

Dallisgrass (*Paspalum dilatatum*)

Gregory K. Breeden, Extension Specialist, Turfgrass Weed Science
James T. Brosnan, Associate Professor, Turfgrass Weed Science
Department of Plant Sciences

Introduction

Dallisgrass (*Paspalum dilatatum*) is arguably one of the most difficult-to-control turfgrass weeds in Tennessee. Multiple herbicide applications, over a two-year period, are required to provide adequate control. As a general rule, the longer dallisgrass has been established, the more difficult it will be to control.

Dallisgrass Identification

Dallisgrass is a coarse-textured, clumping, perennial grass that spreads from short, thick rhizomes and seed. Dallisgrass has a distinct grayish-green color (Figure 1), a membranous ligule, and a few sparse hairs on the leaf collar. Hairs may be present at the base of the leaf blade as well. Leaves are smooth, rolled in vernation, and have a prominent mid-rib (Figure 2). This mid-rib helps distinguish dallisgrass from other coarse-textured grassy weeds like crabgrass (*Digitaria* spp.) and foxtail (*Setaria* spp.). Dallisgrass seedheads are easily identifiable



Figure 1. Dallisgrass is a clumping, perennial grassy weed

(Figure 3). Hairy spikelets are arranged in four rows on 3-7 alternating branches (Figure 4). Dallisgrass will begin to produce seed as early as mid-June in Tennessee. Once used exclusively as a forage, dallisgrass is now a weed problem on lawns, golf courses and other turf areas statewide.



Figure 2. Dallisgrass leaf vernation



Figure 3. Hairs protruding from dallisgrass spikelet



Figure 4. Dallisgrass seedhead

Table 1. Herbicide programs to control dallisgrass in bermudagrass

Options for Control in Bermudagrass	Trade Name (active ingredient)	Formulations	Broadcast Application Rate (/A)	Comments
MSMA Programs				
	MSMA (MSMA)	6L	2.7 to 5.4 pt	Broadcast applications limited to sod farms only. Golf courses can use this product on a spot treatment basis only. See label as well as UT Extension Publication W 243.
Sulfonylurea Programs				
	Revolver (foramsulfuron)	0.19SC	17.4 to 26.2 fl oz	Apply as a spot application (1.5 to 2 fl oz of product per gallon of water) on 7- to 14-day intervals. Results are improved when preceded by an application of MSMA for dallisgrass control.
	Certainty (sulfosulfuron)	75WG	1.25 oz	Apply treatments in a rotation/mixture with MSMA for better control. Apply as a spot treatment for better results.
	Monument (trifloxysulfuron)	75WG	0.53 oz	Apply treatments in a rotation with MSMA for better control. Apply as a spot treatment for best results. Spot treatments prepared by dissolving one 0.5 gram packet per 2 gallons of water and non-ionic surfactant. Apply this mixture to 1,000 sq.ft.
	Tribute Total (thiencarbazone + foramsulfuron + halosulfuron)	60.5WDG	3.2 oz	Best results against dallisgrass are achieved with spot treatments applied at 0.073 oz/gallon in late summer. Multiple applications (on 4- to 6-week intervals) will be required for control. Inclusion of methylated seed oil (0.5% v/v) surfactant is recommended.
ACCcase Programs				
	Manuscript (pinoxaden)	0.42SC	9.6 fl oz	Apply as a spot treatment by mixing 9.6 fl oz of Manuscript in a minimum of 20 gallons of water and treating areas less than or equal to 10,000 sq. ft. Do not make this application more than twice a year. Spray weeds until wet, but avoid run-off of spray solution onto surrounding turf. Inclusion of Agidor adjuvant at 0.5 to 1% v/v is recommended.
Glyphosate Programs				
	Roundup Pro (glyphosate)	Various	See label	Apply after bermudagrass is totally dormant and dallisgrass leaves are still green in color. Timing is critical for this application. Follow up in the spring with other dallisgrass control options.

Table 2. Herbicide programs to control dallisgrass in tall fescue

Options for Control in Bermudagrass	Trade Name (active ingredient)	Formulations	Broadcast Application Rate (/A)	Comments
ACCCase Programs				
	Fusilade II (fluazifop)	2L	5 to 6 fl oz	Apply on 3- to 4-week intervals for dallisgrass management in autumn. Do not apply to tall fescue under stress. Use of surfactant is recommended (see label). Note that fluazifop is sold for use on home lawns under the trade name Ornamec Over the Top Grass Herbicide. Use rates for that product will differ from those presented here.
Glyphosate Spot Treatment Programs				
	Roundup Pro (glyphosate)	Various	See label	Glyphosate applications will control all desirable turf contacted, so caution should be used. Bare areas created by this application will need to re-seeded to prevent future infestations.

