



Curative Suppression of Fairy Ring on a Chicago Golf Green

Researchers: CDGA collaborating with Dan Marco, Ruth Lake Country Club

Goal: Evaluate fungicides and alternatives capable of fairy ring suppression.

Locations: Ruth Lake's number 9 green in play – Hinsdale, Illinois [see photos](#)

Background: Fairy ring can cause dark green ring/arc symptoms on greens. It is an enigma because we do not exactly know how to choose a fungicide for it. Why? A group of soilborne fungi called basidiomycetes cause fairy ring. Some called Agaricales produce mushrooms. Some called Lycoperdales produce puff balls. The CDGA has studied fairy ring on Chicago greens since 2006. In 2006 a study at Twin Orchard CC in Long Grove produced good results and we found the fungicide ProStar and fungicides in the DMI (demethylase inhibitor) family suppressed fairy ring. Unlike DMI fungicides, ProStar didn't cause phytotoxicity. Fairy ring outbreaks require hot summer conditions – research can be difficult.

Brief Material and Methods: Ruth Lake Country Club's 17 green using a randomized complete block design with 4 replications. Individual plot size was 4 ft by 6 ft. Products were applied at labeled rates for fairy ring in water equivalent to 4.0 gal./1,000 sq. ft. and were not mixed with a wetting agent or watered in. A single curative application occurred on August, 8, 2009. Data collected included; fairy ring number per plot, fairy ring percent per plot, and fairy ring color intensity level. Visual quality was used to assess phytotoxicity at midsummer.

Results: Visual quality, fairy ring percent, fairy ring number [see figures](#)

- Best season-long visual quality occurred with N by urea, Reserve, and Triton Flo. They improved green color by N or pigment to mask fairy ring.
- ProStar and Disarm did not reduce fairy ring percent at Ruth Lake. On 28 August, 20 days after treatment, over 20% plot area showed symptoms.
- Relative to ProStar, all DMI fungicides reduced fairy ring percent on 28 August, 20 days after treatment. The QoIs of Disarm and Insignia did not.
- Best reduction of fairy ring number occurred with N by urea and Reserve fungicide with 1 ring or less per plot. In comparison, ProStar had 4.5/plot.
- Relative to ProStar, needle tine aerification reduced fairy ring percent and number. Alone it was similar to urea, ConSan, and most fungicides.