CREEPING BENTGRASS (*Agrostis palustris* 'Penncross' and 'Penneagle')
Dollar spot; *Sclerotinia homoeocarpa*

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Efficacy of preventative fungicide application for control of dollar spot on creeping bentgrass, 2006.

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 in. mowing height, irrigated as needed and a total of 4 lb 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 approximately 20% *Poa annua* invasion. Fungicides were applied using a CO_2-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 29 May before dollar spot started to appear. All other sprays were made on approximately a 14 day interval (12 and 26 Jun, 10 and 24 Jul) with the 21 and 28 day applications noted below. The 21 applications occurred on 29 May, 19 Jun, 10 and 31 Jul. The 28 day applications were made on 29 May, 26 Jun and 24 Jul. Hand scattered application of *S. homoeocarpa* was made to each plot on 14 Jun with approximately 75 g per plot of 8 week old colonized rye.

The level of disease pressure observed during this trial was moderate. Although disease pressure was not as high as has been observed on this site in the past (11% in control plots during 2003) the level of disease (severity?) incidence did remain constant throughout the season. Typically, the percentage of dollar spot severity? incidence declines rapidly as August approaches, however, during the 2006 trial, disease was still at a relatively high level on 8 Aug. While a number of products did provide excellent control, many of them performed poorly. At a disease threshold of 1.0%, Lynx, Compass, Headway, Spectator, Banner MAXX. Topsin M and Zerotol all produced unacceptable levels of disease. Although Compass and Zerotol are not very effective dollar spot fungicides, all of the other products were expected to have produced acceptable results. It is unclear why Lynx failed, as it has been effective in the past. Headway may have failed because of the low rates used. At 21 days, the 1.5 fl oz rate performed better than the 1.125 rate, suggesting that this is likely. It is also probable that Banner MAXX and Spectator would have completely controlled disease at 14 days, instead of the 21 days at which they were applied. Surprisingly, Topsin M failed at the 14 day interval, suggesting that thiophanate-methyl resistance may be developing in the trial area.

	% dollar spot		
Treatment and rate per 1000 sq ft	30 Jun [z]	25 Jul	8 Aug
Control	5.3 e	6.0 e	3.3 ef
Tartan 2.88SC 1.0 fl oz	0.0 a	0.0 a	0.0 a
Tartan 2.88SC 1.5 fl oz	0.0 a	0.0 a	0.0 a
Tartan 2.88SC 2.0 fl oz	0.0 a	0.0 a	0.0 a
Tartan 2.88SC 2.0 fl oz	0.0 a	0.0 a	0.0 a
Tartan 2.88SC 1.0 fl oz + Signature 80 WDG 4.0 oz	0.0 a	0.0 a	0.0 a
Chipco 26GT 2SC 4.0 fl oz	0.0 a	0.0 a	0.0 a
Lynx 2.39 SC 0.4 fl oz	3.7 cd	2.7 bc	2.3 bcd
Compass 50WG 1.0 oz	3.0 bc	4.0 cd	3.0 de
Insignia 20WG 0.9	0.0 a	0.0 a	0.0 a
Emerald 70WG 0.13 oz	0.0 a	0.0 a	0.0 a
Emerald 70WG (*21 days*) 0.18 oz	0.0 a	0.0 a	0.0 a
Emerald 70WG (*28 days*) 0.18 oz	0.0 a	0.0 a	0.0 a
Emerald 70WG 0.13 oz alternated with Curalan 50DF 1.0 oz [y]	0.0 a	0.0 a	0.0 a
Headway 1.4MEC 0.75 fl oz	2.3 b	2.0 b	2.7 cde
Headway 1.4MEC 1.125 fl oz (*21 days*)	5.0 e	4.0 cd	4.0 f
Headway 1.4MEC 1.5 fl oz (*21 days*)	2.3 b	2.7 bc	2.3 bcd
Banner MAXX 1.3MEC 1.0 fl oz + Daconil Ultrex 82.5WG 2.4 oz (*21 days*)	2.3 b	2.7 bc	2.0 bc
Spectator Ultra 3.6MEC 2.0 fl oz (*21 days*)	2.0 b	2.3 b	1.7 b
Manicure Ultra 82.5WG 3.25 oz	0.7 a	0.0 a	1.7 b
Spectator Ultra 3.6MEC 2.0 fl oz + Manicure Ultra 82.5WG 3.25 oz	0.0 a	0.0 a	0.0 a
Topsin M 70WP 3.0 oz	4.7 de	4.0 cd	3.3 ef
Zerotol 27L 6.0 fl oz	4.7 de	4.3 d	3.3 ef
Zerotol 27L 12.0 fl oz	4.7 de	4.3 d	3.3 ef

[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, $P \leq 0.05$).
[y]Emerald applications made on 29 May, 26 Jun, 24 Jul. Curalan applications were made on 12 Jun and 10 Jul.