Preventive Fairy Ring Assurance

Protect your golf course putting greens from fairy ring with the Syngenta fairy ring assurance. Fairy ring is unique because its symptoms are not directly caused by fungal pathogens. Rather, fairy ring pathogens cause symptoms indirectly by changing the chemical and physical properties of the soil. The causes and symptoms can vary, which is why curative fungicide applications can be unreliable. For the best fairy ring control, a preventive strategy should be used.

VARYING CAUSES AND SYMPTOMS

Three types of fairy ring symptoms can change the appearance and/or health of turfgrass.

TYPE I SYMPTOMS
Damaged or dead turf from drought stress.

CAUSES:
- Hydrophobic (water-repellent) thatch and soil.
- Accumulation of ammonium to toxic levels.
- Release of hydrogen cyanide or other toxins into the root zone.

TYPE II SYMPTOMS
Rings of dark green or quickly growing turf. These symptoms usually occur early in the season, and indicate that more severe Type I symptoms may follow. They are most evident in under-fertilized turf.

CAUSE:
- The release of nitrogen and other nutrients into the soil.

TYPE III SYMPTOMS
Mushrooms or other fruiting bodies produced in a ring. They are most common during periods of wet weather preceded by drought.

CAUSE:
- Mycelial mass buildup around the outer ring.

Although Type II and III symptoms are not devastating to turf, they do detract from uniformity and can affect playability.
KEYS TO EFFECTIVE FAIRY RING CONTROL

Fairy ring control is very manageable with regular, preventive fungicide applications. Curative control takes much more time and persistence.

- **Maintain regular, preventive applications throughout the season.**
  - Initiate applications early in the season when soil temperatures reach 60°F.
  - Deliver the active ingredient to the infested zone of the soil profile.

- **Apply soil surfactants regularly to maintain soil conditions and turf health.**
  - Preventive fungicide applications do not require tank-mixing with a soil surfactant, but curative applications generally do.

- **Determine how deep the fairy ring infestation is for watering-in product applications.**
  - 0.15” of irrigation is needed if limited to the thatch layer.
  - 0.25” of irrigation if 2-3” deep in soil.

- **Repeat applications on regular intervals to maintain consistent suppression in the soil.**
  - Fungicides are a long-term, preventive approach.

- **Rotate fungicide classes.**
  - Briskway®, Velista® and Posterity® brand fungicides will provide season-long control that protects your course from fairy ring.

INTRODUCING THE FAIRY RING PERFORMANCE ASSURANCE:

- Prevent the fairy ring fungus from growing with a season-long assurance program in the following states: **AL, AR, CO, FL, GA, HI, IA, IL, IN, KS, KY, MI, MO, MS, NC, ND, NE, OH, OK, SC, SD, TN, TX, VA, WI**.

- Maintain thatch and soil properties favorable for turf health.

- Select timing and product rotation below based on geography and grass type.

- Follow the prescribed solution based on your regional program, follow application timing and product use rates recommended for effective fairy ring control on putting greens.

- Follow Syngenta soil temperature alerts on [GreenCastOnline.com/SoilTemperature](http://GreenCastOnline.com/SoilTemperature), initiate applications at the specified soil temperature and make sequential applications on a 28-day interval.

- Fairy ring applications must be made in conjunction with a soil surfactant program on a 14- to 28-day interval as recommended by the product manufacturer. For preventive applications, soil surfactants can be made separately or tank mixed with Briskway or Velista fungicides.

- All applications must be watered-in immediately with at least 0.15” of irrigation.

- If breakthrough occurs, it is at the Syngenta territory manager’s discretion as to what product to provide for rescue treatment and when or if a spot treatment or broadcast treatment is required. Breakthrough is defined as the appearance of fairy ring symptoms to levels that negatively impact the uniformity and playability of putting surfaces.

- The Assurance is limited to providing two recovery applications, up to the acres originally treated.

- Claims must be reported to a Syngenta territory manager.

- This program also assures mini ring control on bermudagrass/seashore paspalum and summer patch/take-all patch control on creeping bentgrass.
### Bermudagrass and Seashore Paspalum Putting Greens
- Fairy ring and Mini ring Program (FL and HI)
  - Initiate applications in spring when soil temperatures are consistently above 70°F and turf is actively growing (typically March).

### Creeping Bentgrass Putting Greens
- Fairy ring and Mini ring Program (AL, AR, GA, MS, NC, OK, SC, TN, VA, Northern TX)
  - Initiate applications in spring when soil temperatures are consistently above 60°F and turf is actively growing (typically March-April).

### Fairy ring, Summer patch, Take-all patch Program (AL, AR, CO, GA, IA, IL, IN, KS, KY, MI, MO, MS, NC, ND, NE, OH, SC, SD, TN, TX, VA, WI)
- Initiate applications in spring when soil temperatures are consistently above 60°F and turf is actively growing (typically March-April).

<table>
<thead>
<tr>
<th>Application #</th>
<th>Bermudagrass and Seashore Paspalum Putting Greens</th>
<th>Creeping Bentgrass Putting Greens</th>
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<tbody>
<tr>
<td>1</td>
<td>Briskway (0.7 fl. oz.) Briskway (0.7 fl. oz.)</td>
<td>Posterity XT (3 fl. oz.)</td>
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<tr>
<td>2</td>
<td>Velista (0.7 oz.) Velista (0.7 oz.)</td>
<td>Posterity XT (3 fl. oz.)</td>
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<tr>
<td>3</td>
<td>Briskway (0.7 fl. oz.) Velista (0.7 oz.)</td>
<td>Briskway (0.7 fl. oz.)</td>
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<tr>
<td>4</td>
<td>Velista (0.7 oz.) Briskway (0.7 fl. oz.)</td>
<td>Velista (0.7 oz.)</td>
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<tr>
<td>5</td>
<td>Briskway (0.7 fl. oz.) Briskway (0.7 fl. oz.)</td>
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<tr>
<td>6</td>
<td>Velista (0.7 oz.) --</td>
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<tr>
<td>7</td>
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All rates are per 1,000 ft.²

### TERMS AND CONDITIONS
- Prices and terms for the products purchased from Syngenta through a Syngenta Authorized Agent are determined by Syngenta.
- Syngenta will pay for replacement product, but will not pay for any application costs for the rescue treatments.
- Syngenta’s determination as to whether less than acceptable control exists will be final.
- Syngenta reserves the right to modify or discontinue this Assurance Program at any time.
- Contact your Syngenta Authorized Agent for additional information: GreenCastOnline.com/ContactMyTM
- Call the Syngenta Customer Center at 1-866-SYNGENTA (796-4368) to learn more.
To learn more about fairy ring, visit GreenCastOnline.com/FairyRing