

Kudzu Control in Residential Areas

Kudzu control is often a frustrating problem in residential settings. It frequently grows unchecked along woodland edges near homes, in vacant lots, and along property lines. Its aggressive nature makes it seem literally uncontrollable in these situations. If left alone, kudzu will cover virtually anything. To make matters worse, kudzu is the primary host plant for the kudzu bug, a new insect pest in Alabama. This obnoxious pest has given many homeowners a new reason to aggressively control kudzu on their properties. Here are some of the most frequently asked questions concerning kudzu control around homes and in urban settings.

Q: What do you mean by the term *residential areas*?

We define *residential areas* as the landscaped area around a home and those natural or seminatural areas in the immediate proximity that may contain shade trees, shrubs, turf, vegetable gardens, or other desirable vegetation.

Q: Will repeated mowing or cutting work to control kudzu?

To control kudzu by repeated mowing or cutting, you must do two things. First, cut every vine to the ground. This is difficult for rotary mowers as many vines lie flat on the ground. Simply cutting kudzu back (pruning or trimming) to keep it out of the lawn or at your property edge will not provide long-term control. Second, repeated cutting or mowing must continue until kudzu no longer regrows. This technique may take two to three years of repeated mowing or cutting every week during the summer. Kudzu can tolerate occasional mowing or trimming, but it does not tolerate weekly defoliation to the ground. If you start a



(Photo credit: Daniel R. Suttler, University of Georgia. Bugwood.org)

Kudzu infestation in a residential area

mowing or cutting regime but do not follow through for a few weeks, the kudzu will regrow.

Q: I have tried to dig up kudzu and found a large woody root. Do I need to remove the whole root to stop new growth?

No, you do not need to remove the whole root. The large root is a storage organ loaded with energy reserves, but it has no ability to sprout. Kudzu grows from seed and from root crowns. You can see these root crowns if you follow a vine to where it roots in the soil. Dig just a little around it and you will see several buds, new sprouts, or mature vines emerging from just at, or below, the soil surface. This is the root crown. To stop new kudzu vine growth, cut just below the root crown and remove it from the soil. Kudzu cannot regrow from below the root crown, and it does not sprout from any lateral roots. Sometimes vines, which can root, may be buried under a few inches of organic matter and leaf litter. This gives them the appearance of lateral roots, but they are not. Buried vines make control more difficult because they are hidden and may produce many new shoots.

Q: What is the best tool to remove the root crowns?

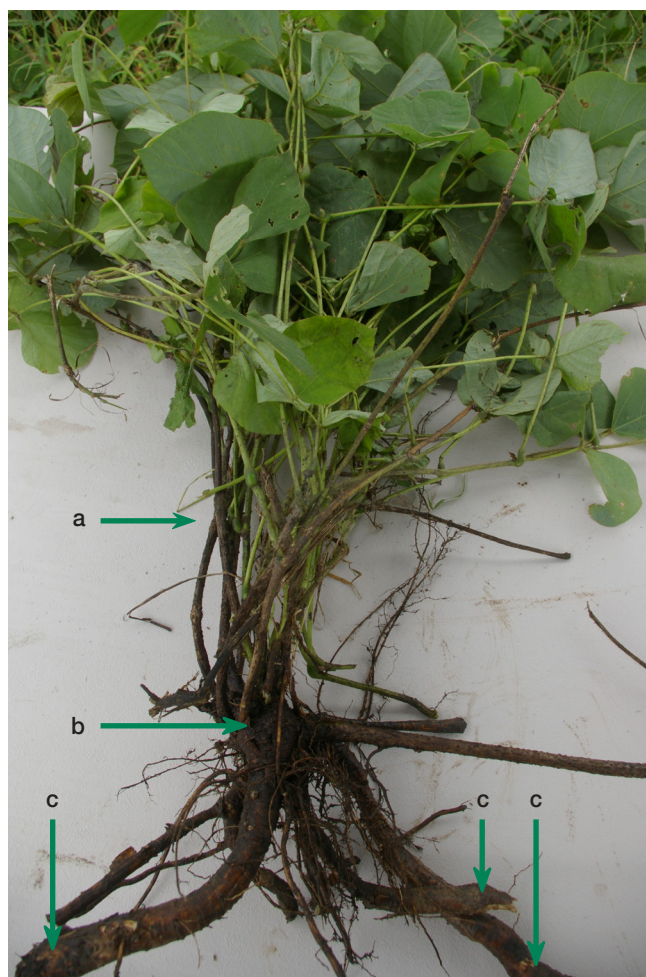
Use a shovel or pick axe to expose the base of the root crown. Then use a sharp hatchet, axe, or a small handsaw to cut the root below the root crown. A shovel or hoe is not adequate for the job as the roots are very fibrous or woody. Pruning shears may work for severing smaller root crowns, but will not work for large root crowns.

Q: What herbicides can I use to treat kudzu?

