

Evaluation of fungicides for control of spring dead spot, 2003-2004.

Fungicides were evaluated for their ability to control spring dead spot when applied on a preventative basis. This trial was conducted at the Walnut Creek Softball Complex in Raleigh, NC on 'Tifway' bermudagrass maintained under athletic field conditions. Mowing was performed twice weekly at a height of 1 in. with clippings returned, and the site was irrigated to prevent drought stress. The experimental area was scouted in Spring 2003 while symptoms of spring dead spot were evident, and the trial was established in an area of uniform disease pressure. Plots were 5 ft x 10 ft and were arranged in a randomized complete block with four replications. Fungicides were applied in water equivalent to 5 gal per 1000 sq ft with a CO₂ powered sprayer at 40 psi using TeeJet 8008 nozzles. Granular materials were weighed individually for each plot and applied by hand using a shaker jar. All treatments were initiated on 3 Oct 2003, and some treatments were reapplied on 4 Nov 2003 as indicated in the table. Percent turf area exhibiting spring dead spot symptoms was assessed on 13 May 2004 using digital image analysis with SigmaScan software. Data were subjected to analysis of variance and means separation by Waller-Duncan k-ratio t test (k=100).

Spring dead spot pressure was high in 2003-2004 in the experimental area, with an average disease incidence of 14.31% in untreated plots according to digital image analysis. Only plots treated with Patchwork or Rubigan exhibited significantly less spring dead spot incidence than untreated control plots. Lynx applications reduced spring dead spot incidence to 2.16%, but this difference was not statistically significant. Multiple applications of 3336 and Endorse in the fall may be needed to provide significant control of spring dead spot in bermudagrass turf.

Treatment and rate / 1000 sq ft	Application code	Spring dead spot incidence (%)	
		13 May	
3336 4F 6 fl oz.....	A ^z	10.31	ab ^y
Endorse 2.5WP 6 oz.....	A	10.8	ab
Lynx 45WP 1.2 oz.....	AB	2.16	ab
Patchwork 0.78G 4 lb.....	AB	1.77	b
Rubigan 1AS 4 fl oz.....	AB	1.58	b
Untreated Control.....	--	14.31	a

^zFungicides were applied on 3 Oct 2003 (application code A) and 4 Nov 2003 (application code B).

^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).