

Curative control of dollar spot in creeping bentgrass, 2004.

Fungicides were evaluated for their curative effect on dollar spot in creeping bentgrass. This trial was conducted at the NC State Faculty Club Turfgrass Field Lab in Raleigh, NC on ‘Crenshaw’ creeping bentgrass maintained under golf course putting green conditions. Mowing was performed 3 times weekly at a height of 0.156 in. with clippings collected, and the site was irrigated to prevent drought stress. Fertilizer was applied as 19-5-9 on 2 Feb (0.5 lb N/1000 sq ft) and 25 Mar (0.75 lb N/1000 sq ft) and as 25-5-15 on 4 Mar (1 lb N/1000 sq ft), 23 Apr (0.5 lb N/1000 sq ft). Insect pests were suppressed with Dursban Pro (1 fl oz/1000 sq ft) on 28 Apr and 28 Aug and Talstar (0.25 fl oz/1000 sq ft) on 15 May and 26 Jul. Plots were 3.33 ft x 6 ft and were arranged in a randomized complete block with four replications. Fungicides were applied in water equivalent to 2 gal per 1000 sq ft with a CO₂ powered sprayer at 40 psi using TeeJet 8004 nozzles. All treatments were applied once on 3 Jun. The number of dollar spot infection centers in each plot was assessed on 3 Jun, 10 Jun, 17 Jun, and 23 Jun. Data were subjected to analysis of variance and means separation by Waller-Duncan k-ratio t test (k=100).

Dollar spot pressure was high throughout May, and as a result, dollar spot incidence was high in the experimental area when the trial was initiated on 3 Jun. No significant differences were detected among treatments on this date. Most treatments allowed a numerical increase in dollar spot incidence over the 7 days after application, with the exception of Daconil Ultrex tank-mixed with Emerald, Bayleton, or Banner Maxx. In addition to these treatments, plots treated with Compass + Bayleton (0.2 + 1 oz), Bayleton (1 oz), and Daconil Ultrex exhibited significantly fewer dollar spot infection centers than the untreated control on 10 Jun. Emerald, Daconil Ultrex + Emerald, Daconil Ultrex + Bayleton, and Daconil Ultrex + Banner Maxx provided the best curative control of dollar spot on both 17 Jun and 23 Jun. Compass + Bayleton (0.1 + 0.5 oz), Compass, and Bayleton (0.5 oz) failed to reduce dollar spot incidence compared to the untreated control on 17 Jun.

Treatment and rate / 1000 sq ft	Dollar spot incidence (infection centers/plot)			
	3 Jun	10 Jun	17 Jun	23 Jun
Compass 50WDG 0.1 oz				
+ Bayleton 50WDG 0.5 oz	107 a ²	198 a-d	151 bc	136 cde
Compass 50WDG 0.2 oz				
+ Bayleton 50WDG 1 oz	106 a	138 def	126 cd	107 efg
Compass 50WDG 0.1 oz	132 a	229 ab	198 a	191 a
Compass 50WDG 0.2 oz	138 a	254 a	185 ab	181 ab
Bayleton 50WDG 0.5 oz	131 a	181 b-e	146 bc	134 c-f
Bayleton 50WDG 1 oz	91 a	125 efg	93 def	83 g
Insignia 20WDG 0.9 oz	118 a	164 cde	110 cde	151 bcd
Emerald 70WDG 0.13 oz	117 a	156 cde	83 efg	105 efg
Daconil Ultrex 82.5WDG 5 oz				
+ Emerald 70WDG 0.13 oz	89 a	80 fgh	60 fg	100 fg
Daconil Ultrex 82.5WDG 5 oz				
+ Bayleton 50WDG 0.5 oz	90 a	66 gh	81 efg	107 efg
Daconil Ultrex 82.5WDG 5 oz	68 a	74 gh	87 def	107 efg
Banner Maxx 1.3ME 1 fl oz	100 a	160 cde	117 cde	119 def
Daconil Ultrex 82.5WDG 5 oz				
+ Banner Maxx 1.3ME 1 fl oz	74 a	50 h	39 g	80 g
Untreated Control	102 a	217 abc	184 ab	169 abc

²Values 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).