

Scientific Name: *Pueraria Montana*

Common Name: Kudzu

Updated: 5/5/2016

A. Priority: B

Description – Kudzu is a perennial trailing or climbing vine of the legume (pea) family. The compound leaves are broad, up to seven or eight inches long; have hairy undersides; and are arranged in threes at the ends of the stems. With a fragrance reminiscent of grapes, the one half to three quarter inch purple flowers are produced on plants exposed to direct sunlight. Kudzu fruits in October and November and produces hairy, bean-like pods with a few viable seeds in each pod. Although establishment by seeds is rare, it is believed that seeds can remain dormant for several years before germinating. Leaves and small vines may die with the first frost, and matted leaves are persistent through the winter. It forms extensive monocultures, often draping and obscuring mature trees, utility poles and lines, houses, cars, etc. Young stems of this plant are hairy, while older stems become woody and up to an inch in diameter. Roots on older populations (i.e. >10 years) may extend 12 feet in sandy soils, and new plants may occur at stem nodes every one to two feet. The roots are tuberous and store carbohydrates produced by the leaves as starch. The roots remain capable of starting new vines when vines and leaves above ground have been top-killed.

B. Damage and threats – Kudzu can grow up to 1-foot per day and has the ability to out-compete and kill everything in its path. Its large roots allow it to survive many unfavorable conditions, and spread uncontrollably. Kudzu has eliminated much of the native biodiversity where it occurs and has formed extensive monocultures that have overgrown trees more than 50-feet tall. Additional cliff and forest species and natural community types will be affected if the infestations continue to expand.

C. Management Options

Mechanical Control:

Some smaller and younger populations of Kudzu can be controlled without chemicals. Persistent mowing, weeding or grazing during the growing season can eradicate some populations of kudzu over many years. Goats can be used to control Kudzu by grazing multiple times a year for at least three years. For larger, older infestations, chemical control is often necessary in addition to grazing to remove re-sprouts.

Chemical Control: Use of a systematic herbicide is a great control option for Kudzu. Many broadleaf herbicides exist that you can choose from. Triclopyr, Aminopyralid, Tebuthiuron, Metsulfuron, Glyphosate or Dicamba can be used. We recommend using Clopyralid, Aminopyralid, or Glyphosate; depending on the situation.

- a. Foliar Spray** – This method involves spraying a dilute herbicide directly onto the plant's leaves. Application needs to occur when foliage is present, sometime between full leaf and the onset of fall for full effectiveness. Caution should be taken

when applying herbicide with this method as non-target plants can easily be killed by drift or overspray. To treat Kudzu, use a 1-4% solution of one of the herbicides described below. Follow all label instructions and apply directly to leaves until just before runoff. Air temperatures must be above 65 degrees and winds should be lower than 5 mph. When water is nearby we recommend using Aminopyralid or aquatic Glyphosate. When you need to protect surrounding plants, Clopyralid is the best choice, when there is a concern for surrounding plants, due to its selective nature.

- b. Cut Stump** – This method involves cutting the vine as close to $\frac{3}{4}$ of an inch from the ground as possible (no more than 5in.) and immediately applying a systematic herbicide. It is best to use this method between summer and fall, but it may be used as long as the ground is not frozen. To treat using this method, apply a 25-50% formulation of aquatic glyphosate or triclopyr directly to the cut stump. If the vine is climbing, cut at the base as described above and again 2-3 feet up.

D. Recommended Management Strategy

- a.** For small and or initial infestations we recommend hand pulling and or cut stump treatments.
- b.** For large or mature infestations we recommend herbicide foliar applications with the best herbicide based on the site. For first time monoculture treatments we recommend using an aquatic formulation of Triclopyr or glyphosate as these herbicide are more cost effective and selectivity is not as important. For later treatments and or where there is a native herbaceous component we would recommend using either Aminopyralid or Clopyralid.

E. Additional and Updated Information

For additional information including photographs and the most up to date control recommendations please visit www.wachng.org/Plants.