

Paulownia tomentosa: Princess-Tree¹

Edward F. Gilman and Dennis G. Watson²

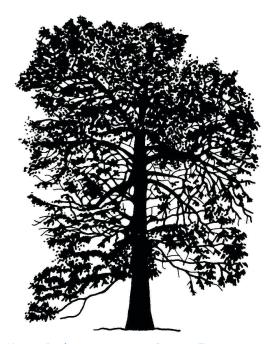


Figure 1. Mature *Paulownia tomentosa*: Princess-Tree.

Introduction

This native of China gives a most dramatic, coarse-textured appearance, with its huge heart-shaped leaves and large clusters of lavender flowers in the spring. Flowers are borne before leaf emergence so they stand out nicely, especially against an evergreen background. With a rapid growth rate, Princess-Tree can reach 50 feet in height with an equal spread in an open landscape. Most trees are seen 30 to 40 feet tall and wide. It thrives best in deep, moist but well-drained soil, sheltered from the wind, and has become

naturalized in many parts of the South. Fuzzy, brown flower buds form in early autumn, persist over the winter, and bloom in early spring. Buds may freeze in very cold weather and drop off. Woody seed capsules form in autumn containing up to two-thousand seeds. They persist through the winter. Seeds germinate readily in the landscape and wherever they are carried. Leaves drop within one week following the first frost in autumn.

General Information

Scientific name: Paulownia tomentosa

Pronunciation: pah-LOE-nee-uh toe-men-TOE-suh **Common name(s):** Princess-Tree, Empress-Tree,

Paulownia

Family: *Scrophulariaceae*

USDA hardiness zones: 5B through 9B (Figure 2)

Origin: not native to North America Invasive potential: invasive non-native Uses: urban tolerant; reclamation

Availability: not native to North America **Origin:** not native to North America

Invasive potential: According to the IFAS Assessment of Non-Native Plants in Florida's Natural Areas (IFAS Invasive Plant Working Group 2008), *Paulownia tomentosa* is invasive and not recommended in Florida (to see if any exceptions for specified and limited use have been approved since publication, check the Conclusions Table at: http://plants.ifas.ufl.edu/assessment/conclusions.html).

Uses: urban tolerant; reclamation

Availability: not native to North America

- 1. This document is ENH-592, one of a series of the Environmental Horticulture, UF/IFAS Extension. Original publication date November 1993. Revised December 2006 and February 2013. Reviewed June 2016. Visit the EDIS website at http://edis.ifas.ufl.edu.
- 2. Edward F. Gilman, professor, Environmental Horticulture Department; Dennis G. Watson, former associate professor, Agricultural Engineering Department, UF/IFAS Extension, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office.

U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A & M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Nick T. Place, dean for UF/IFAS Extension.



Figure 2. Range

Description

Height: 40 to 50 feet **Spread:** 40 to 50 feet

Crown uniformity: irregular Crown shape: vase, round Crown density: moderate

Growth rate: fast **Texture:** coarse

Foliage

Leaf arrangement: opposite/subopposite (Figure 3)

Leaf type: simple
Leaf margin: entire
Leaf shape: ovate, cordate
Leaf venation: palmate, pinnate
Leaf type and persistence: deciduous

Leaf blade length: 4 to 8 inches, 8 to 12 inches

Leaf color: green

Fall color: no color change Fall characteristic: not showy

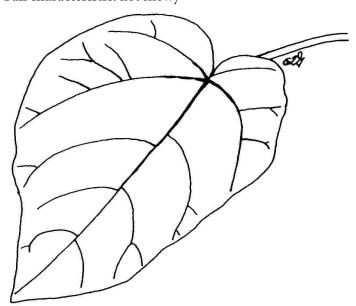


Figure 3. Foliage

Flower

Flower color: lavender

Flower characteristics: very showy



Figure 4. *Paulownia tomentosa* flowers. Credits: William S. Justice @ USDA-NRCS PLANTS Database

Fruit

Fruit shape: oval

Fruit length: 1 to 3 inches **Fruit covering:** dry or hard

Fruit color: brown

Fruit characteristics: does not attract wildlife; showy; fruit/

leaves a litter problem

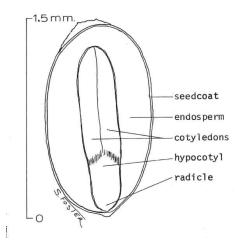


Figure 5. Fruit.
Credits: Suzanne Foster @ USDA-NRCS PLANTS Database

Trunk and Branches

Trunk/bark/branches: branches droop; not showy; typi-

cally one trunk; thorns

Pruning requirement: needed for strong structure

Breakage: susceptible to breakage Current year twig color: brown Current year twig thickness: thick Wood specific gravity: unknown

Culture

Light requirement: full sun, partial sun or partial shade **Soil tolerances:** sand; loam; clay; acidic; slightly alkaline;

occasionally wet; well-drained **Drought tolerance:** moderate **Aerosol salt tolerance:** moderate

Other

Roots: can form large surface roots

Winter interest: no
Outstanding tree: no
Ozone sensitivity: tolerant

Verticillium wilt susceptibility: unknown **Pest resistance:** free of serious pests and diseases

Use and Management

Close-grained Paulownia wood has become extremely valuable during the last 15 years. It may be the highest priced saw timber in the country at this time. It is exported to Japan where it is milled into furniture and jewelry boxes. The wood is very lightweight and makes good crating material.

Princess-Tree should be planted where falling flowers and leaves are not objectionable. In some areas, the tree is often considered a "weed" tree, and has naturalized in the edge of woodlands. If it is planted, consider placing it in a park or other open-space area.

Diseases

It has no known insect enemies.

There have been occasional reports of problems with mildew, leaf- spot and twig canker.

Literature Cited

Fox, A.M., D.R. Gordon, J.A. Dusky, L. Tyson, and R.K. Stocker. 2008. IFAS Assessment of Non-Native Plants in Florida's Natural Areas: Status Assessment. Cited from the Internet (November 16, 2012), http://plants.ifas.ufl.edu/assessment/pdfs/status_assessment.pdf