

Evaluation of Fungicides for Control of Dollar Spot in Creeping Bentgrass - 2003.

Mark L. Gleason and Sara J. Helland

Trials were conducted at the Iowa State University Horticulture Station in Ames, Iowa. Creeping bentgrass was maintained at a 0.150-inch cutting height. Fungicides, selected for activity against brown patch, were applied using a modified bicycle 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 June 30. This was followed by re-applications at recommended intervals until August 20. Visual estimates were made of percent disease severity for dollar spot at approximately 10-day intervals starting on July 27. Data were analyzed using the GLM procedure in SAS, and mean separations were determined using Fisher's protected LSD at $P \leq 0.05$.

Disease pressure was low to moderate due to dry conditions throughout July 2003. Most of the tested products suppressed dollar spot significantly ($P \leq 0.05$) in comparison to the unsprayed check, with the exception of Endorse. This product provided no better control than the unsprayed check. No phytotoxicity symptoms were observed during the trial.

Table 1. Dollar spot trial – 2003 Iowa State University Horticulture Research Farm. (Penncross creeping bentgrass) Plot size: 20 ft² (4 ft x 5 ft); 4 plots per treatment

Trt #	Company	Product	Rate/1000 ft ²	Interval (days)	Dollar spot (%)			
					27 Jul	6 Aug	15 Aug	23 Aug
1	Check	-----	-----	-----	4.1	7.5	10.0	15.7
2	BASF	Emerald 70WG	0.13 oz	14	0.0	0.0 c	0.0	3.1
3	BASF	Emerald 70WG	0.18 oz	21	0.0	0.0 c	0.0	3.7
4	BASF	Insignia 20WG	0.9 oz	14	0.0	0.0 c	0.5	2.2
5	BASF	Emerald 70WG ROTATE Insignia 20WG and †	0.13 oz + 0.9 oz	14	0.0	0.1	0.9	3.6
6	BASF	Propiconazole Pro 1.3 MC	1.0 fl oz	14	0.0	0.0	0.1	1.5
7	Cleary	Endorse 2.5WP	4 oz	14	1.7	5.2	10.7	16.7
8	Cleary	Spectro 90WDG	4 oz	14	0.0	0.0	0.2	2.0
9	Bayer	26GT 2SC	4 fl oz	14	0.0	0.0	0.0	5.5
10	Bayer	Bayleton 50DF	0.5 oz	14	0.0	2.5	0.6	1.4
LSD (0.05)					6.2	3.7	3.7	1.6

† Product applications were rotated on a 14-day interval (Emerald June 30 and July 28; Insignia July 14 and August 11).