While several products are labeled for kudzu control in forestry and rights-of-way, a limited number of herbicides can be used for kudzu control in residential settings (table 1). These include products with the herbicide active ingredients glyphosate and triclopyr. These must be carefully used for foliar or cut stump treatments according to label directions to prevent damage to nearby desirable vegetation including trees, shrubs, flowers, grasses, and vegetable gardens. Care should also be used when treating kudzu along property lines. Clearly communicating with neighbors in these situations is imperative.

Q: What is the optimal timing for herbicide treatment?

For foliar treatment, the optimal timing is in the late summer or early fall. However, a single annual treatment is not sufficient. A better approach is to treat kudzu in the late spring or early summer after the leaves have fully expanded. Then apply a second treatment in the late summer or early fall to new kudzu growth that has emerged after the first



Kudzu vines (a) originate from the root crown (b). The tubers (c) are storage organs found beneath the root crowns.

treatment. This approach will be more effective than waiting until the late summer to start a control program. For cut stump treatment, late summer or fall is very effective. However, cut stump treatments are often easiest to apply when the kudzu root crowns can be readily found. This is generally in

Table 1. Common glyphosate and triclopyr products available at local retail garden supply stores. Always read and follow all directions on the herbicide label.

Product name	Active ingredient(s) (%)	Foliar treatment rate ¹	Cut stump rate
Bayer Advanced Brush Killer Plus Concentrate	triclopyr amine (8.8)	4 oz/gal/500ft ²	100%
Ortho Max Poison Ivy and Tough Brush Killer Concentrate	triclopyr amine (8.0)	4 oz/gal/800 ft ²	100%
Roundup Concentrate Poison Ivy Plus Tough Brush Killer	glyphosate (18.0) + triclopyr amine (2.0)	6 oz/gal/300 ft ²	100%
Roundup Pro	glyphosate (41)	2.67 oz/gal/1000 ft ²	50%
Roundup Pro Concentrate	glyphosate (50.2)	2.4 oz/gal/1000 ft ²	50%

¹The foliar treatment rate is given in fluid ounces per gallon of water per area to be sprayed in square feet.

the spring when new vine growth is initiated or after mowing or herbicide treatment when new sprouts begin growing. Root crowns are difficult to find after full leaf out in the spring. For more information on the cut stump treatment technique, please see Extension publication ANR-1465, "Cut Stump Herbicide Treatments for Invasive Plant Control: Recommendations for Homeowners."

Q: How many treatments will it take to completely kill kudzu?

None of these herbicides will completely kill all kudzu root crowns with one treatment. However, with repeated treatment, the younger, smaller root crowns can be killed. Older root crowns may require many years of herbicide treatment to be killed. A quicker way to eliminate the older root crowns is to identify the location of larger root crowns following initial treatment as soon as they begin to sprout. These can then be physically removed or individually treated using the cut stump method.

Q: What should I do if kudzu is climbing up into large trees?

The safest approach is to cut any kudzu vines just above the ground and immediately treat the stump with one of the recommended glyphosate herbicides using the cut stump method. It is not effective to spray only the lower leaves on a kudzu vine when it has grown up into a tree.

Q: What should I do if kudzu is smothering small tree saplings that I want to keep?

The recommended herbicides may injure or kill most tree saplings if sprayed on the leaves or on green bark. The safest approach is to manually remove vines from saplings and then direct the herbicide spray away from the saplings and onto the kudzu.

Q: Will kudzu bugs control kudzu without my help?

Kudzu bugs feed voraciously on new kudzu growth by sucking out the sap like aphids. You will not see foliar damage as they do not chew holes in the leaves. Kudzu bugs may reduce kudzu growth, but to date, we have not seen elimination of kudzu patches by the bugs. There is some evidence, however, that kudzu bugs may have enough impact to reduce the competitive ability of kudzu. This is apparent as other plants begin to grow through previously dense kudzu mats. The long-term fate of kudzu survival in the presence of kudzu bugs is still uncertain.



Spraying kudzu with a backpack sprayer is an effective application method in residential areas.

Q: Will killing the kudzu around my house eliminate my kudzu bug problem?

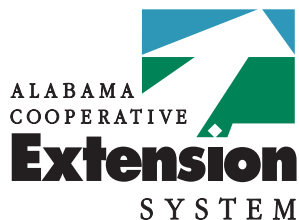
Controlling kudzu near your house will likely reduce the number of kudzu bugs and the foul chemical smell they emit when found in high numbers in kudzu patches or soybean fields. However, kudzu bugs can fly for several miles and some may still find your home. Kudzu bug populations continue to increase across the southeastern United States, and they are likely here to stay.

Q: I have an undeveloped lot where I plan to build that is currently infested with kudzu. Should I spray the kudzu before initiating construction?

Most construction projects that remove the topsoil will remove the kudzu root crowns. However, if the topsoil containing the root crowns is put back on the site, many will sprout and begin to reinfest the site. Aggressive kudzu treatment will be needed around the perimeter of the site where the soil is not disturbed. This can be initiated before or after construction.



Kudzu bugs feeding on kudzu



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