



Unripe seed pods



Bark on older vines



Close-up of a young vine

For More Information Visit:

<http://www.HawkeyeCWMA.org>

ALWAYS READ AND FOLLOW PESTICIDE LABELS.

Proper training for prescribed fires is highly recommended.

Basic training can be found online at <http://training.nwcg.gov/courses/s130.html> and <http://training.nwcg.gov/courses/s190.html>

Related Websites:

<http://www.iowadnr.com/forestry/invasive.html>
<http://plants.usda.gov>
www.invasivespecies.gov
www.nps.gov/plants/alien

Credits:

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The **Hawkeye Cooperative Weed Management Area (HCWMA)** is a collective group of county, state, and federal agencies, nonprofit organizations and community associations who have come together to **combat the invasive species problem in Eastern Iowa**. The HCWMA serves Benton, Cedar, Iowa, Johnson, Jones, Linn, and Louisa Counties and is open to all interested parties. The Term CWMA, or Cooperative Weed Management Area, refers to a local organization that integrates invasive species

management resources across jurisdictional boundaries in order to benefit entire regions.

All Hawkeye CWMA members (agencies, organizations, and individuals) are equal opportunity providers and employees.

Kudzu

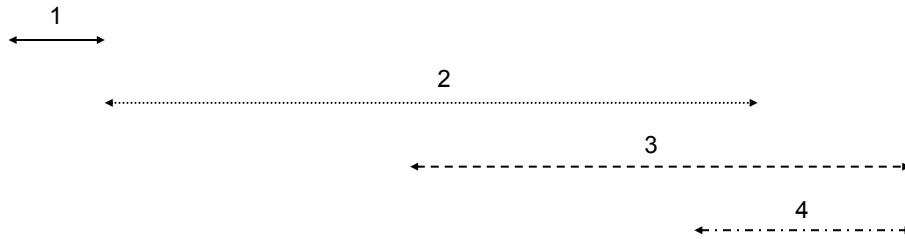
Pueraria montana var. lobata



UGA2307161

A SERIOUS THREAT To Iowa's Woodlands

Jan Feb March April May June July Aug Sept Oct Nov Dec



Management Techniques

- (Early Spring) Prescribed fire. Burning in early spring will kill small plants and sever climbing vines from root systems. Burning will also stimulate seeds to germinate. This technique alone will rarely remove an infestation and should be followed by technique 3 after any seeds have sprouted.
- (Spring-Fall) Mowing. Frequent mowing (at least monthly, if not more often) down to ground level will eventually exhaust the plant's energy stores. Best if continued for 3-4 years.
This should be followed by technique 3(b) in late summer.
- (Summer-Fall) Herbicide. This may be followed by technique 4.
 - Foliar spray. Apply herbicide such as glyphosate (non-selective) or clopyralid (legume-specific) to leaves using a sprayer. Check labels for specific application rates. In general this technique will have a deeper root-kill if used in the fall, but can be used to top kill the plant in the spring and summer.
 - Basal bark or cut stem. Apply a 20% glyphosate or 12.5% triclopyr solution to stems cut at ground level or bark near base of plant in late summer or throughout dormant season. Both are non-selective and care should be taken to avoid applying to non-target species.
- (Fall) Native grass planting. Following wilting after herbicide application, native grasses may be planted to provide competition to kudzu regrowth in the spring.

What is Kudzu?

- “The Vine that ate the South”
- A highly aggressive, perennial, semi-woody climbing vine
- Native to Japan and China
- Introduced in the early 1900s for erosion control and livestock feed
- Widely planted by various federal programs before being recognized by the USDA as a weed species in 1953



Kudzu infestation in North Carolina

What is the threat to Iowa?

