

Knox County Cooperative Invasive Species Management Area

Invasive Species of the Month for November 2019

Princess Tree (Paulownia tomentosa)

Origin: China

Introduction: First brought to Europe in 1830 by the Dutch East India Trading Company, first propagated by American nurserymen ~1850

Botanical Terminology:

Panicle – a type of inflorescence structure where individual flowers are attached with stalks to a central stem

Interesting Fact: Princess Tree has been promoted for its large, showy flowers in landscaping as well as its strong, light wood for lumber.

Description: Princess Tree is a woody tree species in the Figwort Family that can grow over 100 ft. tall. It has opposite, large leaves and flowering panicles of large, tubular flowers that turn into capsules containing winged seeds when ripe.

Defining characteristics:

- Large, opposite leaves with cordate bases
- Leaves are hairy especially juvenile leaves and on the undersides
- Flowering, terminal panicles of white to pink, tubular flowers
- Tan to brown capsules containing winged seeds



Left Images: Princess Tree's panicle of attractive flowers and large leaves

<u>Center Image</u>: The capsules of Princess Tree <u>Right Images</u>: Princess Tree's slightly fissured bark



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Habitat: Forests, forest edges, riparian areas, disturbed areas, and right-of-ways



Above Image: A mature planted Princess Tree with fruit in Knox County.

Ecological threat: Princess Tree is a prolific seed producer and a very fast growing species. A single mature Princess Tree can produce over 20 million seeds/year. These seeds can persist in the seedbank for at least 2 to 3 years. Princess Tree has been shown to grow as much as 7 ft./year and can reach reproductive maturity in 4-5 years. With its rapid growth and large leaves, Princess Tree can shade out other species.

Control Methods:

- Manual: Pulling of young individuals can be effective. Make sure to remove all of the root because resprouting from root fragments may occur. Mowing or cutting large individuals takes several years as trees resprout readily from root system.
- <u>Chemical</u>: Probably the most effective method on large, dense patches. Foliar applications of herbicides with glyphosate* or triclopyr* solution are effective for young individuals. Larger trees can be cut or girdled, and cuts applied with a cut stem concentration of glyphosate*.

References

Hu, Shiu-Ying. 1961. "The Economic Botany of the Paulownias." Economic Botany 15(1): 11-27.

Innes, Robin J. 2009. Paulownia tomentosa. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer). Available:

https://www.fs.fed.us/database/feis/plants/tree/pautom/all.html [2019, October 29].

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^{*}Always follow herbicide label instructions.