
SUNNYSIDE THYMES

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“Helping Others Grow”

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Space Invaders

By Rosa Hutchins, SMG Member

Both of these trees are such wonderful sounding names, but beware! They are like the wolf in sheep clothing. Both are invasive and non-native to the United States.



Tree of Heaven Leaves - Photo by

Paul Wray, Iowa State Univ.

Tree of Heaven (*Ailanthus altissima*) is native to China. It grows rapidly and reaches heights of 49 feet in 25 years. It typically lives more than 50 years and some even get to be 100 years old. It was first brought in from China to Europe in the 1740's and to the USA in 1784. It has become an invasive species due to its ability to colonize disturbed areas quickly and to suppress competition with allelopathic chemicals.

The leaves are large, odd or even pinnately compound and arranged alternately on the stem. They range in size from 1-4 feet and contain 10-41 leaflets organized in pairs. The flowers are small and appear in large panicles. They bloom from mid-April to July, depending on the region it's growing.

The tree prefers moist and loamy soils but is adaptable to a wide variety of soils. It is an opportunist and thrives in full sun. It spreads aggressively both by seeds and vegetatively by root spouts, re-sprouting rapidly after being cut. It is possibly the fastest growing tree in North America.



Tree of Heaven Seeds - Photo: Dave Jackson, Extension Educator, Pennsylvania State University

Due to its extensive root system and

resprouting ability, it is almost impossible to destroy. Hand pulling young seedlings is effective when the soil is moist and the entire root system is removed.

The Tree of Heaven is dioecious, meaning it is either male or female and typically grows in dense colonies or clones. Female trees are prolific seeders and may produce more than 300,000 seeds annually. Established trees continually spread by sending up root suckers that may come up as far as 50 feet from the parent tree. Well established trees are only eliminated through repeated efforts. Persistence is the key to success.

Tree of Heaven can affect human health due to it being a very high pollen producer and a moderate source of allergy in some people.

Princess Tree (*Paulownia tomentosa*) is native to western and central China and has been in the US for more than 150 years. It is a showy, aggressive ornamental tree growing 30-60 feet tall. Often found on roadsides, stream banks and disturbed habitats, it has the ability to sprout prolifically from adventitious buds on stems and roots allow it to survive fire, cutting and even bulldozing in constructive areas.



Paulownia flowers in spring

Photo: Leslie J. Mehrhoff, University of Connecticut, Bugwood.org

The leaves are opposite, 6-12 inches long, heart shaped and hairy on the underside. It has spring flowers which are 1.5-2 inches long, tubular and pale violet. The pecan-shaped fruits occur in terminal clusters and split to release thousands of seeds which makes it so invasive.

It colonizes by root spouts and the seeds are spread by wind and water. To help control it, large trees can be cut down with a chainsaw and treat the outer two inches of the cut surface with undiluted glyphosate concentrate (53.8%



Paulownia fruit cluster in June
Photo: James H. Miller, USDA
Forest Service, Bugwood.org

is preferred). Well-established trees are only eliminated by repeated efforts and monitoring. If seed capsules are present on cut limbs, collect and bag them, dispose in a large garbage bag so they do not spread.

Due to its fast growing nature, it causes so many problems for the ecosystems from Maine to Florida, Texas and the Pacific Northwest. Unfortunately, open almost any garden magazine and you'll find this tree as an amazing, fast growing shade tree. It is this fast growing nature that causes so many problems for native ecosystems.

Both trees are very similar in that they are fast growing, invasive and hard to remove once established. Best advise is to do your research first and avoid these wonderful sounding trees.

Sources:

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