

Evaluation of granular fungicides for the control of brown patch on tall fescue, 2010.

Host:

Tall fescue (*Lolium arundinaceum* 'Rembrandt')

Target Disease/Pathogen:

Brown Patch; *Rhizoctonia solani*

Fungicides were evaluated for control of brown patch at the University of Missouri Turfgrass Research Facility in Columbia, MO on 'Rembrandt' tall fescue. Mowing was performed one to two times weekly at a height of 3.0 in. Plots were 5 ft x 10 ft and were arranged in a randomized complete block with four replications. Sprayable treatments were applied in water equivalent to 2 gal per 1000 sq ft with a CO₂ powered sprayer at 40 psi using TeeJet 8008 nozzles. All treatments were initiated on 24 May and reapplied approximately every 28 d for a total of 4 applications. Disease severity, turfgrass quality, and phytotoxicity were assessed every 7-14 days from initial symptom development. Disease severity was assessed as a visual estimation of the percent symptomatic area within the plot. Turfgrass quality was evaluated using a 1 to 9 scale (9=best, 5=acceptable) based on color, density, and uniformity. Data were subjected to analysis of variance and means separation by Waller-Duncan k-ratio t-test (k=100).

Brown patch symptoms first became apparent on 7 Jun, with moderate disease severity occurring in the plot area throughout the season. All fungicide treated plots had significantly lower brown patch severity than untreated plots. On all rating dates, no statistical difference in mean disease severity was observed among the fungicide treated plots in this study. Insignia + Trinity and Heritage G treated plots tended to have the least amount of disease following the third fungicide application on 21 Jun. Turfgrass quality was higher for all fungicide treated plots compared to untreated plots. Among treated plots, turfgrass quality was similar except for the 23 Jul rating date when quality in plots treated with Pillar G at the 2.25 lb rate was lowest. No phytotoxicity was observed on any rating date.