T. cordata)
Italian:	Tiglio. Tiglio a foglie grandi (T. platyphylla). Tiglio selvatico, Tiglio a foglie piccole (T. cordata)
German:	Linde. Sommerlinde (T. platyphylla). Winterlinde (T. cordata)
Rumano:	Tei

Common names:

Aragón:	Tilo, Teja, Tilleria
Burgos:	Tejo blanco
Cataluña:	Tell, Tey
Cuenca:	Tila

Physical properties:

Density:	520-540-560 kg/m ³	
Shrinkage:	Moderately unstable	
Shrinkage values (ASTM):	Total	Unitary
Volumetric:	8,0%	(0,26)
Tangencial:	6,0%	(0,18-0,32)
Radial:	5,0%	(0,15-0,23)
Hardness:	1,7-1,9	Very soft

Mechanical properties (Wood free of defects (ASTM))

Static bending:	88-105 N/mm ²
Modulus of elasticity:	7,000-11,000 N/mm ²
Compression parallel to grain:	43-53 N/mm ²
Compression perpendicular to grain:	6,7 N/mm ² (UNE)
Shear:	4,4 N/mm ²
Toughness:	4,5-5,5 N/mm ²

Origin and availability:

Present in all Europe, including the United Kingdom. The forest areas are stable whereas its production and export are scarce.

Description of the wood:

The colour of wood is pale yellow-white in green, which turns into pale brown once it is dried. Heartwood and sapwood are not differentiated. The growth rings are slightly marked.

The fibre is straight. The grain is fine.

Drying:

Fast drying speed. Presents slight risks of deformations.

The recommended drying cells are, as follows: n°8 of the CTBA and «H» of the PRL.

Natural durability and ease of penetration:

The wood is classified as non durable against the action of fungi and susceptible to termites.

Both the heartwood and the sapwood are penetrable.

Technological properties:

It is well suited to obtaining sliced veneer.

Easily workable, although it tends to form fibre fluff, therefore it is recommended to work using sharpened devices so as to obtain good surfaces. It is advised to reduce the operating angle of blades during brushing and moulding. Dulling is relatively slow.

Gluing, using of nails and screws, and finishing present no problem.

Applications:

Furniture and cabinetwork. / Carving and sculpture. / Utensils for decoration. / Thread winding. / Banisters. / Shoetrees.

Its most important quality is the great resistance to cracking and easy workability in all directions, reason why it is very appreciated in sculpture. Spanish's imaginary used it frequently.