

Efficacy of preventative fungicide application for control of dollar spot on creeping bentgrass, 2007.

Tests were conducted on a Bridgehampton silt loam located at the Skogley Memorial Turfgrass Research Facility at the University of Rhode Island. The turf was maintained at a 0.13 in. mowing height, irrigated as needed and a total of 4 lb N was applied in four separate applications throughout the course of the season as a slow release formulation. Plots measured 5 ft x 5 ft with no borders, and were arranged in a randomized complete block design with three replicates on an original mixture of 83% ‘Penncross’ and 17% ‘Penneagle’ creeping bentgrass with approximately 20% *Poa annua* invasion. Fungicides were applied using a CO₂-pressurized hand held sprayer fitted with TeeJet 8004VS Visiflow flat fan nozzles delivering 3.2 gal/1000 sq ft at 40 psi. All treatments were first applied on 8 June as dollar spot started to appear. All other sprays were made on approximately a 14 day interval (22 Jun, 9 and 24 Jul) with two treatments made on a 21 day interval (29 Jun and 19 Jul). Hand scattered application of *S. homoeocarpa* was made to each plot on 28 May with approximately 75 g per plot of 8 week old colonized rye.

The level of disease pressure observed during this trial was moderate and similar to that observed at URI in previous years. While many products were able to suppress dollar spot at a disease threshold of 1.0%, a number of products can be considered to have performed inadequately. At the low rate, Tartan did not perform well but performed better at the higher rate and very well in combination with Signature. Headway did not provide adequate dollar spot control at the rate employed, however, higher rates have been effective in past trials at this site. Trinity performed poorly at the 21 day application interval on the last rating date but very well at a 14 day application interval. Cleary’s performed poorly on all rating dates, as has been observed on this site in previous years, suggesting the development of resistance to thiophanate-methyl. Chlorothalonil (Manicure) also performed poorly but is typically not recommended for more than a 10 day application interval for dollar spot in Southern New England. Heritage is not recommended for dollar spot use and did not provide adequate dollar spot control. Disarm did provide good control of dollar spot at the high rate but only moderate control at the lower rate. Chipco 26GT, Emerald, Insignia and Banner MAXX all provided good control of dollar spot in the current study.

| Treatment and rate per 1000 sq ft | % dollar spot | | |
|---------------------------------------------------------|---------------------|--------|---------|
| | 29 Jun ^z | 13 Jul | 27 Jul |
| Control | 3.3 b | 4.7 b | 6.7 d |
| Tartan 2.88SC 1.0 fl oz | 2.5 ab | 2.3 ab | 2.7 c |
| Tartan 2.88SC 1.5 fl oz | 1.0 ab | 1.7 a | 2.0 abc |
| Tartan 2.88SC 1.0 fl oz + Signature 80 WDG 4.0 oz | 1.0 ab | 0.7 a | 0.8 abc |
| Headway 1.4MEC 1.0 fl oz | 2.0 ab | 1.7 a | 1.7 abc |
| Chipco 26GT 2SC 4.0 fl oz | 0.3 ab | 0.2 a | 0.0 a |
| Emerald 70WG 0.13 oz | 0.0 a | 0.0 a | 0.0 a |
| Trinity 1.7SC 1.0 fl oz | 1.0 ab | 1.3 a | 1.2 abc |
| Emerald 70WG 0.13 oz (21 Days) | 0.0 a | 0.5 a | 0.5 ab |
| Trinity 1.7SC 1.0 fl oz (21 Days) | 0.6 ab | 0.5 a | 2.3 bc |
| Insignia 20WP 0.9 oz | 0.0 a | 0.0 a | 0.0 a |
| Banner MAXX 1.3MEC 1.0 fl oz | 0.0 a | 0.0 a | 0.0 a |
| Cleary’s 3336 70WP 3.0 oz | 2.3 ab | 2.7 ab | 2.3 bc |
| Heritage 50WG 0.4 oz | 1.7 ab | 2.7 ab | 2.7 c |
| Manicure Ultra 82.5WG 3.25 oz | 1.7 ab | 2.7 ab | 1.5 abc |
| Disarm 4SC 0.18 fl oz..... | 1.7 ab | 2.3 ab | 2.0 abc |
| Disarm 4SC 0.36 fl oz | 0.3 ab | 1.7 a | 1.0 abc |

^zPlots were rated based on the percentage of symptomatic plot area. Means within a column followed by the same letter are not significantly different, according to the Waller-Duncan k-ratio t-test (k=100, P≤0.05).