

Dollar Spot Disease in Turfgrass

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Causes, symptoms and management of dollar spot disease in turfgrass. The U.S. spends more on its control than any other turf disease. This is one in a series of NebGuides on managing turfgrass diseases.

Introduction

Dollar spot can be managed through an integrated approach that combines the use of disease-resistant seed, favorable maintenance and cultural practices, and fungicides. Each year more money is spent managing dollar spot than any other turf disease in the U.S. While cultural practices represent the first line of defense, often fungicides also will be necessary. The following information describes the disease and how to identify and manage it.

Cause, Hosts, and Occurrence

Cause: *Sclerotinia homoeocarpa*

Primary hosts: All cool-season turfgrasses can be affected, but the disease is most common on bentgrass and bluegrass.

Occurrence: June – September

Key Symptoms and Signs

Tall-cut turf: Four- to six-inch, straw-colored patches of blighted turf. A bleached lesion in the shape of an hour glass is present on the leaf blade. The lesion has a characteristic reddish-brown margin. In the early, dewy mornings a cobweb-like mycelium is visible in the affected area (*Figure 1*).

Greens and fairway height: Small, round, bleached spots approximately the size of a silver dollar (1-2 inches in diameter).

Recommended Cultural/Maintenance Practices

- Provide sufficient nitrogen to maintain moderate growth throughout the season. Higher rates of nitrogen fertilizer will reduce dollar spot severity.
- Irrigate to maintain plant vigor and avoid drought stress.



Figure 1. Symptoms of dollar spot on Kentucky bluegrass. Note lesion that extends across grass blade.

- Irrigate in the early morning hours.
- Remove dew from the turf.
- Limit traffic on wet turf in the early morning.

Fungicide Program

Cultural management is the first choice in managing dollar spot in turf, however, in many instances fungicides also will be needed.

- Resistance to benzimidazole and DMI fungicides has been found with this disease. Incorporating a good resistance management program will help prevent resistance from developing. A resistance management program includes:
 - Using cultural practices to reduce disease potential
 - Limiting the number of applications
 - Tank-mixing or rotating applications with other modes of action
 - *Not* using reduced product rates
 - Ensuring proper application for maximum effectiveness of the products

- Golf Courses: On bentgrass greens use thiophanate-methyl, myclobutanil, propiconazole, or triadimefon as preventive treatments early in the spray program. Avoid repeated applications of these products through the growing season. On active dollar spot use chlorothalonil, fenarimol, iprodione, or vinclozolin.
- Home Lawn and Other Turfs: Treat as needed at the first sign of dollar spot.

Fungicide Selection

Products are tested and evaluated for efficacy each year. Please see *Table 1* for a rating of products commonly used to manage dollar spot. An example product is listed for each active ingredient; other products also may be available. Homeowner and commercial product labels will list active ingredients. While the active ingredient may be in combination with others, users should look for a specific active ingredient with or without other chemistry modes of action.

Table I. Fungicides for dollar spot control in turf¹

Fungicide	Fungicide Class	Application Interval (days)	Efficacy ²	Products
<i>Bacillus licheniformis</i>	Biological	3-14	2	EcoGuard
Boscalid	Carboxamide	14-28	4	Emerald
Chlorothalonil	Chloronitrile	7-14	3	Daconil Ultrex ³
Fenarimol	DMI	10-30	3	Rubigan
Iprodione	Dicarboxamide	14-28	3+	Chipco 26019
Mancozeb	Dithiocarbamate	7-14	1	Fore ³
Myclobutanil	DMI ⁴	14-28	4	Eagle
Propiconazole	DMI	7-28	4	Banner MAXX ³
Pyraclostrobin	Strobilurin	14	2	Insignia
Thiophanate-methyl	MBC ⁴	10-21	4	Cleary's 3336 ³
Thiram	Dithiocarbamate	7-10	1	Spotrete ³
Triadimefon	DMI	14-30	4	Bayleton ³
<i>Trichoderma harzianum</i>	Biological	7-14	1	Bio-trek
Triticonazole	DMI	14-28	4	Trinity
Vinclozolin	Dicarboxamide	14-28	4	Curalan ³

¹Fungicide active ingredients, class and efficacy ratings for products labeled for the control of dollar spot. Table adapted from *Chemical Control of Turfgrass Diseases 2008*, P. Vincelli and A.J. Powell, University of Kentucky Cooperative Extension Service.

²Rating system: 4 = excellent control; 3 = good to excellent control; 2 = fair to good control; 1 = control is inconsistent but good in some instances; + = intermediate between two efficacy categories.

³Other products with the same active ingredient may be available.

⁴DMI fungicides are demethylation inhibitors and are otherwise known as triazole fungicides
MBC = methyl benzimidazole carbamate

This publication has been peer reviewed.

Disclaimer

Fungicides listed represent the best information available. No criticism is intended of products not listed, nor is endorsement by the University of Nebraska–Lincoln given to those listed. Read and follow all product label directions for mixing and application.

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