Evaluation of Fungicides for Control of Dollar Spot in Fairway Height 'Penneagle' Creeping Bentgrass, 2006

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Trials were conducted at the Iowa State University Horticulture Station in Gilbert, Iowa. Creeping bentgrass (cv. Penneagle) was maintained at 0.5-inch cutting height. On 1 Jun, all plots were inoculated with rye grain infested with *Sclerotinia homoeocarpa*. Fungicides, selected for activity against dollar spot, were applied using a backpack sprayer at 30 psi and a dilution rate of 5 gal per 1000 sq ft. The experimental design was a randomized complete block with four replications. All plots measured 4 ft x 5 ft. Spray applications were initiated on 6 Jun, followed by re-application at recommended intervals until 16 Aug. Visual estimates of disease severity of each plot with dollar spot symptoms were made at approximately 14-day intervals starting on 22 Jun. Data were analyzed using the GLM procedure in SAS, and mean separations were determined using Fisher's protected LSD at P≤0.05.

Disease pressure was low to moderate due to dry conditions throughout June and July. All of the tested products suppressed dollar spot significantly (P≤0.05) in comparison to the unsprayed check. On the final rating date Headway 1.3 MEC sprayed at 28 day intervals had significantly less dollar spot than the unsprayed check, but more than the other treatments. No phytotoxicity symptoms were observed during the trial.

Products and rates per 1000 sq ft	Interval (days)	Dollar spot (%) ^z				
		22 Jun	7 Jul	26 Jul	4 Aug	19 Aug
Unsprayed check		5.03 a	12.25 a	40.50 a	34.50 b	67.50 a
3336 F 3 oz	14 d	0.13 b	0.0 0 b	0.00 b	0.00 b	2.25 c
3336 Plus 3 oz	14 d	0.00 b	0.00 b	0.25 b	0.00 b	1.75 c
Emerald 0.13 oz.	14 d	0.13 b	0.00 b	0.00 b	0.00 b	0.00 c
Emerald 0.18 oz.	21 d	0.25 b	0.03 b	0.00 b	0.00 b	0.25 c
Emerald 0.18 oz.	28 d	0.13 b	2.00 b	0.00 b	0.00 b	0.00 c
Tartan SC 1 fl oz.	14 d	0.00 b	0.00 b	0.00 b	0.00 b	0.00 c
Tartan SC 1.5 fl oz.	21 d	0.25 b	0.78 b	0.75 b	0.00 b	0.50 c
Tartan SC 2 fl oz.	28 d	0.00 b	2.25 b	0.00 b	0.00 b	0.25 c
Tartan SC 1 fl oz + Chipco Signature 4 oz	14 d	0.00 b	0.00 b	0.00 b	0.00 b	0.25 c
Chipco Sig. 4oz + Daconil Ultrex 3.2 oz alt. with Tartan 1 fl oz	14 d	0.00 b	0.00 b	0.00 b	0.00 b	0.00 c
Chipco Signature 4 oz + Daconil Ultrex 3.2 oz	14 d	0.00 b	0.00 b	0.00 b	0.00 b	0.00 c
Chipco Signature 4 oz + Bayleton SC 1 fl oz	14 d	0.00 b	0.00 b	0.00 b	0.00 b	0.25 c
Headway 1.3 MEC 0.75 fl oz	14 d	0.00 b	0.03 b	0.25 b	0.00 b	0.00 c
Headway 1.3 MEC 0.75 fl oz	21 d	0.00 b	0.00 b	2.00 b	1.75 b	1.13 c
Headway 1.3 MEC 0.75 fl oz.	28 d	0.00 b	0.75 b	0.00 b	0.00 b	8.3 b
LSD (0.05) ^x		1.35	2.50	5.65	6.69	4.13

^zPercent plot symptomatic.

^xMeans followed by the same letter are not significantly different according to Fisher's protected LSD at P≤0.05.