

TURFGRASS SCIENCE

at the University of Tennessee

Wild Garlic (*Allium vineale*)

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Introduction

Wild garlic (*Allium vineale*) is an odiferous, perennial weed found in various turfgrass areas throughout Tennessee. Wild garlic infestations are most prevalent during fall, winter and early spring. While regular mowing will not control wild garlic, it can reduce plant vigor and hamper bulb production. Although similar in appearance to wild onion (*Allium canadense*), wild garlic is far more prevalent in Tennessee than wild onion.

Wild Garlic Life Cycle in Tennessee

Wild garlic is a cool-season perennial that emerges from bulbs in the fall and grows throughout the winter. It will flower and produce aerial bulblets that can survive for several years after they are incorporated into the soil profile. After these bulblets are formed in the spring, the plant will senesce and remain dormant throughout the warm summer months.

Wild Garlic Identification

Wild garlic often grows in clumps of several individual plants (Figure 1). Leaves are slender, hollow, cylindrical and have a waxy appearance. Wild garlic produces underground bulbs (Figure 2) and flowers that produce bulblets rather than seed. The foliage of wild garlic produces a distinct odor when crushed. Wild garlic is similar in appearance to wild onion, but the leaves of wild onion are flat and not hollow. This is the easiest way to distinguish between the two species. Wild garlic is also similar in appearance to Star-of-Bethlehem (*Ornithogalum umbellatum*); however, the leaves of Star-of-Bethlehem have a distinct white mid-rib and do not produce an odor when crushed.

Wild Garlic Control Options

There are no effective preemergence herbicides that control wild garlic in turfgrass. Postemergence control is difficult and often requires repeat applications



Figure 1. Wild garlic (*Allium vineale*) clump



Figure 2. Wild garlic (*Allium vineale*) bulb

Table 1. Postemergence herbicides for wild garlic (*Allium vineale*) control

Postemergence Herbicides (Active Ingredient)	Trade Name	Rate (Product/Acre)	Comments
Phenoxy Herbicides			
2,4-D	2,4-D Amine 4L	3 qt	Apply to well-established turf; don't apply to newly overseeded warm-season turfgrass
dicamba	Banvel 4S; Vanquish 4S	0.5-1 pt	Apply to well-established turf; don't apply to newly overseeded warm-season turfgrass
Combination Herbicides			
2,4-D + MCPP + dicamba	Trimec Classic; Three-Way	Various products available; refer to label	Use rates differ between warm- and cool-season turf; can cause injury to warm-season turfgrass transitioning in and out of dormancy.
carfentrazone, 2,4-D, MCPP, dicamba	SpeedZone	3-5 pt	Carfentrazone addition improves efficacy in cold weather compared to other phenoxy combinations
carfentrazone, MCPA, MCPP, dicamba	PowerZone	3-6 pt	Carfentrazone addition improves efficacy in cold weather compared to other phenoxy combinations
ALS Herbicides			
chlorosulfuron	Corsair 75WDG	2.76-5.3 oz	Use restricted to professional applicators; can be used on Kentucky bluegrass; DO NOT USE ON TALL FESCUE ; don't apply to overseeded bermudagrass; apply prior to the initiation of green-up; non-ionic surfactants improve efficacy
metsulfuron	Blade; Manor	0.33-1.0 oz	Use restricted to professional applicators; safe on Kentucky bluegrass at lower rates; don't apply to overseeded bermudagrass; non-ionic surfactants improve efficacy
imazaquin	Image 70DG	8.6-11.4 oz	Don't use on cool-season turfgrasses, don't apply to over-seeded bermudagrass; non-ionic surfactants improve efficacy
trifloxysulfuron	Monument	0.33-0.56 oz	Use restricted to professional applicators; don't use on cool-season turfgrasses; don't apply to overseeded bermudagrass; non-ionic surfactants improve efficacy
sulfosulfuron	Certainty	1.25-2 oz	DO NOT USE ON TALL FESCUE ; don't apply to over-seeded bermudagrass; non-ionic surfactants improve efficacy

of postemergence herbicides. Use products containing 2,4-D alone or in combination with dicamba (Table 1). Some ALS-inhibiting herbicides (Corsair, Monument, etc.) can also be used to control wild garlic. Herbicide applications should be made in the fall after re-growth of wild garlic has occurred following the first hard frost. However, early-spring applications can also be effective.

Optimum control can be achieved by repeating either fall/winter or early spring applications annually. After any herbicide application, if sufficient re-growth of wild garlic occurs, a second application will aid in long-term control.

Mowing should be delayed for 10 to 14 days after a postemergence herbicide application to control wild garlic.

Final Thoughts

Numerous herbicide options are available for control of wild garlic in established warm- and cool-season turf. Mowing can help weaken plants, but mowing alone will not control wild garlic. Always read the product label before applying an herbicide and follow use directions carefully. For more information on turfgrass weed control, visit the University of Tennessee's turfgrass weed science Web site, <http://tennesseeturfgrassweeds.org>

Disclaimer

This publication contains herbicide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the herbicide applicator's responsibility, by law, to read and follow all current label directions for the specific herbicide being used. The label always takes precedence over the recommendations found in this publication.

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