- Has no natural growth controls
- Can grow up to 60 feet in a season
- Forms dense mats which smother native plants and reduce diversity
- May kill trees and shrubs by girdling trunks, breaking branches, or toppling over entire trees with the weight of its vines
- Alternate host for soybean rust

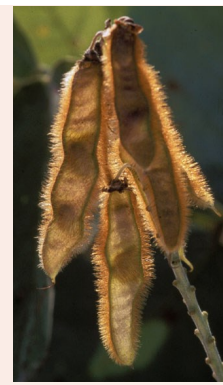
What does Kudzu Look Like?

Identifying traits: A climbing, semi-woody perennial vine. May reach heights of 80-100 feet. Leaves are up to 8” long, contain 3 notched or lobed leaflets, and are dark green and alternate. Stems, undersides of leaves, and seed pods (up to 3” long) are hairy. Reddish-purple, pea-like flowers occur in clusters up to 8-12” long.

Vines: Up to 10” in diameter, 100 feet high and sprawling up to 50 feet. Young vines are yellow-green and hairy, becoming light gray and hairless and eventually developing rough, dark brown bark. Hanging vines may produce roots where they contact soil.



Leaves: Alternate, compound leaves with 3 leaflets. Leaflets are 3-7” long and 2.5-8” wide. Center leaflet is symmetrically lobed with asymmetrically lobed outer leaflets (unless grown in shade). Pointed tips with hairy undersides.



Seeds: Seed pods are 1.5-3” long and contain 3-10 seeds which can be easily seen through the pod. Seed viability varies greatly between plants. Pods are green, ripening to tan, and covered in stiff tan hairs.

Flowers: Fragrant pea-like flowers grow in pairs or threes to form long clusters, 8-12” long, which open from the base to the tip. Reddish-purple, lightening to lavender toward the tip of the cluster, with yellow centers.



Roots: Root crowns are able to produce several vines each. Older plants have very large, tuberous taproots, up to 7” in diameter, 12 feet in length, and weighing 300-400 lbs.



Native Alternatives:

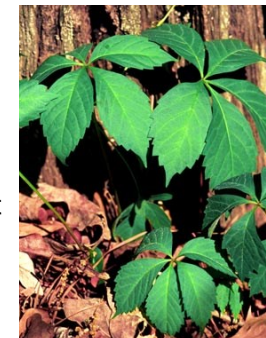
American Bittersweet (*Celastrus scandens*)

A perennial woody native vine which may climb to heights of 30 feet. Simple, ovate, dark green glossy leaves which turn green-yellow in fall. Small, greenish flowers in summer followed by bright orange seed capsules which hang in clustered droops and persist through winter. Mildly poisonous to humans and pets if eaten; attracts birds.



Virginia Creeper (*Parthenocissus quinquefolia*)

This native, woody, deciduous vine can reach up to 60 feet tall on trees. Clusters of blue-black berries provide food for many animals throughout the winter. This vine works well as an ornamental because it does not cause damage if it grows against a building. Also can be used to control soil erosion if grown as a groundcover. Leaves turn red in fall.



What is the Difference Between Kudzu and Poison Ivy?

Kudzu (*Pueraria montana*): A climbing or sprawling vine, up to 100 feet in height. Large compound leaves are often lobed, but not toothed. Stems and undersides of leaves are hairy. Has fragrant purplish flowers, hairy seed pods, and does not produce berries.

Poison Ivy (*Toxicodendron radicans*): Vines grow up to 60-70 feet high, but may also grow as a shrub or groundcover. Leaves and younger stems are hairy but less obviously so than kudzu. Leaf characteristics are highly variable, but typically slightly smaller and less round in appearance than kudzu. Compound leaves contain 3 leaflets which may be smooth, lobed, or toothed, have rounded or pointed tips, and be glossy (more often found on young leaves) or dull. Young leaves may have a reddish appearance in spring. Center leaflet is symmetrical with asymmetrical outer leaflets. Leaves often turn red in fall. Produces small greenish-white flowers in spring and early summer and waxy white berries in late summer, which persist into the winter.



Poison Ivy (*Toxicodendron radicans*)