

# Invasive Plants in Pennsylvania

## Kudzu

*Pueraria montana var. lobata*



Photo: Greg Czarnecki, DCNR

### Background:

Kudzu, referred to as “the vine that ate the South,” is a native to Asia. It was first introduced into the U.S. in 1876 at the Philadelphia Centennial Exposition. It was widely planted throughout the eastern U.S. for erosion control and livestock feed.

### Range:

Found as far north as Massachusetts and throughout the east coast over to the Midwest. Kudzu can also be found in Hawaii and parts of Oregon.

### Description:

Kudzu is a climbing, deciduous vine that can reach lengths of over 100 feet. Leaves are alternate, compound (with three lobed leaflets), hairy and up to five inches in length. Clusters of purple, fragrant flowers appear in midsummer. Fruits are green to brown, hairy, flat seed pods that are roughly three inches in length and contain three to 10 seeds.



Photo: Greg Czarnecki, DCNR

### Habitat:

This vine prefers open, disturbed areas like roadsides, rights-of-way, forest edges and old fields. In Pennsylvania most of the sites are old homesteads or industrial sites that were planted with kudzu to prevent erosion.

### Biology and Spread:

Kudzu can grow up to a foot a day. Its spread is limited to vegetative means: roots and rhizomes. It is unknown whether the seeds are viable this far north. Kudzu tap roots are substantial in size, some weighing as much as 400 pounds, making their removal difficult. As many as 30 vines may grow from one root crown.

### Ecological Threat:

This vine kills other plants by smothering them, girdling woody stems and trunks, and uprooting entire trees by the force of its weight.

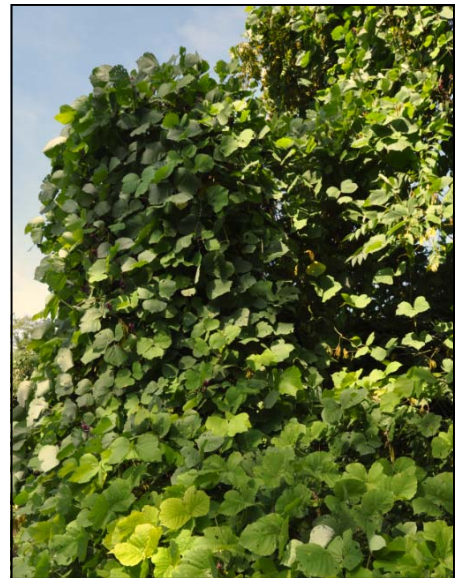


Photo: Greg Czarnecki, DCNR

## How to Control this Species:

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For successful long-term control of this vine, the extensive root system must be destroyed, which will take many years. Any surviving root crowns can lead to reinfestation.

### Manual and Mechanical

Repeated cutting every month of the growing season may be effective at reducing the stored energy in the roots, but it can take up to 10 years in well-established stands. Cut vines can be fed to livestock or bagged and sent to a landfill. Root removal is not recommended as they may be up to 12 feet deep under ground.

### Chemical

When vines have grown into trees, the cut stump method is suggested. Cut the stem two inches above the ground and immediately apply a 25 percent glyphosate or triclopyr and water solution to the stem.

For large populations of kudzu the foliar spray method is recommended. Apply either a two percent solution of glyphosate or triclopyr and water solution to the leaves. A 0.5 percent non-ionic surfactant added to the herbicide is recommended to help penetrate the leaf surface. Air temperatures should be above 65 degrees F.

## If You Find This Plant:

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Kudzu is on the Pennsylvania Noxious Weed Control List. It is illegal to sell, plant or transport this species. If you believe that you have found a new population of this plant, please contact Melissa Bravo, PA Dept. of Agriculture, at 717-787-7204.



Photo: Greg Czarnecki, DCNR

## References:

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*Center for Invasive Species and Ecosystem Health:*

<http://www.invasive.org/browse/subinfo.cfm?sub=2425>

*Invasive Exotic Plant Tutorial for Natural Lands Managers:*

<http://www.dcnr.state.pa.us/forestry/invasivetutorial/kudzu.htm>

## For More Information:

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To learn more about invasive plants in Pennsylvania and the northeast, here are some useful resources:

*Plant Invaders of Mid-Atlantic Natural Areas, National Park Service:*

<http://www.nps.gov/plants/alien/pubs/midatlantic/midatlantic.pdf>

*Invasive Plants Field and Reference Guide, U.S. Forest Service:*

[http://na.fs.fed.us/pubs/misc/ip/ip\\_field\\_guide.pdf](http://na.fs.fed.us/pubs/misc/ip/ip_field_guide.pdf)