Dallisgrass Control Options in Bermudagrass

The optimal time to control dallisgrass in bermudagrass (*Cynodon* spp.) is during autumn as plants prepare for winter dormancy. Repeat applications of MSMA or MSMA + Sencor have long been the standards for dallisgrass control in bermudagrass and other warm-season turfgrasses. However, the potential loss of MSMA as a commercial herbicide would make dallisgrass control increasingly difficult.

MSMA Programs

Broadcast applications can be applied for dallisgrass control on sod farms at 2.7 to 5.4 pt/A. Inclusion of Sencor (ai- metribuzin) can enhance activity of these applications but may cause temporary bermudagrass injury. Broadcast applications of MSMA on sod farms are limited to two per calendar year. On golf courses, MSMA can only be applied on a spot treatment basis, with spots defined as less than 100 square feet. No more than 25 percent of the course can be treated in a year. Use of MSMA on athletic fields and lawns is prohibited. Please see UT Extension publication W 243 Use of MSMA for Weed Management in Turf for more information.

Sulfonylurea Programs

Many of the newer sulfonylurea herbicides have activity against dallisgrass; however, results vary and might not be at a level deemed commercially acceptable. Multiple

applications of Revolver, Certainty, Monument and Tribute Total all have activity against dallisgrass when applied in autumn. Better results have been achieved when sulfonylurea herbicides have been applied as spot treatments rather than broadcast sprays. Inclusion of a spray adjuvant is typically recommended with these herbicides and sequential applications should be made on three- to four-week intervals. Research has also reported that applications of these herbicides are more effective when applied to dallisgrass plants that have previously received an application of MSMA.

ACCCase Programs

Applications of the acetyl co-A carboxylase (ACCCase) inhibiting herbicide Manuscript (ai - pinoxaden) have activity against dallisgrass when applied as a spot treatment in autumn. Inclusion of the spray adjuvant Agidor will improve overall control; however, sequential applications on three- to four-week intervals will be required for eradication.

Glyphosate Programs

Bermudagrass will go dormant before dallisgrass each winter. Make spot applications of glyphosate (see label) after bermudagrass is totally dormant and dallisgrass leaves still exhibit some degree of green color. Timing is critical, as there is usually only about a two-week window available to safely make this treatment. Use caution when making a glyphosate application to dormant bermudagrass, due to the potential for injury.

Dallisgrass Control Options in Tall Fescue

Limited options are available for controlling dallisgrass in tall fescue. Be aware that if successful, there will be numerous voids (bare areas) in the turf canopy after dallisgrass has been removed. These voids will be susceptible to future weed infestations. Bare areas should be re-seeded with a high-quality cultivar of tall fescue. For more information on selecting a high-quality tall fescue cultivar, please refer to the University of Tennessee Extension publication W 159-E Turfgrass Selection – Fescues.

ACCCase Programs

Make two applications of the ACCCase inhibiting herbicide fluazifop (e.g., Fusilade II, Ornamec, etc.) Be advised that not all fluazifop products are labeled for use in home lawns. Be sure to consult product labels before selecting an herbicide for use in tall fescue home lawns. Sequential applications should be made on three- to four-week intervals. Do not apply if tall fescue is under stress due to the increased potential for injury.

Glyphosate Spot Treatment Programs

Spot treatments of glyphosate can be used to control dallisgrass in tall fescue. Precise applications are required, as glyphosate, a non-selective herbicide, will kill any desirable turf that it contacts in addition to dallisgrass. Bare areas will need to be reseeded to prevent future weed infestations and improve the overall aesthetic quality of the turfgrass stand. Refer to the University of Tennessee Extension publication W 159-E Turfgrass Selection – Fescues, for more information on selecting a high-quality tall fescue cultivar.

Final Thoughts

Controlling dallisgrass in warm- and cool-season turf is difficult. In some cases, dallisgrass pressure may be so high that the best control option is renovation. For more information on turfgrass renovation, please refer to the University of Tennessee turfgrass extension website, tennesseeturf.utk.edu

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, 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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