



# Green Solutions

## update

### Fairy Ring Management

#### // Overview

Fairy ring is one of the more difficult turf diseases to control. It is caused by any one of 60 or more soil-borne basidiomycete fungi. Fairy ring fungi do not directly attack plants, but instead cause problems by stimulating turf and/or causing hydrophobic soils that lead to localized dry spot (Figures 1 & 2). Fairy ring fungi use lignin in thatch and organic matter as a food source. All turfgrass species regardless of mowing height and location can be affected by fairy ring. Greens are particularly vulnerable to fairy ring given their low mowing height and sand-based root zone.

#### // Best Management Practices

##### Cultural Practices

- // Core aerify, vertical mow and sand top-dress frequently to reduce thatch and organic matter
- // Added fertility and water may minimize symptoms

##### Spray Volume and Watering-In

- // Apply products using at least 2 gallons of water volume per 1,000 square feet with flat fan nozzles
- // Whenever possible, determine where fairy ring mycelium is active in the root zone profile
- // Water-in applications with 1/8 to 1/4 inch of irrigation if fairy ring is in the thatch or upper mat
- // Water-in applications with >1/4 inch of irrigation if fairy ring is in the lower mat or root zone
- // Additional water is needed if the fairy ring is deeper in the soil

##### Use of Wetting Agents

- // A wetting agent program should be used throughout the growing season as a standard practice
- // When hydrophobic soil conditions are caused by fairy ring mycelium; wetting agents should be used in a seasonal program to reduce disease symptoms
- // Tank-mixing of wetting agents with Bayleton® FLO, Tartan® Stressgard® or Mirage® Stressgard® is not recommended; apply wetting agents separately from these fungicides
- // Wetting agents can be tank-mixed with Prostar® 70WG

##### Preventive Application Timing When Using PGRs

- // Apply plant growth regulators (PGRs) separately and at least one week before or after DMI applications

##### Reapplication of Fungicides

- // Under extreme weather conditions, such as extended heavy rains, an additional application of fungicide may be needed, but adhere to label limitations on annual use
- // Please contact your local Bayer Area Sales Manager for recommendations for modifying the program under extreme conditions



Left untreated, fairy ring can spread and kill large areas on putting greens. (Bayer)



Same green from the picture above taken one year later after preventative applications of fungicide were made in the spring. (Bayer)

## // 2020 Fungicide Programs for Greens, Tees and Fairways

Timing for fairy ring prevention is based on university research and begins in the spring based on the average soil temperature for five consecutive days at a 2-inch depth taken at 11 am. For specific targeted soil temperature ranges based on your location, please see the recommendations below.

### Cool-Season Turf in Northern U.S. (except New York)

Application	Product <sup>1</sup> and Use Rate per 1,000 sq. ft.
1st app. (55-60°F soil temp)	Bayleton FLO <sup>2</sup> 1.5 fl. oz. <b>or</b> Tartan Stressgard <sup>3</sup> 2 fl. oz.
2nd app. (28 days later)	Bayleton FLO <sup>2</sup> 1.5 fl. oz. <b>or</b> Tartan Stressgard <sup>3</sup> 2 fl. oz. <b>or</b> Mirage Stressgard <sup>4</sup> 2 fl. oz.
3rd app. (<56 days later)	Prostar 70WG <sup>5</sup> 2.2 oz.

### Cool-Season Turf – New York Only

Application	Product <sup>1</sup> and Use Rate per 1,000 sq. ft.
1st app. (55-60°F soil temp)	Bayleton FLO <sup>2</sup> 1.5 fl. oz. <b>or</b> Tartan Stressgard <sup>3</sup> 2 fl. oz.
2nd app. (28 days later)	Bayleton FLO <sup>2</sup> 1.5 fl. oz. <b>or</b> Tartan Stressgard <sup>3</sup> 2 fl. oz.
3rd app. (28 days later)	Mirage Stressgard <sup>4</sup> 1 fl. oz.
4th app. (28 days later)	Mirage Stressgard <sup>4</sup> 1 fl. oz.

### Warm-Season Turf & Cool-Season Greens in Southern U.S. (except Florida and Texas)

Application	Product <sup>1</sup> and Use Rate per 1,000 sq. ft.
1st app. (55-60°F soil temp)	Tartan Stressgard <sup>3</sup> 2 fl. oz.
2nd app. (28 days later)	Tartan Stressgard <sup>3</sup> 2 fl. oz.
3rd app. (28 days later)	Prostar 70WG <sup>5</sup> 2.2 oz.
4th app. (28 days later)	Mirage Stressgard <sup>4</sup> 1 fl. oz.

### Warm-Season Turf – Florida & Texas Only

Application	Product <sup>1</sup> and Use Rate per 1,000 sq. ft.
1st app. (65-70°F soil temp)	Tartan Stressgard <sup>3</sup> 2 fl. oz.
2nd app. (28 days later)	Tartan Stressgard <sup>3</sup> 2 fl. oz.
3rd app. (28 days later)	Prostar 70WG <sup>5</sup> 2.2 oz.
4th app. (28 days later)	Mirage Stressgard <sup>4</sup> 1 fl. oz.
5th app. (28 days later)	Prostar 70WG <sup>5</sup> 2.2 oz.

<sup>1</sup>See product labels for additional information and follow application instructions

<sup>2</sup>Do not exceed 3.8 fl. oz. Bayleton FLO/1,000 sq. ft./year

<sup>3</sup>Do not exceed 8 fl. oz. Tartan Stressgard/1,000 sq. ft./year

<sup>4</sup>Do not exceed 6.5 fl. oz. Mirage Stressgard/1,000 sq. ft./year; In New York only, do not exceed three applications at 1 fl. oz. Mirage Stressgard/1,000 sq. ft.

<sup>5</sup>Do not exceed 9 oz. Prostar 70WG/1,000 sq. ft./year; In New York, not labeled for use in Nassau or Suffolk counties

## // Satisfaction Guarantee

The Bayer Fairy Ring Program protects turf with preventative applications prior to summer. You will have confidence in your fairy ring control from spring through the end of August 2020. If your Bayer Fairy Ring Program performance expectations are not met, just contact your Bayer Distributor or Bayer Area Sales Manager. Any disease breakthrough by fairy ring that meets the program guidelines will be resolved.

