



Fairy Ring BMPs

Overview

Fairy ring is a difficult turf disease to control since it is caused by any one of 60 or more soil-borne basidiomycete fungi. Unlike other turf disease fungi that directly attack plants, fairy ring fungi cause problems by stimulating turf and/or causing hydrophobic soils that lead to localized dry spots. 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 topdress frequently to reduce thatch and organic matter.
- Added fertility and water may minimize symptoms.

Spray Volume and Post Application Irrigation

- Apply products using at least 2 gallons of water volume per 1,000 square feet with flat fan nozzles.
- When possible, identify where fairy ring mycelium is active within the root zone profile.
- Apply 0.125 - 0.25 inch irrigation following fungicide application if disease present in thatch or upper mat.
- Water-in fungicide application with >0.25 inch irrigation if fairy ring is in the lower mat or root zone.
- Additional irrigation is needed if fairy ring is deeper in the soil.

Use of Wetting Agents

- A wetting agent program should be used throughout the growing season to prevent localized dry spots.
- If hydrophobic soil conditions are caused by fairy ring mycelium, wetting agents should be used in a seasonal program to minimize disease symptoms.

PGR Use

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

Fungicide Timing

- Fairy ring preventive fungicide applications should begin in the spring when the average soil temperature is 55-60°F for five consecutive days at a 2-inch depth taken at 11 am.
- Additional applications should be made every 21-28 days as required.

Fairy Ring Solutions

- Some active ingredients proven to deliver effective fairy ring control include Protégé™ (difenconazole + azoxystrobin), Artavia™ Xcel (propiconazole + azoxystrobin), and Artavia™ 2 SC (azoxystrobin).
- Combination products will provide broad-spectrum disease control beyond fairy ring.