



Curative Control of Waitea Patch on *Poa annua* greens in Chicago

Researchers: CDGA collaborating with Brian Thomson, Biltmore Country Club

Goal: Evaluate fungicides for ability to suppress Waitea curatively/post-infection.

Location: Biltmore CC's no. 15 green in play – N. Barrington, Illinois

Background: Waitea patch is a common disease of *Poa annua* on greens in Chicago. May to June, the fungus infects *Poa annua* leaf sheaths and causes narrow bright yellow ring symptoms. Rings are about 4 to 12 inches in diameter. Dr. Randy Kane noticed it on a green about 1985 with Dave Ward in Flossmoor. Until 2006 it was called *Rhizoctonia zeae* in Chicago. In 2005 Japanese scientists renamed this *Rhizoctonia* disease. Today it is brown ring patch or Waitea patch.

Brief Material and Methods: Biltmore Country Club's 15 green in play is a push-up constructed green that receives some shade. Individual plot size was 4 ft by 6 ft. arranged as a randomized complete block design with 4 replications. The putting green, comprised primarily of annual bluegrass (*Poa annua*) with low levels of creeping bentgrass (*Agrostis stolonifera*), was managed at a height of 0.110 inches. Initial symptoms were faint when first applications occurred 19 May. Waitea patch was estimated by percent by number of rings per plot. Visual quality was rated to estimate acceptable health and quantify phytotoxicity.

Results: Visual quality, Waitea percent, Waitea number

- Untreated, peak disease development of 29% occurred on 2 June.
- All fungicides worked except the contact chlorothalonil/Daconil Ultrex.
- Visual quality negatively affected by i) inability to control disease, ii) phytotoxicity by triadimefon/Bayleton and propiconazole/Banner Maxx.
- Nitrogen by urea did not reduce disease on 2 June when levels of disease were unacceptable for a putting green with 20% area affected.
- Season-long, certain treatments provided better visual quality by disease suppression without phytotoxicity (Triton, Insignia, and ProStar).
- Counting number of Waitea patches is a good way to quantify this disease and allows better efficacy determination of treatments.