

CREEPING BENTGRASS (*Agrostis stolonifera* 'A4')Dollar Spot; *Sclerotinia homoeocarpa*Brown Patch; *Rhizoctonia solani*

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### Evaluation of fungicides for control of dollar spot and brown patch of greens height creeping bentgrass in Kansas, 2013.

Five fungicide treatments were evaluated on an established stand of creeping bentgrass on a sand-based putting green at the Rocky Ford Turfgrass Research Center, Manhattan KS. The area was mowed daily at 0.156-in. Fungicides were applied at 14-, 21-, or 28-day intervals using a hand-held CO<sub>2</sub>-powered sprayer equipped with two TeeJet 8004VS flat spray nozzles at 30 PSI. Plots were 4 ft × 6 ft and arranged in a randomized complete-block design with four replications. Dollar spot and brown patch severity were determined by visually estimating the percentage of each plot affected by blight symptoms. Data were subject to the analysis of variance and treatment means were separated using pairwise comparisons with Tukey's HSD ( $\alpha_{FER}=0.05$ ). Disease data were  $\ln(y + 1)$  transformed for analysis and back-transformed for presentation.

Dollar spot developed starting in early July with peak activity in mid-August. Brown patch symptoms appeared on 25 Jul and 6 Aug with similar levels. All fungicide treatments significantly reduced disease to zero.

Treatment and rate per 1,000 ft <sup>2</sup>	Application interval <sup>x</sup>	Dollar spot <sup>z</sup>				Brown Patch <sup>y</sup>
		25 Jul	6 Aug	16 Aug	21 Aug	6 Aug
Untreated Control	-----	8.8 a	10.5 a	12.8 a	7.8 a	5.0 a
Encartis 6.25SC 3.0 fl oz	14-day	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b
Encartis 6.25SC 4.0 fl oz	21-day	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b
Xzemplar 2.47SC 0.21 fl oz	21-day	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b
Xzemplar 2.47SC 0.26 fl oz	28-day	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b
Emerald 70WG 0.18 oz	28-day	0.0 b	0.0 b	0.0 b	0.0 b	0.0 b

<sup>z</sup>Dollar spot severity was determined by visually estimating the percentage of each plot affected by blight symptoms.

<sup>y</sup>Brown patch severity was determined by visually estimating the percentage of each plot affected by blight symptoms.

<sup>x</sup>Application dates for 14-day: 6 and 19 Jun, 3, 17, and 31 Jul, and 13 Aug; 21-day: 6 and 27 Jun, 17 Jul, and 9 Aug; and 28-day: 6 Jun, 3 Jul, and 31 Jul.