CREEPING BENTGRASS (Agrostis palustris ev. 'Washington')

Brown patch; *Rhizoctonia solani* Dollar spot; *Sclerotinia homoeocarpa* M.L. Gleason, S.J. Helland, and J.P Newton Department of Plant Pathology and Veenker Memorial Golf Course Iowa State University Ames, IA 50011

Evaluation of fungicides for control of Brown Patch and Dollar Spot in creeping bentgrass, 2003.

Trials were conducted at Veenker Memorial Golf Course in Ames, Iowa. Creeping bentgrass (cv. Washington) was maintained at 0.16-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 1,000 sq ft. The experimental design was a randomized complete block with four replications. All plots measured 4 ft x 5 ft. Because several treatments were added to the trial after it began, spray applications were initiated on 10 Jun (non-Garlic GP treatments) and 24 Jun (Garlic GP treatments). These were followed by re-applications at recommended intervals until 20 Aug. 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 moderate to severe for Dollar Spot and Brown Patch. Most of the tested products suppressed both diseases significantly (P<0.05) in comparison to the unsprayed check. No phytotoxicity symptoms were observed during the trial.

		17 Jul		27 Jul		6 Aug		15 Aug		23 Aug	
	Interval	Brown	Dollar	Brown	Dollar	Brown	Dollar	Brown	Dollar	Brown	Dollar
Product and rate per 1,000 sq ft	(days)	Patch ^z	Spot ^y	Patch	Spot	Patch ^z	Spot ^y	Patch	Spot	Patch	Spot
Unsprayed check		4.2 ab	16.2 ab	3.5 ab	16.2 a	4.5 a	30.7 a	2.0 a	19.2 ab	4.7 a	36.7 b
Emerald 70WG, 0.13 oz	14	3.5 bc	0.7 e	2.2 abcd	0.5 d	0 b	0 e	0.7 ab	0.7 e	1.7 bcde	0 c
Emerald 70WG, 0.18 oz	21	1.2 de	0 e	1.7 bcde	0 d	2.5 cde	0 e	0.2 b	0.1 e	0.2 bcdef	0 c
Insignia 20WG, 0.9 oz	14	0.2 e	3.0 de	0.2 de	5.5 cd	2.2 de	9.5 cde	0.2 b	13.0 bc	1.5 bcdef	26.2 b
Emerald 70WG alt. w/Insignia	14	2.2 cd	0 e	1.0 cde	0 d	1.5 e	0 e	0.2 b	0.4 e	0 f	0 c
20WG, 0.13 oz and 0.9 oz											
Propiconazole Pro, 1.0 fl oz	14	1.2 de	0 e	0.5 cde	0 d	2.7 bcde	0.2 e	0.2 b	1.4 e	1.5 bcdef	0.2 c
Endorse, 4 oz	14	0.7 e	16.7 a	0.7 cde	15.5 ab	2.2 de	26.5 ab	0 b	22.0 a	2.5 bc	50.0 a
Spectro, 4 oz	14	0.7 e	0 e	0 e	0 d	2.7 bcde	0 e	1.0 ab	0.2 e	0.7 def	0 c
26GT 2SC, 4 fl oz	14	0.2 e	0 e	0 e	0.5 d	1.2 e	0 e	0 b	0 e	1.2 cdef	0.1 c
Bayleton 50DF, 0.5 oz	14	1.2 de	0 e	1.0 cde	0 d	2.2 de	0 e	0.7 ab	0 e	2.2 bcd	0 c
Garlic GP, 5% (Pat. Pend.)	7	3.7 ab	10.3 abcd	1.7 bcde	9.5 abc	3.7 abcd	21.2 abc	0 b	2.2 e	1.7 bcde	5.5 c
Garlic GP, 5% " "	14	5.0 ab	8.0 bcde	4.0 a	8.2 c	4.0 abc	8.2 de	0.5 b	2.7 e	2.2 bcd	9.5 c
Garlic GP, 10% " "	7	0.2 e	7.2 cde	2.5 abc	7.7 c	4.7 a	7.2 de	1.2 ab	2.5 e	1.7 bcde	2.5 c
Garlic GP, 10% " "	14	4.5 ab	13.5 abc	3.5 ab	11.2 abc	4.2 ab	17.5 bcd	1.0 ab	8.5 c	3.0 b	10.2 c
Garlic GP, 10% " "	21	4.5 ab	15.5 abc	2.0 abcde	8.7 bc	3.2 abcd	14.2 bcd	0.7 ab	2.2 e	1.2 cdef	1.2 c

^z Disease severity ratings on the following qualitative scale: 0 = no disease; 1 = 1-5%; 2 = 6-10%; 3 = 11-25%; 4 = 26-50%; 5 = >50% plot symptomatic.

y Percent plot symptomatic.