



## **Preventive Suppression of Fairy Ring on a Chicago Golf Green**

**Researchers:** CDGA collaborating with Dan Tully, Kemper Lakes Golf Club

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

**Locations:** Kemper Lake's number 3 green in play – Kildeer, Illinois [see photos](#)

**Background:** Fairy ring causes dark green ring/arc symptoms on greens. Multiple basidiomycete fungi cause fairy ring. Those called Agaricales produce mushrooms while others called Lycoperdales produce puff balls. In 2006 a CDGA study at Twin Orchard CC in Long Grove we found the fungicide ProStar and DMI fungicides (demethylase inhibitor family) suppressed fairy ring. Unlike DMI fungicides, ProStar did not cause phytotoxicity. A range of fungicides can be used preventively, but effectiveness varies according to site. Preventively DMIs are now preferred, but may reduce golf green health by yellowing/phytotoxicity.

**Brief Material and Methods:** Kemper Lakes Golf Club 3 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. The irrigation system was used to water-in products. In 2009 28 day interval applications were 20 May, 17 June, and 20 July (+ 3 June and 6 July urea and ConSan every 14 day). Data collected per plot; fairy ring number, fairy ring percent, 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](#)

- Alone, fungicides effected plant health. Fairy ring disease was lacking.
- Some DMI fungicides reduced visual quality substantially on Kemper Lakes 3 green. This agrees with Twin Orchard CC data in 2006 and 2007.
- At Kemper Lakes, DMIs with greatest season-long yellowing/phytotoxicity potential included Eagle, Headway, and Bayleton Flo.
- DMIs with intermediate yellowing were Triton Flo, Trinity, and Tourney.
- A new DMI combo product Reserve mitigated yellowing entirely. It contains a green pigment. Visually it matched N by urea and untreated.