



## *Ailanthus altissima*

**Family:** Simarubaceae

**Tree-of-Heaven**

The genus *Ailanthus* contains about 10 species, native to Asia and northern Australia. It was introduced into England from China in the mid-18th century as an ornamental. It was subsequently introduced from England to the United States in 1874. The word *ailanthus* is from the Moluccan name *aylanto*, meaning tree-of-heaven and referring to the height of the tree. The word *altissima* means very tall.

*Ailanthus altissima*-Ailante, ailanthus, ailanto, ailantus, albero del paradiso, arbol el cielo, a tree grows in Brooklyn, Chinese tree-of-heaven, Chinese sumac, copal tree, falso zumaque, gotterbaum, gudstrad, heavenwood, hemelboom, paradise tree, piede di cavallo, stinking chun.

### Distribution

Native to northern China, the tree was introduced in the 19th century throughout eastern United States (Missouri to Pennsylvania) and the south to California.

### The Tree

*Ailanthus* grows rapidly, even in poor soils or environments. It grows to 80 ft (24 m), with a diameter of 2 ft (0.6 m). It is a pioneer species, crowding out other tree species. The leaves and flowers have a foul odor.

### The Wood

#### General

Heartwood is pale green to yellow with dark streaks, while the sapwood is wide and cream color. It is ring-porous with wide rays, superficially resembling ash.

#### Mechanical Properties (2-inch standard)

	Specific gravity	MOE x10 <sup>6</sup> lbf/in <sup>2</sup>	MOR lbf/in <sup>2</sup>	Compression		WML <sup>a</sup> in-lbf/in <sup>3</sup>	Hardness lbf	Shear lbf/in <sup>2</sup>
				Parallel lbf/in <sup>2</sup>	Perpendicular lbf/in <sup>2</sup>			
Green	–	0.92	6,000	2,000	380	–	701	1,050
Dry	0.53	1.52	11,800	5,260	1,130	–	1,731	2,240

<sup>a</sup>WML = Work to maximum load.  
Reference (65).

**Drying and Shrinkage:** Volumetric shrinkage is 10.81% from green (65).

**Kiln Drying Schedules:** No information available at this time.

**Working Properties:** Easily worked with tools and glues; takes a finish well.

**Durability:** Resistant to insects

**Preservation:** No information available at this time.

**Uses:** Ornamental tree (shade, screen, water edge, erosion control), fuel, home crafts, turnery, pulp.

**Toxicity:** Pruning may cause vesicular eruptions (105).

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