



Paulownia tomentosa Princess-Tree¹

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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 (Fig. 1). 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 9 (Fig. 2)

Origin: not native to North America

Uses: reclamation plant; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common

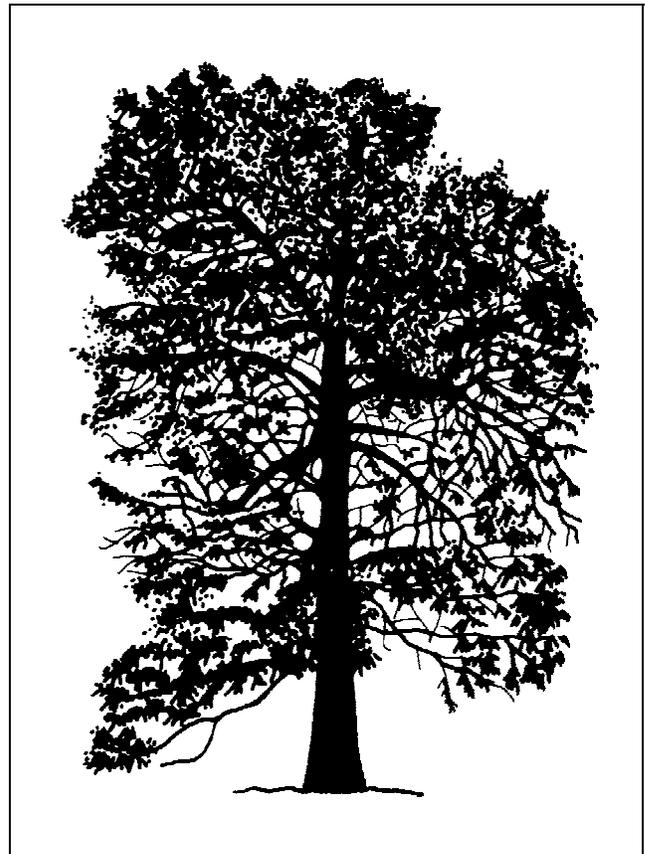


Figure 1. Mature Princess-Tree.

Availability: grown in small quantities by a small number of nurseries

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Figure 2. Shaded area represents potential planting range.

DESCRIPTION

Height: 40 to 50 feet
Spread: 40 to 50 feet
Crown uniformity: irregular outline or silhouette
Crown shape: round; vase shape
Crown density: moderate
Growth rate: fast
Texture: coarse

Foliage

Leaf arrangement: opposite/subopposite (Fig. 3)
Leaf type: simple
Leaf margin: entire
Leaf shape: cordate; ovate
Leaf venation: pinnate; palmate
Leaf type and persistence: deciduous
Leaf blade length: 8 to 12 inches; 4 to 8 inches
Leaf color: green
Fall color: no fall color change
Fall characteristic: not showy

Flower

Flower color: lavender
Flower characteristics: spring flowering; very showy

Fruit

Fruit shape: oval
Fruit length: 1 to 3 inches
Fruit covering: dry or hard
Fruit color: brown
Fruit characteristics: does not attract wildlife; fruit, twigs, or foliage cause significant litter; persistent on the tree; showy

Trunk and Branches

Trunk/bark/branches: bark is thin and easily damaged from mechanical impact; droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; not particularly showy; should be grown with a single leader; no thorns
Pruning requirement: requires pruning to develop strong structure

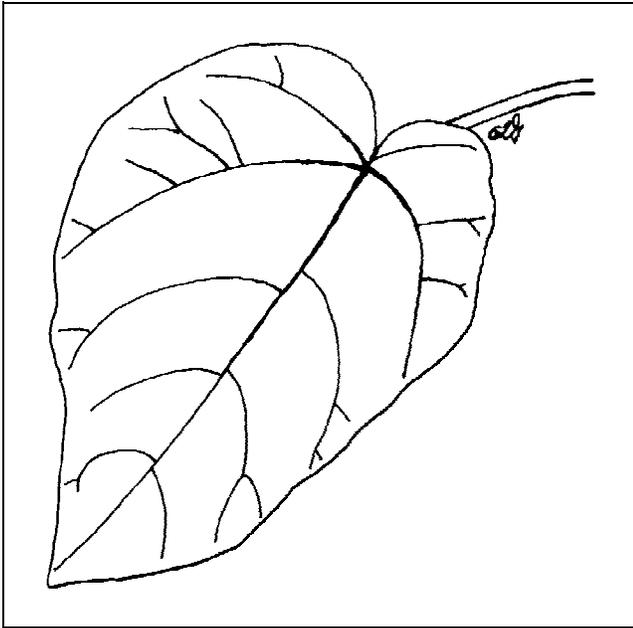


Figure 3. Foliage of Princess-Tree.

Breakage: susceptible to breakage either at the crotch due to poor collar formation, or the wood itself is weak and tends to break

Current year twig color: brown

Current year twig thickness: thick

Culture

Light requirement: tree grows in part shade/part sun;
tree grows in full sun

Soil tolerances: clay; loam; sand; slightly alkaline;
acidic; occasionally wet; well-drained

Drought tolerance: moderate

Aerosol salt tolerance: moderate

Other

Roots: surface roots can lift sidewalks or interfere with mowing

Winter interest: no special winter interest

Outstanding tree: not particularly outstanding

Invasive potential: No entries found.

Ozone sensitivity: tolerant

Pest resistance: no pests are normally seen on the tree

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.