

NIMBLEWILL CONTROL IN TURFGRASS

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INTRODUCTION

Nimblewill (*Muhlenbergia schreberi*) is a warm-season perennial grassy weed found in turfgrass systems. Nimblewill prefers shady sites with moist soils but can also be found in areas of full sun. Nimblewill has slender leaves and spreads via both seed and stolons that root at the nodes. In Tennessee, nimblewill is often confused with bermudagrass (*Cynodon dactylon*) (Picture 1). However, nimblewill has a membranous ligule while bermudagrass has a hairy ligule. Additionally, deep roots of common bermudagrass provide strong adherence to the soil whereas nimblewill is shallow rooted and can be easily pulled from the ground. Nimblewill stolons (and nodes) are also much thinner than those of bermudagrass. Spread of nimblewill via seed and stolons results in patches being formed in existing turfgrass stands.

CHARACTERISTICS

In the transition zone, nimblewill emerges from dormancy in spring and grows throughout the summer. Nimblewill leaves are short, pointed, have a blue-green color, and align with the stem on angle of about 45 degrees (Picture 2). Nimblewill seed heads form in the summer and take the shape of a spike. Seed have long hair-like awns that further distinguish them from seed of bermudagrass. Patches of nimblewill will go dormant after the first hard frost in autumn, making them very noticeable in cool-season turfgrass lawns (Picture 3).



Picture 2. Nimblewill leaves.



Picture 1. Nimblewill, left. Bermudagrass, right.



Picture 3. Dormant nimblewill.

NIMBLEWILL CONTROL OPTIONS

Cultural Practices

The best defense against any weed infestation is to maintain a dense, vigorous stand of turfgrass. Growing conditions that favor turf often discourage the growth of weeds like nimblewill. Decreasing shade and soil moisture will create an environment better suited for turfgrass growth and less conducive for nimblewill.

Additionally, perform soil testing regularly and apply nutrients according to soil test recommendations. Take care when attempting to physically remove nimblewill from turfgrass stands; any plant part left behind will produce new growth, ensuring that the infestation will persist.

Although cultural practices can be used to help discourage nimblewill infestations, they will not provide complete control. Herbicide applications will be required for complete eradication.

Herbicide Options

There are no preemergence herbicides labeled for control of nimblewill and limited options are available for postemergence treatment. It is likely sequential applications of postemergence herbicides will be required to control nimblewill, as it is a perennial species that grows from stolons.

Non-selective herbicides: Non-selective herbicides such as glyphosate (e.g., Roundup) have good activity on nimblewill. These products must be applied to actively growing nimblewill to be effective. Use caution when applying non-selective herbicides because these products will also kill desirable turf. It is recommended that non-selective herbicides are applied via spot treatment. Including a tracker dye or spray indicator in the spray solution can help identify leaves that have been contacted by spray droplets (Picture 4). It is also important to eliminate foot or vehicular traffic in areas treated with non-selective herbicide until the application has dried. Cultural practices such as re-seeding or plugging will be required in patches of nimblewill treated with non-selective herbicide to promote the regrowth of the desirable turf species.

Selective herbicides: Herbicides such as mesotrione (e.g., Tenacity) and topramezone (e.g., Pylex) can be used to selectively control nimblewill in cool-season turfgrasses such as tall fescue (*Festuca arundinacea*). These herbicides inhibit carotenoid production in sensitive plants and will turn nimblewill foliage white within 7 to 21 days after application. Inclusion of a spray adjuvant such as non-ionic surfactant or methylated seed oil is recommended with these herbicides to improve activity.

Table 1

Trade Name (Active Ingredient)	Formulation	Rate (/A)	Select Tolerant Turfgrass
Non-selective Herbicides			
Roundup (glyphosate)	4L	0.5 to 4 pt.	NA
Selective Herbicides			
Tenacity (mesotrione)	4FL	5 to 8 fl oz.	Kentucky Bluegrass Perennial Ryegrass Fine Fescue Tall Fescue Centipedegrass
Pylex (topramezone)	2.8SC	1 to 1.5 fl oz.	Kentucky Bluegrass Perennial Ryegrass Fine Fescue Tall Fescue Centipedegrass



Picture 4. Tracker dye or spray indicator can be used in spray solution.

FINAL THOUGHTS

Nimblewill control in established turf can be difficult. Improving cultural practices and sequential applications of postemergence herbicides will often be required to provide effective control.

Always refer to the product label for specific information on proper product use, tank-mix compatibility and turfgrass tolerance. 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 the University of Tennessee Mobile Weed Manual (MWM) at 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. For more information on turfgrass weed control, visit the UT Institute of Agriculture's turfgrass weed science website, tnturfgrassweeds.org.

Disclaimer

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

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