

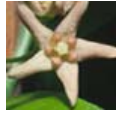


## Invasive Plant Atlas of New England

### Catalog of Species Search Results

## *Paulownia tomentosa*

(Princess tree )



[:: Catalog of Species Search](#)



[Common Name\(s\)](#) | [Full Scientific Name](#) | [Family Name Common](#) | [Family Scientific Name](#) | [Images](#) | [Synonyms](#) | [Description](#) | [Similar Species](#) | [Reproductive/Dispersal Mechanisms](#) | [Distribution](#) | [History of Introduction in New England](#) | [Habitats in New England](#) | [Threats](#) | [Early Warning Notes](#) | [Management Links](#) | [Documentation Needs](#) | [Additional Information](#) | [References](#) | [Data Retrieval](#) | [Maps of New England Plant Distribution](#)

### COMMON NAME

Princess tree

### FULL SCIENTIFIC NAME

*Paulownia tomentosa* (Thunb.) Sieb. & Zucc. ex Steud.

### FAMILY NAME COMMON

Figwort family

### FAMILY SCIENTIFIC NAME

Scrophulariaceae

### IMAGES



Fruit



Flowers



Bark close-up



Habit

## NOMENCLATURE/SYNONYMS

**Synonyms:** None

## DESCRIPTION

### Botanical Glossary

*Paulownia tomentosa* is a fast-growing tree that can reach 15 m (50 ft.) or more in height. The trunk diameter can reach 1.2 m (4 ft.). The thin bark of the tree is rough and gray-brown in color, with intermittent smooth areas here and there. The light brown branches have numerous lenticels. The long-petioled leaves are cordate-ovate in shape, and can be entire or have slight lobing. They are arranged oppositely or in whorls. The leaves are 15-38 cm (6-15 in.) long and 10-20 cm (4-8 in.) wide. The young leaves are pubescent on both the upper and lower surfaces, while the older leaves are glabrate above and pubescent below.

The extremely fragrant flowers of *Paulownia tomentosa* have lavender or bluish corollas. They are 5-7 cm (2-2.75 in.) long and are borne in erect terminal panicles. The calyx of the flower is 5-lobed, and these lobes are tomentose. The pedicels are thick and densely tomentose. The woody capsules are ovoid, pointed, 3-4.5 cm (1.25-1.75 in.) long and 2.5 cm (1 in.) in diameter. The capsules are sticky and green when they are first produced, but become dry and brown by September and October. These capsules open and release about 2000 seeds per capsule. The capsules persist on the branches into the winter.

Page References Bailey 900, Fernald 1273, Gleason & Cronquist 493, Holmgren 461, Magee & Ahles 912. See reference section below for full citations.

## SIMILAR SPECIES

*Catalpa speciosa* Warder (Northern catalpa)

*Catalpa bignonioides* Walter (Southern catalpa)

Both species of catalpa resemble *Paulownia tomentosa*. However, the corollas of catalpa are white, and their fruits are long bean-like capsules.

## REPRODUCTIVE/DISPERSAL MECHANISMS

*Paulownia tomentosa* can reproduce via seeds as well as root sprouts. The seeds of *P. tomentosa* are dispersed by wind.

## DISTRIBUTION

*Paulownia tomentosa* is native to China, Japan and Korea. In the United States it is distributed from Massachusetts to Florida and west to Texas, Oklahoma, Missouri and Illinois. In New England it has been reported from coastal areas in Massachusetts, Connecticut and Rhode Island.

## HISTORY OF INTRODUCTION IN NEW ENGLAND

*Paulownia tomentosa* was introduced into the United States in 1844 as a horticultural plant. In the northeastern and southeastern parts of the United States it is now being planted in plantations and used for lumber. It is likely that this plant made its way into New England by intentional plantings as an ornamental, and then dispersed from these points of introduction.

## HABITATS IN NEW ENGLAND

Edge  
Open Disturbed Area  
Roadside  
Yard or Garden

*Paulownia tomentosa* is tolerant of many different types of habitats. However, it relies greatly on disturbance to move into a natural environment. It can be found in dry, infertile and acidic soils, as well as spaces in cliffs.

## THREATS

*Paulownia tomentosa* is a prolific seed producer, producing up to 20 million seeds per plant each year. Since these seeds are dispersed by wind, they can travel long distances and make their way into minimally managed habitats. Once they take hold in an area, they can crowd out native trees. This plant has been encouraged as a cash crop in Asia, and is being planted as such in the United States as well. These large plantations could serve as focal points for dispersal. In New England its distribution has remained limited to near the coast thus far.

## MANAGEMENT LINKS

[Plant Conservation Alliance](#)  
Fact sheet with management information

## DOCUMENTATION NEEDS

Documentation required: A photograph of the flowers or fruits  
Best time for documentation: Spring, summer.

## ADDITIONAL INFORMATION

Integrated Taxonomic Information System  
Taxonomic information

The PLANTS database  
General information and map

Plant Conservation Alliance  
Fact sheet with description and control information

University of Connecticut Plant Database  
Description

USDA Forest Service - Silvics of North America  
Description and ecology

Virginia Tech Dendrology  
Description and photographs

## REFERENCES

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Williams, C.E. 1993. The exotic empress tree, *Paulownia tomentosa*: An invasive pest of forests? *Natural Areas Journal* 13(3): 221-222.

## DATA RETRIEVAL

Select a task by clicking the radio button and then click "Submit Selection."

- Formatted display as table
- Export as comma-delimited text file

## MAPS OF PLANT DISTRIBUTION IN NEW ENGLAND

Select a study area by clicking the radio button and then click "Submit Selection."

- The whole New England area
- One or more states
- One or more counties
- One or more towns (county sub-divisions)

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