

Evaluation of fall preventative fungicides for summer patch control on Kentucky bluegrass, 2010-2011.

Host:

Kentucky bluegrass (*Poa pratensis*)

Target Disease/Pathogen:

Summer Patch; *Magnaporthe poae*

Fungicides were evaluated for the control of a natural infestation of summer patch at the St. Louis Country Club in St. Louis, MO on Kentucky bluegrass rough. Mowing was performed 1 to 2 times weekly at a height of 3.0 in. Nitrogen was applied using ammonium sulfate (21-0-0) at 0.46 lb N/1000 sq ft on 7 and 28 Mar, and 0.5 lb N/1000 sq ft on 5 May. Plots were 5 ft × 10 ft and arranged in a randomized complete block with four replications. Treatments were applied in water equivalent to 2.0 gal per 1000 sq ft with a CO₂-powered sprayer at 25 psi using TeeJet 8008 nozzles. On 12 Oct 2010, baseline disease was assessed and a single fall preventative application of Heritage TL, Banner Maxx (high and low rate), Chipco Triton, and Trinity was made. In spring 2011 disease severity and turfgrass quality were assessed every 7 to 14 days from initial symptom development. Disease severity was assessed as estimates of the percent symptomatic area. Turfgrass quality was evaluated using a 1 to 9 scale (9=best, 5=acceptable) based on color, density, and uniformity. Turf density was rated visually as percent turf coverage. Data were subjected to analysis of variance and means separation by Waller-Duncan k-ratio t-test (k=100).

Summer patch was first observed in plots on 9 May. Plots treated with Heritage TL, Banner Maxx (both rates), and Trinity tended to show better summer patch control, turf density, and quality from May to early July, but no statistical differences were noted between any of the treatments and the untreated control. By August, summer patch increased in all plots including the untreated control, but no treatment differences were observed. A single fall fungicide application did not provide acceptable summer patch control in this study. A late spring preventive fungicide application may be better suited for summer patch control. No phytotoxicity was observed following application.