TALL FESCUE (*Festuca arundinacea* unknown cultivar blend) Brown patch; *Rhizoctonia solani* C. Thompson and M. Kennelly Department of Horticulture, Forestry, and Recreation Resources and Department of Plant Pathology Kansas State University Manhattan, KS 66506-5502

Evaluation of granular fungicides for control of brown patch of lawn height tall fescue in Kansas, 2012.

Two granular fungicides, Pillar G and Headway G, were evaluated on an established stand of tall fescue on Chase silt loam at the Rocky Ford Turfgrass Research Center in Manhattan, KS. The area was mowed weekly at 3-in. and irrigated for 10 min each night. Turf was fertilized with urea (46-0-0 N-P-K) to provide 1 lb N 1,000 ft⁻² on 30 May, 27 Jun, and 25 Jul to promote brown patch development. Fungicides were applied preventatively at approximately a 28-day interval on 29 May, 27 Jun, and 25 Jul. Fungicides were applied in at least two directions over plots using a shaker-jar. Plots were 5 ft × 10 ft and arranged in a randomized complete block design with four replications. Disease severity was assessed weekly. Brown patch severity was determined by visually estimating the percentage of each plot affected by blight symptoms. Data were collected on 8 dates from 7 Jun to 14 Sep. Data were subject to the analysis of variance and treatment means were separated using pairwise comparisons with Tukey's HSD ($\alpha_{FER}=0.05$). Values were arcsine(*y*) transformed for analysis and backtransformed for presentation.

Disease pressure was low through most of the season. Brown patch was first observed on 3 Jul, when untreated plots averaged approximately 3.5% blight. The highest disease severity in the untreated plots was 14.5%. Both Pillar G and Headway G suppressed brown patch development compared to untreated on most rating dates, and neither was phytotoxic to turf.

Brown patch severity ^z							
7 Jun	22 Jun	3 Jul	18 Jul	1 Aug	17 Aug	30 Aug	14 Sept
0.0	0.0	3.5 a ^x	7.3 a	14.5 a	3.8 a	10.0	0.0
0.0	0.0	0.5 b	2.5 ab	3.3 b	0.0 b	4.8	0.0
0.0	0.0	0.0 b	0.5 b	1.3 b	0.0 b	6.8	0.0
	0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 3.5 a ^x 0.0 0.0 0.5 b	7 Jun 22 Jun 3 Jul 18 Jul 0.0 0.0 3.5 a ^x 7.3 a 0.0 0.0 0.5 b 2.5 ab	7 Jun 22 Jun 3 Jul 18 Jul 1 Aug 0.0 0.0 3.5 a ^x 7.3 a 14.5 a 0.0 0.0 0.5 b 2.5 ab 3.3 b	7 Jun 22 Jun 3 Jul 18 Jul 1 Aug 17 Aug 0.0 0.0 3.5 a ^x 7.3 a 14.5 a 3.8 a 0.0 0.0 0.5 b 2.5 ab 3.3 b 0.0 b	7 Jun 22 Jun 3 Jul 18 Jul 1 Aug 17 Aug 30 Aug 0.0 0.0 3.5 a ^x 7.3 a 14.5 a 3.8 a 10.0 0.0 0.0 0.5 b 2.5 ab 3.3 b 0.0 b 4.8

^zValues represent the average percentage of plot area blighted by brown patch.

^yTreatments were applied on 29 May, 27 Jun, and 25 Jul.

^xMeans within columns followed by the same letter are not significantly different according to Tukey's HSD ($\alpha_{FER}=0.05$).