



are hairy. Young stems are yellow-green and covered with golden or bronze bristly hairs, which makes them glow in sunlight. Older woody stems have gray-brown bark and are hairless, to 4 inches thick. Upright flower clusters as long as 8 inches may appear in mid- to late summer. They are composed of numerous irregular-shaped, reddish-purple flowers that are typical of the pea family. The very fragrant flowers smell like ripe grapes. Seedpods, if they form, are 1 to 3 inches long, flat and hairy, and contain 3 to 10 small, kidney-bean-shaped seeds.



fleshy, tuberous taproot, which can grow up to 7 inches wide and 6 to 12 feet long, reaching deep into the soil. Mature tubers can weigh in at 200 to 300 pounds. The growing points on the crowns along the ground-hugging stems can sprout as many as 30 branching vines. Each vine forms roots and crowns of its own where it contacts soil. If a vine is severed, these additional crowns can survive on their own—a crucial trait in an amazing survival tactics.

DIYVDR

It cannot be overemphasized that nothing short of total eradication prevents kudzu from taking over again once it has invaded a location. Achieving total eradication takes several years of consistent monitoring and repeated treatments. Cooperation among neighbors is essential where this beastly vine crosses property lines, because it grows rampantly and respects no borders. Which control methods you choose depends partly upon the age of the infestation. Infestations four or fewer years old might be controlled by repeated grazing or mechanical methods. Herbicide is needed for infestations of 10 or more years.

Prescribed burning Burning is effective only for very recent infestations, because fire does not kill large crowns and they will resprout. However, burning kills overhead vines and will thin the vegetation, making it easier to treat with herbicides.

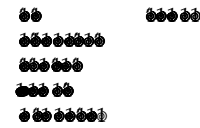
Grazing The goal is to weaken kudzu so much that it dies. Cattle, goats, sheep and pigs eat kudzu, and it is nutritious. However, grazing does not destroy the plant crowns. Grazing works only on young infestations and when at least 80% of the foliage is continually removed from late summer through fall. Grazing needs to be carried out for at least three or four years to exhaust all tuber nutrients. After several years of grazing, spot treatments with herbicide will kill remaining live growth.

Mechanical Removal: Instead of grazing, mechanical cutting with machetes or mowers is sometime feasible. Repeat weekly throughout the growing season for three to four years to exhaust the tubers. Mowing does not destroy the crowns, which will resprout.

This is much easier said than done. In older infestations, it is difficult to find all the crowns hidden in the immense tangle of vines.

To find a root crown, follow a vine to where it roots in the soil. Dig around that spot and look for a woody knob or ball near the soil surface. If it has several buds, new sprouts, and/or mature vines emerging from it, this structure is a crown. Use a saw or mattock to cut just below and above each and every crown. Remove the severed crowns from the site. Kudzu cannot regrow from roots or tubers that originate below a crown, and it does not sprout from lateral roots, but crowns left in place can re-root. Sometimes vining stems, which do form roots, may be buried under leaf litter. These stems resemble lateral roots, but are able to grow roots and crowns and that continue the infestation.

Cut Stump: If it is possible to cut the tangle of vines back to its crowns, instead of severing the crown from the tuber, you can apply concentrated herbicide to the cut stumps. Use a recommended herbicide at full strength. Be sure to reveal and treat every crown. Cut stumping is best in late summer or early fall.



Foliar Spray Foliar herbicide twice a year. Apply the first spray in late spring or early summer after leaves mature. Thoroughly wet the foliage as high as possible on climbing vines. This kills the spring growth. In late summer or early fall, spray the foliage that emerged after the first treatment. Repeat this for several years until no new growth appears. A higher concentration of herbicide commonly used to control most plants is needed for kudzu. Add surfactant if one is not in the product you use.

In forests and fields away from residential areas, use a pea-family-specific herbicide. This herbicide can injure trees in the pea family, such as redbud and black locust, and also harms plants in the daisy-family, but leaves most other plants unscathed. It is the preferred treatment where non-specific herbicides could harm nearby, high-value plants. After foliar treatment, kudzu may remain dormant for several years, then regrow into a monster seemingly overnight.

Restore long-established kudzu infestations after eradication with native grasses and wildflowers.

For currently approved herbicide recommendations, check the Virginia Department of Forestry chart *Non-Native Invasive Plant Species Control Treatments*, which you can download from the Blue Ridge PRISM website.