

GREEN GONE BAD

Featured Ornamental Plant: *Paulownia tomentosa*

Some exotic ornamental plants behave badly when they escape from the place they are planted. Infestations of these plants have negative impacts on natural environments. One of these plants is *Paulownia tomentosa*; common name: Princess Tree.



Paulownia tomentosa or Princess tree (also known as royal paulownia or empress tree) is a small to medium sized tree that may reach 30-60 feet in height. It is native to China, having been introduced to North America in the 1800s; it is still widely planted for horticultural purposes in North America. The wood is highly prized in Asia leading to the establishment of commercial plantations in the United States. Several Paulownia plantations exist in South Carolina.



Paulownia tomentosa has large (5-10 in. long on mature trees) heart-shaped leaves arranged oppositely along the branches. Young plants and stump sprouts have leaves up to twice the size. Bark is thin grayish brown with shallow fissures. Lavender flowers arranged in upright pyramidal clusters appear in April and May before leaves emerge. Fruits are oval capsules initially sticky and green that later turn brown and dry; persisting on the tree through the winter. Capsules have four compartments that may contain several thousand tiny winged seeds.



There are many problems with *Paulownia tomentosa*. Its wood is very brittle causing constant clean-up of fallen limbs in planted landscapes. Moreover, its falling leaves, flowers, twigs and seed pods all create abundant litter. While its flowers are beautiful, hard winters often freeze and kill the developing, young flower buds, leaving the tree no choice but to grow faster and drop more limbs.

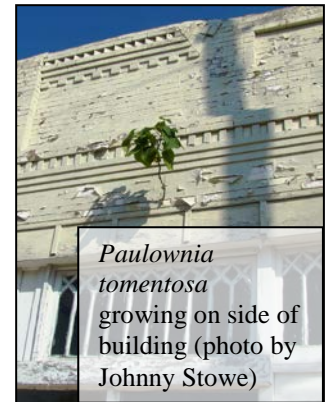


Paulownia tomentosa is listed as Noxious and banned in Connecticut. It is included on many other states invasive exotic pest plant lists.



Once *Paulownia tomentosa* escapes cultivation it is an extremely fast-growing competitor with native species in disturbed natural areas including forests, stream banks and steep rocky slopes. It tolerates high soil acidity, drought, and low soil fertility enabling it to survive, grow, and reproduce on harsh, exposed sites. Roadsides provide ideal habitat and migration routes for this plant. It easily adapts to disturbed habitats where it may compete with rare plants. Its ability to sprout prolifically from adventitious buds on stems and roots allows it to survive fire, cutting, and even bulldozing in construction areas. Sprouts generally grow faster than seedlings. Natural habitats become altered through decreased light availability, decreased space,

depleted soil moisture and nutrients, and reduced bio-diversity.



It may not be widely known among horticulturalists and landscapers that this plant can be harmful to natural habitats. Please consider removing this species from your inventory. Native trees that grow quickly include *Liriodendron tulipifera* (tuliptree or yellow poplar) and *Acer negundo* (boxelder); other natives have comparable attractive flowers or foliage such as *Amelanchier canadensis* and *A. arborea* (serviceberry), *Cercis canadensis* (redbud), *Cornus florida* (flowering dogwood), *Ilex opaca* (American holly), *Morus rubra* (red mulberry), *Lindera benzoin* (spicebush), and *Sassafras albidum* (sassafras).

Visit <http://www.invasive.org/browse/subinfo.cfm?sub=2426> for more details

See also: <http://www.se-eppc.org/southcarolina/> and <http://www.se-eppc.org/>

