

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 Headway G for control of brown patch of lawn height tall fescue in Kansas, 2011.

Headway G was evaluated on an established stand of tall fescue on Chase silt loam at the Rocky Ford Turfgrass Research Center, 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 nitrogen (N) 1,000 ft<sup>-2</sup> on 22 Jun and 21 Jul to promote brown patch development. Headway G was applied preventatively at approximately a 28-day interval at two rates on 8 Jun, 6 Jul, and 3 Aug. Headway G was applied in at least two directions over plots using a shaker-jar. Plots were 6 ft × 6ft and arranged in a randomized complete block design with four replications. Disease severity and turfgrass quality were assessed weekly. Brown patch severity was determined by visually estimating the percentage of each plot affected by blight symptoms. Turfgrass quality ratings followed a 1 to 9 scale (1=completely brown, 6=minimum acceptable quality, and 9=optimum green color/no disease symptoms). Data were collected on 15 dates from 6 Jun 11 to 16 Sep 11. 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 back-transformed for presentation.

Disease pressure was very low until August and was highest on 9 Aug when untreated plots averaged approximately 14% blight from brown batch symptoms. Both rates of Headway G suppressed brown patch development compared to untreated. Untreated plots averaged significantly lower turfgrass quality than plots treated with Headway G on 9 Aug, when disease pressure was highest. Headway G was not phytotoxic to turf.

Treatment ** and rate 1,000 ft <sup>-2</sup>	Brown Patch Severity*					
	9 Aug	18 Aug	28 Aug	1 Sep	9 Sep	16 Sep
Untreated.....	13.8 a	6.3 a	11.3 a	3.8 a	5.0 a	0.0 a
3 lb Headway G.....	1.8 b	0.0 b	0.0 b	0.0 b	0.0 b	0.0 a
4 lb Headway G.....	1.5 b	0.0 b	0.5 b	0.0 b	0.0 b	0.0 a

\* Values represent the average percentage of plot area blighted by brown patch symptoms. Means within columns followed by the same letter are not significantly different according to Tukey's HSD ( $\alpha_{FER}=0.05$ ).

\*\* Treatments were applied on 8 Jun, 6 Jul, and 3 Aug.