

Efficacy of fungicides for control of dollar spot on creeping bentgrass, 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. 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 16 Jun when dollar spot started to appear. All other sprays were made on approximately a 14 day interval (30 Jun, 14 and 28 Jul, 11 Aug) with the exception of one Emerald, one Propiconazole Pro and one 18 Plus treatment, which were applied approximately every 21 days following 16 Jun (7 and 28 Jul). All Bayleton treatments, one Emerald treatment and one Spectator treatment were applied approximately every 28 days, following 16 Jun (14 Jun and 11 Aug). Hand scattered application of *S. homoeocarpa* was made to each plot on 30 Jun with approximately 75 g per plot of 8 week old colonized rye.

Although artificial inoculation at this site typically yields high levels of disease incidence, the summer of 2005 was extremely dry and warm and disease activity was significantly impeded by climatic conditions. Under the level of disease pressure observed, all of the chemicals employed in this study provided effective dollar spot control, at a disease threshold of approximately 1.0%, with the exception of the lowest Bayleton rates, Heritage TL and Spectator at 28 days on the first rating. All products produced satisfactory results on later rating dates. No fungicide resistance was observed.

Treatment and rate per 1000 sq ft	% dollar spot		
	6 Jul *	22 Jul	12 Aug
Control	3.7 c	3.3 b	2.3 b
Bayleton 50WP 0.5 oz (28 Days)	1.3 ab	0.0 a	0.0 a
Bayleton 50WP 1.0 oz (28 Days)	0.3 ab	0.0 a	0.0 a
Bayleton SC 0.5 fl oz (28 Days)	0.9 ab	0.0 a	0.0 a
Bayleton SC 1.0 fl oz (28 Days)	1.3 ab	0.0 a	0.3 a
Bayleton SC 2.0 fl oz (28 Days)	0.1 a	0.0 a	0.0 a
Insignia 20WG 0.9 oz	0.7 ab	0.0 a	0.3 a
Emerald 70WG 0.13 oz	0.7 ab	0.0 a	0.3 a
Emerald 70WG 0.18 oz (21 Days)	0.1 a	0.0 a	0.0 a
Emerald 70WG 0.18 oz (28 Days)	0.4 ab	0.0 a	0.3 a
Emerald 70WG 0.13 oz alternated with Curalan 50DF 1.0 oz **	0.0 a	0.0 a	0.0 a
Propiconazole Pro 1.3MEC 1.0 fl oz (21 Days)	0.0 a	0.0 a	0.3 a
Heritage TL 0.8MEC 1.0 fl oz	1.7 ab	0.4 a	0.0 a
Heritage 50WG 0.2 oz + Banner MAXX 1.3MEC 0.5 fl oz	0.4 ab	0.0 a	0.0 a
Heritage 50WG 1.0 oz + Banner MAXX 1.3MEC 0.5 fl oz	0.4 ab	0.0 a	0.0 a
Heritage 50WG 0.5 oz + Banner MAXX 1.3MEC 0.5 fl oz	0.1 a	0.0 a	0.0 a
Spectator 3.6MEC 0.37 fl oz	0.2 a	0.0 a	0.0 a
Spectator 3.6MEC 0.72 fl oz (28 Days)	2.0 b	0.0 a	0.0 a
18 Plus 2SC 3.0 fl oz (21 Days)	0.0 a	0.0 a	0.0 a
Topsin M 70WP 3.0 oz	0.9 ab	0.3 a	0.0 a
Daconil Ultrex 82.5WG 3.2 oz	0.7 ab	0.0 a	0.0 a

* 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 16 Jun, 14 Jul, 11 Aug. Curalan applications were made on 30 Jun and 28 Jul.