

Preventative fungicide applications for the control of grey snow mold on creeping bentgrass, 2004-2005.

Tests were conducted on a Bridgehampton silt loam located at the Skogley Memorial Turfgrass Research Facility at the University of Rhode Island. The turf was maintained at a 0.13 inch mowing height, irrigated as needed and a total of 4 lbs N was applied in four separate applications throughout the course of the season as a slow release formulation. Plots measured 5 ft x 5 ft with no borders and were arranged in a randomized complete block design with three replicates on an original mixture of 83% ‘Penncross’ and 17% ‘Penneagle’ creeping bentgrass with minimal *Poa annua* invasion. Liquid fungicides were applied using a CO₂-pressurized hand held sprayer fitted with TeeJet 8004VS Visiflow flat fan nozzles delivering 3.2 gallons/1000 sq ft at 40 psi. Fungicides were applied on two separate occasions: mid-November (MN) = 15 Nov 04 and pre-snow (PS) = 6 Dec. No mowing occurred after the MN application. Plots were inoculated with *T. incarnata* on 8 Dec with approximately 75g per plot of 12 week old infected rye. Immediately after inoculation, plots were covered with 4 inches of loose hay and covered with a lightweight porous greenscover. The experiment was then surrounded by snow and silt fencing to prevent accumulated snow from blowing off the trial area. Plots were uncovered on 30 Mar 05 and rated.

Inoculation was successful, resulting in 84% disease in control plots. The majority of treatments resulted in excellent control of grey snow mold. Noticeably, the Endorse and Emblem products were only marginally effective. In previous years, Endorse has been extremely effective and it is unclear why it failed in the current experiment. Although these two treatments were not considered successful, it is important to note two factors. Firstly, large amounts of artificial inoculum were introduced. Such high levels are not commonly encountered on a typical putting green and it is possible that treatments that failed under these experimental conditions might be more successful under less intense disease pressure. Secondly, fungal inoculation took place after preventative sprays had been applied. Had sprays been applied following inoculation, it may have reduced the severity of disease and these treatments may have been more successful. Climatic conditions also may have played a role in the failure of these treatments. Every other treatment was applied 3 weeks later in the season or in combination with a product applied 3 weeks later.

Treatment and rate per 1000 sq ft	Application Dates	% disease ^z
Control	-	84.0 a
PCNB 15.4G 6.36 lbs	PS	1.3 e
Medallion 50WP 14.0 oz + Daconil WeatherStik 6F 2.4 oz + Banner Maxx 1.3MEC 1.7 fl oz	PS	0.0 e
Emblem 3.7F 4.0 oz + Daconil Ultrex 82.5WG 5.5 oz	MN	42.0 bcd
Endorse 2.5WP 4.0 oz	MN	61.7 ab
Endorse 2.5WP 1.0 oz + Spectro 90WDG 5.75 oz	MN	43.3 bc
Endorse 2.5WP 4.0 oz + Spotrete 42F 8.0 fl oz	MN	24.0 cde
18 Plus 2SC 4.0 fl oz + Manicure Ultrex 82.5WDG 5.0 oz, Revere 4000 4F 8.0 fl oz	MN + PS	0.7 e
18 Plus 2SC 4.0 fl oz + Manicure Ultrex 82.5WDG 5.0 oz + Revere 4000 4F 8.0 fl oz	PS	0.0 e
Spectator 3.6MEC 1.25 fl oz oz	MN	0.0 e
Revere 4000 4F 8.0 fl oz	PS	
Spectator 3.6MEC + Medallion, 1.25 fl oz + 0.5 oz	PS	1.3 e
Revere 4000 4F 8.0 fl oz	PS	1.7 e
Insignia 20WG 0.7 oz	MN	0.3 e
18 Plus 2SC 4.0 fl oz + Manicure Ultrex 82.5WDG 5.0 oz	PS	
Spectator 3.6MEC 1.0 fl oz	MN	0.0 e
Insignia 20WG 0.7 oz + Manicure Ultrex 82.5WDG 5.0 oz	PS	
Insignia 20WG 0.7 oz + Manicure Ultrex 82.5WDG 5.0 oz	MN	0.0 e
Revere 4000 4F 8.0 fl oz	PS	
Compass 50WP 0.5 oz + Revere 4000 4F 8.0 fl oz	PS	0.0 e

^z Plots were rated based on the percentage of symptomatic plot area. Means within a column followed by the same letter are not significantly different, according to the Waller-Duncan k-ratio t-test (k=100, P≤0.05).