CREEPING BENTGRASS (*Agrostis stolonifera* 'A4')
Dollar Spot; *Sclerotinia homoeocarpa*

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Evaluation of fungicides and fungicide programs for control of dollar spot of creeping bentgrass in Kansas, 2010.

Fungicides were evaluated on an established stand of 'A4' creeping bentgrass on a sand-based putting green at the Rocky Ford Turf Research Center, Manhattan KS. The turf was mowed to a height of 0.156-in. and irrigated daily for 15 min. The area was fertilized biweekly with 0.25 lb nitrogen (N)/1000 ft^2 during Mar through Jun and 0.16 lb N/1000 ft^2 during Jul through Nov. Fungicide applications were made at 14- to 21-day intervals beginning 21 May, with the exception of the two Bayer Program treatments which included early season applications on 20 Apr. The final application for all treatments was on 24 Aug with the exception of the 21-day treatments which had final applications on 31 Aug. Fungicides were applied with a CO_2-powered boom sprayer equipped with two XR Tee Jet 8004VS nozzles at 30 psi in water equivalent to 2.0 gal/1000 ft^2. Plots were 4 ft × 5 ft and arranged in a randomized complete block design with four replications. Disease was assessed periodically by visually estimating the percentage of each plot affected by dollar spot symptoms.

Dollar spot reached about 10% severity in the non-treated plots in mid to late Aug. Except for low levels of symptoms (≤ 1.0% severity) in early June, the products and programs reduced dollar spot significantly compared to the non-treated control and resulted in complete suppression of symptoms. On 13 Aug the KSU program plots displayed a slight blue-gray color, typical of the phytotoxic effects caused by the application of DMI fungicides to greens-height bentgrass under stressful environmental conditions.

Treatment and rate/1000 ft^2	Spray date or interval (days)[z]	Dollar Spot Severity[y] 17 Jun		15 Jul		2 Aug		17 Aug		9 Sept	
Non-treated control	--	5.3	a	7.5	a	8.5	a	10.0	a	7.3	a
Bayer Program 1											
Bayleton Flo 4SC 1.0 fl oz	20 Apr										
Tartan 2.4SC 2.0 fl oz	21 May										
Chipco Signature 80WG 4 oz + Interface 2.27SC 4.0 fl oz	2 Jun										
Reserve 4.8SC 3.6 fl oz	15 Jun										
Chipco Signature 80WG 4 oz + Insignia 20WG 0.9 oz	29 Jun										
Chipco Signature 80WG 4 oz + Daconil Ultrex 82.5WDG 3.2 oz	13 Jul										
Chipco Signature 80WG 4 oz + Reserve 4.8SC 3.6 fl oz	27 Jul										
Chipco Signature 80WG 4 oz + Insignia 20WG 0.9 oz	10 Aug										
Tartan 2.4SC 2.0 fl oz	24 Aug	0.0	b	0.0	b	0.0	b	0.0	b	0.0	b
Bayer Program 2											
Bayleton Flo 4SC 1.0 fl oz	20 Apr										
Chipco Signature 80WG 4 oz + Triton Flo 3SC 0.5 fl oz	21 May										
Chipco Signature 80WG 4 oz + Interface 2.27SC 4.0 fl oz	2 Jun										
Reserve 4.8SC 3.2 fl oz + Honor 28WG 0.83 oz	15 Jun										
Chipco Signature 80WG 4.0 oz + Daconil Ultrex 82.5WDG 3.2 oz	29 Jun										
Chipco Signature 80WG 4.0 oz + Honor 28WG 0.3 oz	13 Jul										
Chipco Signature 80WG 4.0 oz + Daconil Ultrex 82.5WDG 3.2 oz	27 Jul										
Chipco Signature 80WG 4.0 oz + Interface 2.27SC 4.0 fl oz	10 Aug										
Reserve 4.8SC 3.6 fl oz	24 Aug	0.0	b	0.0	b	0.0	b	0.0	b	0.0	b
KSU Program 1											
Emerald 70WG 0.13 oz	21 May										
Banner MAXX 1.3ME 1.0 fl oz + Daconil Ultrex 82.5WDG 3.2 oz	2 Jun										
26GT 2SC 4.0 fl oz	15 Jun										
Bayleton 50 WDG 0.5 oz	29 Jun										
Emerald 70WG 0.13 oz + Daconil Ultrex 82.5WDG 3.2 oz	13 Jul										
Reserve 4.8SC 3.2 fl oz	27 Jul										
26 GT 2SC 4.0 fl oz	10 Aug										
Emerald 70WG 0.13 oz	24 Aug	1.0	b	0.0	b	0.0	b	0.0	b	0.0	b
KSU Program 2											
Bayleton 50WDG 0.5 oz	21 May										
Emerald 70WG 0.13 oz + Daconil Ultrex 82.5WDG 3.2 oz	2 Jun										
Spectro 90WDG 4.0 oz	15 Jun										
Banner MAXX 1.3ME 1.0 fl oz + Insignia 20WG 0.7 oz	29 Jun										
26/36 3.8SC 3.0 fl oz	13 Jul										
26GT 2SC 4.0 fl oz + Daconil Ultrex 82.5WDG 3.2 oz	27 Jul										
Emerald 70WG 0.13 oz	10 Aug										
Banner MAXX 1.0 fl oz	24 Aug	0.8	b	0.0	b	0.0	b	0.0	b	0.0	b
Honor 28WG 0.55 oz	14	0.3	b	0.0	b	0.0	b	0.0	b	0.0	b
Honor 28WG 0.83 oz	21	0.3	b	0.0	b	0.0	b	0.0	b	0.0	b
Insignia SC 0.54 fl oz	21	0.5	b	0.0	b	0.0	b	0.0	b	0.0	b
Insignia SC 0.7 fl oz	14	0.3	b	0.0	b	0.0	b	0.0	b	0.0	b
Emerald 70WG 0.13 oz	14	0.0	b	0.0	b	0.0	b	0.0	b	0.0	b
Emerald 70WG 0.18 oz	21	0.0	b	0.0	b	0.0	b	0.0	b	0.0	b
Honor 28WG 0.83 oz	14	0.0	b	0.0	b	0.0	b	0.0	b	0.0	b
Honor 28WG 1.1 oz	21	0.5	b	0.0	b	0.0	b	0.0	b	0.0	b

[z]The 14-day treatments received applications on 21 May; 2, 15 and 29 June; 13 and 27 July, and 10 and 24 Aug. The 21-day treatments were applied on 21 May, 8 and 29 June, 20 July, and 10 and 31 Aug.

[y]Values represent the average percentage of plot area blighted by dollar spot symptoms. Means within columns followed by the same letter are not significantly different according to Tukey's pairwise comparisons (family error rate P=0.05). Values were square-root transformed for analysis and back-transformed for presentation.