

**Effect of fungicides for control of dollar spot on creeping bentgrass, 2002.**

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 0.17 inch mowing height, irrigated as needed. A total of 4 lbs N was applied in four separate applications throughout the course of the season using 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 minimal *Poa annua* invasion. Fungicides were applied using a CO<sub>2</sub>-pressurized hand held sprayer fitted with TeeJet 8004V<sub>S</sub> Visiflow flat fan nozzles delivering 3.2 gal/1000 sq ft at 40 psi. All treatments were first applied on 18 Jun when dollar spot first started to appear. All other sprays were made on a 14 day interval (2 and 18 Jul), except the last spray which was made 21 days after the third spray (8 Aug).

While dollar spot activity was observed, it remained at a relatively low level (no artificial inoculation of *S. homoeocarpa* was undertaken). However, because less than 0.5% dollar spot activity would be considered aesthetically unacceptable on a putting green, the data analysis demonstrates both statistical and practical differences between treatments. Intermittent irrigation problems and high temperatures through a significant part of the summer provide a likely explanation for the low levels of disease observed. In our trials, both Daconil and Concorde were equally effective, regardless of formulation. However, efficacy of these chemicals would have probably been improved under a 10-day spray schedule. Systemic fungicides, with the exception of ProStar, all provided excellent control (0% disease) on a 14 day spray schedule. No fungicide resistance was observed. Although Heritage has been observed to increase the incidence of dollar spot in previous URI trials, it was not applied in this year’s experiments singly (it was applied in conjunction with Banner). Consequently, no increase in dollar spot incidence could be attributed to Heritage. ZeroTol was also employed in this year’s dollar spot trials and does appear to be as effective as Daconil or Concorde against dollar spot (under low disease pressure). It is likely that a 7 to 10 day spray schedule would increase ZeroTol’s effectiveness.

Treatment and rate per 1000 sq ft	% dollar spot			
	2 Jul	12 Jul	22 Jul	8 Aug
Control .....	1.7 a *	1.7 ab	1.0 b	2.3 a
Control .....	2.0 a	2.3 a	1.7 a	1.7 ab
Signature 80WG 4 oz + 26GT 2SC 4 fl oz .....	0.0 b	0.0 c	0.0 b	0.0 c
ROTATIONAL TANKMIX ** .....	0.0 b	0.7 bc	0.0 b	0.0 c
Signature 80WG 4 oz + Triton 1.67SC 1 fl oz .....	0.0 b	0.0 c	0.0 b	0.0 c
26GT 2SC 4 fl oz .....	0.0 b	0.0 c	0.0 b	0.0 c
ProStar 70WG 2.2 oz .....	0.7 b	0.7 bc	0.7 bc	1.0 abc
Triton 1.67SC 0.75 fl oz .....	0.0 b	0.0 c	0.0 b	0.0 c
Triton 1.67SC 1 fl oz .....	0.0 b	0.0 c	0.0 b	0.0 c
Triton 1.67SC 2 fl oz .....	0.0 b	0.0 c	0.0 b	0.0 c
Bayleton 25WG 2 oz .....	0.0 b	0.0 c	0.0 b	0.0 c
Banner MAXX 1.3MC 1 fl oz + Daconil Ultrex 82.5WG 3.2 oz .....	0.0 b	0.0 c	0.0 b	0.3 bc
Banner MAXX 1.3MC 1 fl oz + Heritage 50WG 0.2 oz .....	0.0 b	0.0 c	0.0 b	0.0 c
Banner MAXX 1.3MC 1 fl oz + Heritage 50WG 0.2 oz + Primo 1MEC 0.25 fl oz .....	0.0 b	0.0 c	0.0 b	0.0 c
Banner MAXX 1.3MC 1 fl oz + Heritage 50WG 0.2 oz + Primo 1MEC 0.25 fl oz .....	0.0 b	0.0 c	0.0 b	0.0 c
MANhandle WP 10 oz .....	0.0 b	0.0 c	0.0 b	0.0 c
Concorde 82.5DF 3.2 oz .....	0.3 b	0.3 bc	0.3 b	1.0 abc
Concorde SST 6F 3.5 fl oz .....	0.7 b	0.7 bc	0.3 b	1.0 abc
Daconil Ultrex 82.5WG 3.2 oz .....	0.3 b	0.3 bc	0.0 b	0.7 bc
Daconil Weather Stik 6F 3.5 fl oz .....	0.3 b	0.3 bc	0.0 b	1.0 abc
Concorde 82.5DF 3.2 oz + Pentathlon DF 6 oz .....	0.3 b	0.3 bc	0.0 b	0.7 bc
Concorde SST 6F 3.5 fl oz + Pentathlon LF 14 fl oz .....	0.0 b	0.0 c	0.0 b	0.0 c
Spectro 90WG 4 oz .....	0.0 b	0.0 c	0.0 b	0.0 c
Spectro 90WG 4 oz + Alliance 3 fl oz .....	0.0 b	0.0 c	0.0 b	0.0 c
ZeroTol 1.25 fl oz .....	0.3 b	0.7 bc	0.3 b	0.7 bc

\* Plots were rated based on the percentage of symptomatic plot area. Means within a column followed by the same letter are not statistically different, according to the General Linear Model procedure and of the SAS (Cary, NC) Waller-Duncan k-ratio t-test (k=100, P=0.05)

\*\* Rotational Tankmix = Combination of three separate treatments, applied as a standard rotation: 1<sup>st</sup> Application: Signature 80WG 4 oz + Triton 1.67SC 1 fl oz, 2<sup>nd</sup> Application: Signature 80WG 4 oz + Daconil Ultrex 82.5WG 3.8 oz, 3<sup>rd</sup> Application: Banol 6SL 2 fl oz + Compass 50WG 0.15 oz + 26GT 2SC 4 fl oz.