



## Invasive Species of the Month for August 2019

### Kudzu (*Pueraria montana*)

**Origin:** China

**Introduction:** First introduced as an ornamental species in the late 1800s, used as a forage crop in the early 1900s, and promoted for erosion control in the 1930s and 40s

#### Botanical Terminology:

*Raceme* – a type of flowering structure with separate flowers attached to a central stem by short stalks. They will develop from the bottom up.

**Interesting Fact:** Kudzu is one of the most widely identifiable invasive plant species in the United States and is commonly referred to as “the vine that ate the South.”

**Description:** Kudzu is a semi-woody, perennial vine in the Legume Family. It has alternate, compound leaves and flowering racemes of red-purple flowers that turn into hairy seedpods when ripe.

#### Defining characteristics:

- Alternate, compound leaves with 3 leaflets per leaf
- Flowering racemes of red-purple flowers in late Summer
- Fruit is hairy seedpods with several seeds per pod.
- Herbaceous stems are densely hairy.



Left Images: Kudzu climbing up a small tree (note the trifoliate leaves).

Center Image: Woody vines of Kudzu

Right Images: Kudzu forming a canopy while it is flowering. Shot of hairy stems (inset).



## Knox County Cooperative Invasive Species Management Area

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**Habitat:** Forests, disturbed areas, right-of-ways, forest edges, riparian areas, fallow fields, hedgerows, and yards



Above Image: Kudzu climbing over Black Cherry trees in Knox County.

**Ecological threat:** Kudzu is known for its prolific growth; vines can grow up to 30 m. in a single growing season. Kudzu can reproduce by seed or by underground tubers. In addition, Kudzu tolerates a wide variety of environmental conditions and can establish in many different habitats. These traits allow Kudzu to outcompete native grasses, wildflowers, trees and shrubs and convert diverse environments into a monoculture. Kudzu has been known to wrap around trees in the South and kill them after 2-3 years. In addition, Kudzu's range is likely to expand in the future with climate change predictions as winters begin to warm. Kudzu may also become even more invasive in the future because its growth rate can increase strongly with increased CO<sub>2</sub> in the atmosphere. Lastly, there has been some concern that Kudzu would serve as an alternative host for Soybean Rust, although this has only been observed in a minority of infestations.

### **Control Methods:**

- Biological: Goats have been shown to be effective grazers of Kudzu.
- Manual: Generally not effective, especially mowing.
- Chemical: Generally the most effective method especially on large, dense patches. Foliar applications of herbicides with clopyralid\* or triclopyr\* have been shown to be effective. Also, large woody vines can be controlled with a basal bark application with triclopyr\*.

\*Always follow herbicide label instructions.



## References

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