



Catalpa spp.

Family: **Bignoniaceae**

Catalpa

The genus *Catalpa* is composed of 11 species native to North America [2], West Indies [5], and temperate Asia (China to Tibet) [4]. The name *catalpa* is the Native American (Cherokee) name for this tree.

*Catalpa bignonioides**-beantree, beau-tree, candle-tree, catawba, catawba-tree, cigartree, common catalpa, Indian bean, Indian cigartree, **southern catalpa**

*Catalpa longissima**-(Jamaica and Haiti) French oak, Haitian oak, Jamaica oak, mastwood, **yokewood**

*Catalpa speciosa**-candle-tree, catawba, cigartree, hardy catalpa, Indian bean, Indian cigartree, **northern catalpa**, shawnee-wood, western catalpa, western catawba

*commercial species

The following description is for the North American species.

Distribution

Catalpa is native to the central eastern United States, but is naturalized throughout the United States and Canada.

The Tree

Catalpa trees are often planted as street trees and for shade in yards, but most often for their showy flowers. The tree has opposite, simple, entire leaves. The flowers are bisexual and formed in branched clusters. The fruits are large bean-like structures, resembling cigars. *Catalpa* trees can reach 100 ft (30 m) in height and 3 ft (1 m) in diameter. The bark is thick, with reddish-brown scales.

The Wood

General

The wood is similar for both North American species. The sapwood is narrow and gray, while the heartwood is a grayish brown, tinged with lavender. The wood has a faint aromatic odor and no characteristic taste. It is ring porous, straight grained, light and soft. It can be confused with ash.

Mechanical Properties (2-inch standard)

	Specific gravity	MOE x10 ⁶ lbf/in ²	MOR x10 ³ lbf/in ²	Compression		WML ^a in-lbf/in ³	Hardness lbf	Shear x10 ³ lbf/in ²
				Parallel x10 ³ lbf/in ²	Perpendicular x10 ³ lbf/in ²			
Green	.38	.84	5.2	1.45	.32	7.9	410	.68
Dry	.42	1.21	9.4	2.74	.57	9.6	550	1.13

^aWML = Work to maximum load.

^bReference (98).

^cReference (59).

Drying and Shrinkage

Type of shrinkage	Percentage of shrinkage (green to final moisture content)		
	0% MC	6% MC	20% MC
Tangential	4.9	3.9	1.6
Radial	2.5	2.0	.8
Volumetric	7.3	5.8	2.4

^aBirch shrinks considerably during drying. References: 0% MC (98), 6% and 20% MC (90).

Kiln Drying Schedules^a

Condition	Stock				
	4/4, 5/4, 6/4	8/4	10/4	12/4	16/4
Standard	T8-C4	T6-C3	T6-C3	T5-C3	T3-B1

^aReferences (6, 86).

Working Properties: Catalpa works very well with hand and machine tools, although it requires care to sand well.

Durability: Very resistant to heartwood decay when the wood is in contact with the soil.

Preservation: No information available at this time.

Uses: Fence posts and rails, general construction, interior finish, handles, picture frames, cabinetry and fuel wood.

Toxicity: No information available at this time.

Additional Reading and References Cited (in parentheses)

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