

Efficacy of fungicides for control of dollar spot on creeping bentgrass, 2004.

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. Fungicides were applied using a CO₂-pressurized hand held sprayer fitted with TeeJet 8004VS Visiflow flat fan nozzles delivering 3.2 gal/1000 sq ft at 40 psi. All treatments were first applied on 20 May before dollar spot started to appear. All other sprays were made on approximately a 14 day interval (7 and 21 Jun, 5 and 19 Jul, 3 Aug) with the exception of one 0.18 oz rate of Emerald, 18 Plus, and Propiconazole Pro, which were applied approximately every 21 days following 20 May (14 Jun, 5 Jul, 26 Jul, 19 Aug). One 0.18 oz rate of Emerald and the 0.72 oz rate of Spectator were applied approximately every 28 days, following 20 May (21 Jun, 19 Jul, 19 Aug). Hand scattered application of *S. homoeocarpa* was made to each plot on 2 Jun with approximately 75 g per plot of 8 week old colonized rye.

Inoculation provided adequate levels of disease, with a maximum of 9.3% disease in control plots. Most of the chemicals employed in this study provided effective dollar spot control, at a disease threshold of approximately 1.0%. The only chemical that did not provide acceptable control of the disease was ZeroTol. Trials demonstrated that Emerald alternated with Curalan every 14 days provided no better control than Emerald at 28 days. Systemic fungicides all provided excellent control (0% disease) on a 14 day spray schedule but some disease did reoccur in treatments utilizing 21-28 day spray intervals. No fungicide resistance was observed.

Treatment and rate per 1000 sq ft	% dollar spot		
	14 Jun *	15 Jul	3 Aug
Control	2.7 a	4.3 a	9.3 a
26GT 2SC 4 fl oz	0.0 c	0.0 c	1.0 c
Super GT 3SC 2.67 fl oz	0.0 c	0.0 c	0.7 c
Insignia 20WG 0.9 oz	0.0 c	0.0 c	0.7 c
Emerald 70WG 0.13 oz	0.0 c	0.0 c	0.0 c
Emerald 70WG 0.18 oz (21 Day)	0.0 c	0.0 c	0.0 c
Emerald 70WG 0.18 oz (28 Day)	0.0 c	0.0 c	0.0 c
Emerald 70WG 0.13 oz alternated with Curalan 50DF 1 oz **	0.0 c	0.0 c	0.3 c
Propiconazole Pro 1.3MEC 1 fl oz (21 Day)	0.0 c	0.3 c	1.3 c
Spectator 3.6MEC 0.37 fl oz	0.0 c	0.0 c	0.0 c
Spectator 3.6MEC 0.72 fl oz (28 Day)	0.0 c	0.0 c	0.3 c
T-Storm 4.5F 2.5 fl oz	0.0 c	0.0 c	0.0 c
18 Plus 2SC 3 fl oz (21 Day)	0.0 c	0.0 c	1.7 c
Banner MAXX 1.3MEC 1 fl oz	0.0 c	0.0 c	0.0 c
Topsin M 70WP 3 oz	0.0 c	0.3 c	0.0 c
Zerotol 27L 6 fl oz	1.3 b	2.3 b	6.7 b
Zerotol 27L 12 fl oz	1.7 b	3.3 ab	9.3 a
Daconil Ultrex 82.5WG 3.2 oz	0.0 c	0.0 c	1.0 c

* 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).

** Emerald applications made on 20 May, 21 Jun, 19 Jul. Curalan applications were made on 7 Jun, 5 Jul and 3 Aug.