

## 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  |
|--|---|--|---|
| <b>Synthetic Auxin Herbicides</b>            |   |  |   |
| 2,4-D  | 2,4-D Amine                             | 3 qt                                       | Kentucky bluegrass, Bermudagrass, Centipedegrass, Fine Fescue, Tall Fescue, Perennial Ryegrass, Zoysiagrass |
| dicamba                                      | Banvel 4S;<br>Vanquish 4S               | 0.5-1 pt                                   | Kentucky bluegrass, Bermudagrass, Centipedegrass, Fine Fescue, Tall Fescue, Perennial Ryegrass, Zoysiagrass |
| <b>Combination Herbicides</b>                |   |  |   |
| 2,4-D + MCPP + dicamba                       | Trimec Classic;<br>Three-Way;<br>Others | Various products available; refer to label | Kentucky bluegrass, Bermudagrass, Centipedegrass, Fine Fescue, Tall Fescue, Perennial Ryegrass, Zoysiagrass |
| 2,4-D + fluroxypyr + dicamba                 | Escalade 2                              | 2-3 pt                                     | Kentucky bluegrass, Bermudagrass, Fine Fescue, Tall Fescue, Perennial Ryegrass, Zoysiagrass                 |
| 2,4-D + triclopyr + fluroxypyr               | Momentum FX2                            | 3-4 pt                                     | Kentucky bluegrass, Bermudagrass, Fine Fescue, Tall Fescue, Perennial Ryegrass, Zoysiagrass                 |
| Carfentrazone + 2,4-D + MCPP + dicamba       | SpeedZone                               | 2-5 pt                                     | Kentucky bluegrass, Bermudagrass, Fine Fescue, Tall Fescue, Perennial Ryegrass, Zoysiagrass                 |
| Carfentrazone + MCPA + MCPP + dicamba        | PowerZone                               | 2-6 pt                                     | Kentucky bluegrass, Bermudagrass, Fine Fescue, Tall Fescue, Perennial Ryegrass, Zoysiagrass                 |
| Sulfentrazone + 2,4-D + MCPP + dicamba       | Surge                                   | 2.75-4 pt                                  | Kentucky bluegrass, Bermudagrass, Fine Fescue, Tall Fescue, Perennial Ryegrass, Zoysiagrass                 |
| Sulfentrazone + triclopyr + 2,4-D + dicamba  | TZone                                   | 2-4 pt                                     | Kentucky bluegrass, Bermudagrass, Fine Fescue, Tall Fescue, Perennial Ryegrass, Zoysiagrass                 |
| quinclorac + sulfentrazone + 2,4-D + Dicamba | Q4 Plus                                 | 5-8 pt                                     | Kentucky bluegrass, Bermudagrass, Fine Fescue, Tall Fescue, Perennial Ryegrass, Zoysiagrass                 |
| Thiencarbazon + Iodosulfuron + dicamba       | Celsius                                 | 2.5-4.9 oz                                 | Bermudagrass, Centipedegrass, Zoysiagrass   |
| Sulfentrazone + metsulfuron                  | Blindside                               | 3.25-10 oz                                 | Kentucky bluegrass, Bermudagrass, Centipedegrass, Tall Fescue, Zoysiagrass                                  |
| <b>ALS Herbicides</b>                        |   |  |   |
| Imazaquin                                    | Image 70DG                              | 8.6-11.4 oz                                | Bermudagrass, Centipedegrass, Zoysiagrass   |
| Metsulfuron                                  | Blade; Manor                            | 0.33-1 oz                                  | Kentucky bluegrass, Bermudagrass, Centipedegrass, Fine Fescue, Zoysiagrass                                  |
| Trifloxysulfuron                             | Monument                                | 0.33-0.53 oz                               | Bermudagrass, Zoysiagrass   |

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 website, [tennesseeturfgrassweeds.org](http://tennesseeturfgrassweeds.org).

Herbicides listed in this publication have provided good to excellent control in research trials conducted at the University of Tennessee; however, other herbicides may also have activity on these weeds. For more information on herbicide selection, please visit University of Tennessee Mobile Weed Manual (MWM) at [mobileweedmanual.com](http://mobileweedmanual.com). MWM was developed by UT Extension professionals to assist green industry professionals in selecting herbicides for use in turf and ornamentals. MWM is a web-based platform optimized for use on mobile devices such as smartphones and tablets, but it will function on desktop and laptop computers as well. The site provides users with weed control efficacy information for 90 different herbicides, tolerance information for over 2,300 turf and ornamental species, as well as direct links to label and material safety data sheet information on herbicides used for turf and ornamental weed management.



### 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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