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Virginia Creeper *(Parthenocissus quinquefolia)* Control Herbicide Options

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BRIEF

Virginia creeper (*Parthenocissus quinquefolia*), also known as five-leaved ivy and Victoria creeper, is in the Vitaceae (grape) family. It is native to eastern and central North America. Virginia creeper can occupy our southeastern United States forests and can be a competitor in pine stands. If not controlled, it can kill the trees it grows on by canopying over the crowns and not allowing adequate sunlight to get to the tree's foliage for photosynthesis. Virginia creeper is a deciduous vine that can "climb" trees up to heights greater than 50 feet (Photo 1), grow in clumps similar to a shrub, or it can form continuous mats on the ground (Photo 2). The leaves are alternate, palmately compound, composed of five leaflets (occasionally but rarely three) ranging from 3 to 8 inches in diameter with serrated (toothed) edges (Photo 3). The flowers are small and greenish, produced in late spring, and mature in late summer or early fall into small hard purplish-black berries ¼ to 1/3 inch in diameter. The berries are moderately toxic to humans and other mammals. The fruit (Photo 4) containing seeds are bird dispersed. Virginia creeper has climbed up into a number of trees, a prescribed burn or cutting the vines to groundline may be needed to get the climbing vine down to groundline where foliar active herbicides can be applied more effectively. In either of these cases, the Virginia creeper will be treated during green-up (new green growth) after burning or cutting.

HERBICIDES LABELED TO CONTROL VIRGINIA CREEPER

There are other name brand and generic herbicides with the same active ingredient for many of the forest herbicides listed below that can be substituted for the products in this paper. The rate per acre or percent solution may change though due to different amounts of active ingredient.

I. Pre-plant to Establish Loblolly, Longleaf, or Slash Pine

Add one of the following to the summer (June-October) site prep tank

Arsenal® AC (BASF; 53% imazapyr; 4 lb per gal)

- A SOIL + FOLIAR active herbicide
- Apply at 16 to 24 oz/ac + 1% non-ionic surfactant, MSO, or crop oil
- Application timing is from mid-July to early October (prior to leaf color change)

Chopper[®] Gen2 (BASF; 27% imazapyr; 2 lb per gal)

- A SOIL + FOLIAR active herbicide
- Apply at 32 to 48 oz/ac
- Application timing is from mid-July to early October (prior to leaf color change)



Forestry Garlon® XRT (Corteva Agriscience; 89.3% triclopyr)

- A FOLIAR active only herbicide (Garlon 3A, Garlon 4 Ultra, Vastlan, and Trycera can be used as well, but at greater rates per acre than Forestry Garlon XRT for sufficient control)
- Apply at 1.25 2.5 qts/ac + 1% non-ionic surfactant, MSO, or crop oil (if applied alone) or $1-1\frac{1}{2} \text{ qts/ac}$ when applied with a site prep rate of Chopper OR Arsenal. DO NOT use with nearby sensitive crops or trees when temperature is greater than 86 degrees F.

There are no mature hardwood border trees restrictions with Garlon as long as one does NOT apply products to hardwood foliage or apply Forestry Garlon XRT or Garlon 4 Ultra when temperature is greater than 86 degrees F. If Imazapyr (Chopper or Arsenal or a generic equal) is used with these products, stay 1 to 2 tree heights away from mature hardwoods on site borders.

II. Post-plant over-the-top application in loblolly pine stands

Arsenal® AC (BASF; 53% imazapyr; 4 lb per gal)

- A SOIL + FOLIAR active herbicide
- Broadcast apply at 8-16 oz/ac + 1/4% non-ionic surfactant AFTER 15 August of the first growing season in areas where Virginia creeper is present
- Application timing is from mid-July to early October (prior to leaf color change)
- Consider using an ester, amine or choline triclopyr product (e.g. Forestry Garlon XRT, Garlon 4 Ultra, Garlon 3A, Vastlan, etc.) as a <u>DIRECT</u> spray treatment over Arsenal where there are sensitive, desirable plants nearby as Arsenal is soil + foliar active and if the applicator gets some product on the ground at this concentration in a small area, desirable plants may die.

III. Post-plant over-the-top application in longleaf and slash pine stands

Arsenal[®] AC (BASF; 53% imazapyr; 4 lb per gal)

- A SOIL + FOLIAR active herbicide
- Broadcast apply to the foliage of Virginia creeper where it is present at 6 12 oz/ac with NO surfactant AFTER 15 August of the second growing season through the fifth growing season
- Application timing is from mid-August to early October (prior to leaf color change)
- Consider using an ester, amine or choline triclopyr product (e.g. Forestry Garlon XRT, Garlon 4 Ultra, Garlon 3A, Vastlan, etc.) as a DIRECT spray treatment over Arsenal where there are sensitive, desirable plants near-by as Arsenal is soil + foliar active and if the applicator gets some product on the ground at this concentration in a small area, desirable plants may die.

IV. Post-plant DIRECT spray in loblolly, longleaf, and slash pine stands

Arsenal® AC (BASF; 53% imazapyr; 4 lb per gal)

- A SOIL + FOLIAR active herbicide
- Apply as 1% solution in water + 1% non-ionic surfactant, MSO, or crop oil
- DIRECT spray Arsenal, water and surfactant solution thoroughly wetting all foliage (just before the point of runoff), especially the sapling top. DO NOT spray desirable plants.
- Apply using a backpack sprayer, 12-volt operated 15- or 25-gallon tank sprayer (on an ATV or tractor) or PTO driven tractor mounted sprayer using a medium droplet size.
- Application timing is from mid-July to early October (prior to leaf color change)
- Consider using triclopyr over imazapyr where there are sensitive, desirable plants nearby as imazapyr is soil + foliar active and if the applicator gets some product on the ground at this concentration in a small area, desirable plants may die.



Forestry Garlon® XRT (Corteva Agriscience; 83.9% triclopyr)

- A foliar active only herbicide (Garlon 3AGarlon 4 Ultra, Vastlan, and Trycera can be used as well)
- Apply at 2 3% (5% for Garlon 4 Ultra,1.5 qt/ac for Vastlan, 2 qt/acre for Trycera) solution in water + 1% non-ionic surfactant, MSO, or crop oil
- Apply to Virginia creeper foliage as a <u>DIRECT</u> spray
- <u>Do NOT</u> apply on planted pines or any other desired vegetation
- June October application (with temperature less than 87 degrees F; the same for Garlon 4 Ultra). When temperature is greater than 86 degrees F, use Garlon 3A or Vastlan.

Follow label directions and wear all personal protective equipment as required by the label when applying herbicides.



Photos 1 and 2: The photo on the left is Virginia creeper growing up a tree. The photo on the right is Virginia creeper growing along the ground.



Photos 3 and 4: The photo on the left shows the leaves of Virginia creeper. The photo on the right is the fruit of Virginia creeper. Note the new green growth on the left photo. This is a good time to apply the listed above herbicide(s) for best control after initial spring growth.





Photo 5. Fall red leaves color of Virginia creeper. This stage (time of year) is too late for best foliar applied, foliar active herbicides spray control.

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