

Curative control of brown patch in tall fescue using Insignia and foliar fertilizer, 2005.

Insignia 20WG was evaluated for its curative effect on brown patch development in tall fescue when applied alone or combined with foliar fertilizers. This trial was conducted at the Lake Wheeler Turfgrass Field Laboratory in Raleigh, NC on 'Coronado' tall fescue maintained under landscape conditions. Mowing was performed 2 times weekly at a height of 3 in. with clippings returned, and the site was irrigated to prevent drought stress. Fertilizer was applied as 25-6-12 on 21 Feb and 21 Mar to deliver 1 lb N/1000 sq ft. Annual grasses were controlled with Barricade 65WDG on 21 Feb (0.5 lb a.i./A) and 18 Apr (0.25 lb a.i./A). Plots were 5 ft x 6 ft and were arranged in a randomized complete block with four replications. The experimental area was inoculated on 16 Jun using rye grain infested with a mixture of *R. solani* isolates AG1, Rh65, and Rh68 by placing 10 cm³ of infested rye grain in the turf canopy in two spots per plot. Fungicides were applied on 13 Jul and 11 Aug in water equivalent to 3 gal per 1000 sq ft with a CO₂ powered sprayer at 40 psi using TeeJet 8004 nozzles. Percent turf area exhibiting brown patch symptoms was assessed on 26 Jul, 11 Aug, 25 Aug, and 6 Sep using a point-intersect method. Data were subjected to analysis of variance and means separation by Waller-Duncan k-ratio t test (k=100).

Significant differences among treatments were first detected on 11 Aug, or 29 days after the first fungicide application. Insignia provided nearly complete control of brown patch on 11 Aug, 25 Aug, and 6 Sep regardless of application rate or the addition of foliar fertilizer. Iprodione Pro provided an intermediate level of control on these rating dates. The addition of low rates of nitrogen does not appear to have a positive or negative effect on the efficacy Insignia 20WG applications for curative control of brown patch in tall fescue.

Treatment and rate / 1000 sq ft	Spray Interval (days)	Brown patch incidence (%)			
		26 Jul	11 Aug	25 Aug	6 Sep
Insignia 20WG 0.5 oz	29 ^z	2 a ^y	2 c	2 c	2 c
Insignia 20WG 0.7 oz	29	2 a	0 c	2 c	0 c
Insignia 20WG 0.9 oz	29	3 a	2 c	0 c	2 c
Insignia 20WG 0.5 oz + 20-20-20 0.0625 lb N.....	29	2 a	1 c	2 c	1 c
Insignia 20WG 0.7 oz + 20-20-20 0.0625 lb N.....	29	0 a	0 c	0 c	0 c
Insignia 20WG 0.9 oz + 20-20-20 0.0625 lb N.....	29	2 a	3 c	0 c	3 c
Insignia 20WG 0.5 oz + 20-20-20 0.125 lb N.....	29	2 a	0 c	0 c	0 c
Insignia 20WG 0.7 oz + 20-20-20 0.125 lb N.....	29	3 a	0 c	0 c	0 c
Insignia 20WG 0.9 oz + 20-20-20 0.125 lb N.....	29	4 a	2 c	1 c	2 c
Iprodione Pro 2SC 4 fl oz	29	5 a	13 b	11 b	13 b
Untreated Control.....	--	7 a	23 a	41 a	23 a

^zAll treatments were applied on 13 Jul and 11 Aug.

^yValues are means of four replicates. Means within columns followed by the same letter are not significantly different according to Waller-Duncan k-ratio t-test (k=100).