

## Dollar Spot Fungicide Trial - 1997

Hancock Turfgrass Research Center  
Michigan State University, E. Lansing, MI

The 1997 dollar spot (*Sclerotinia homoeocarpa*) fungicide trial was conducted on an irrigated Emerald creeping bentgrass green at the Hancock Turfgrass Research Center on the MSU campus in E. Lansing, MI. The green was maintained at 1/4" height of cut and was fertilized with 3/8 lb. nitrogen/1000 ft<sup>2</sup>/mo. Treatments were applied preventively to 2' x 9' plots in four replications in a randomized block design on 7, 14, 21, or 28 day re-treatment schedule, as indicated in the data tables. Treatments were applied with a CO<sub>2</sub>, back-pack sprayer at a volume of 48 GPA, except as noted in the data tables. Sprayer pressure was 42 PSI and a flat-fan, 8002E nozzle was utilized.

By the last rating date (9/22), the 7 day treatments had been applied 7 times (8/8, 8/15, 8/23, 8/29, 9/5, 9/12, 9/19), the 14 day treatments had been applied 4 times (8/8, 8/23, 9/5, 9/19), the 21 day treatments had been applied 3 times (8/8, 8/29, 9/19), and the 28 day treatments had been applied twice (8/8, 9/5), except as noted on the data tables. The dollar spot strains in this plot area are benzimidazole-resistant. No objectionable phytotoxicity was observed, except as noted in the data tables.

As the data in table 30 indicates, most treatments gave statistically significant disease control, compared to the untreated control. Statistical separation among the treatment means was less clear cut, but all treatments gave statistically significant disease control, compared to the untreated control. Disease pressure continued to increase steadily in the plot area throughout the duration of this study.

Table 3. Dollar Spot Fungicide Study - 1997  
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Rating Scale: Percent plot area infected.  
 Rating Date: September 16, 1997

Treatment	Rate/1000 ft <sup>2b</sup>	Interval	I	II	III	IV	AVG. (LSD-.05) <sup>a</sup>
CGA-BMP	0.5 oz	7 days	0	0	0	0	0G
CGA-BMP	1 oz	14 days	0	0	0	0	0G
CGA-BMP + Primo	0.5 oz + 0.1 fl oz	14 days	0	0	0	0	0G
CH.26019 FLO	4 fl oz	14 days	0	0	0	0	0G
EXP 10790A	4 fl oz	14 days	0	0	0	0	0G
EXP 10702B	4 fl oz	14 days	0	0	0	0	0G
Thalonil (4L) + Heritage	6.2 fl oz + 0.4 oz	14 days	0	0	0	0	0G
Terraguard + Dac. Weather Stik	2 oz + 2.2 fl oz	14 days	0	0	0	0	0G
Terraguard + Dac. Weather. Stik.	1 oz + 4 fl oz	14 days	0	0	0	0	0G

Table 3. cont.							
Treatment	Rate/1000 ft <sup>2b</sup>	Interval	I	II	III	IV	AVG. (LSD-.05) <sup>a</sup>
Procymidone <sup>c</sup>	1 oz	14 days	0	0	0	0	0G
Procymidone <sup>c</sup>	3 oz	14 days	0	0	0	0	0G
Procymidone <sup>c</sup>	5 oz	14 days	0	0	0	0	0G
Signature + CH.26 GT	4 oz + 3 fl oz	14 days	0	0	0	0	0G
Dac. Weather Stik	4 fl oz	14 days	0	0	0	0	0G
CGA-BMP	0.5 oz	14 days	.25	0	0	0	.06G
Banner MAXX	1 fl oz	21 days	0	0	0	.25	.06G
CH.26019 FLO	3 fl oz	14 days	0	0	0	.25	.06G
EXP 80318A	0.5 fl oz	14 days	.25	0	0	0	.06G
Signature + CH.26GT + Heritage	4oz + 3 fl oz + 0.2 oz	14 days + 14 days + 28 days	0	.25	0	0	.06G
Heritage + CH.26GT	0.2 oz + 3 fl oz	28 days + 14 days	0	0	0	.25	.06G
EXP 80318A	1 fl oz	14 days	.25	0	0	.25	.13G
EXP 10702B	3 fl oz	14 days	0	0	.25	.25	.13G
Eagle	1.2 oz	28 days	.25	.25	.25	0	.19G
Bayleton	1 oz	21 days	0	.25	.25	.25	.19G
Terraguard	4 oz	14 days	1	0	0	0	.25G
EXP 10790A	3 fl oz	14 days	.25	0	.25	.5	.25G
Heritage + Dac. Ultrex	0.2 oz + 3.8 oz	28 days + 14 days	.5	.25	.5	0	.31G
Rubigan AS	2 fl oz	21 days	1	0	0	.25	.31G
A-815-50WP -EXP	2 fl oz	14 days	.33	0	0	1	.31G
EXP 10702B	2 fl oz	14 days	.25	0	2	.25	.63G
EXP 10790A	2 fl oz	14 days	.5	.25	.25	2	.75FG
Thalonil (4L)	6.2 fl oz	14 days	0	.25	0	3	.81FG
Dac. Ultrex	3.8 oz	14 days	0	0	2	2	1.0FG

Table 3. cont.

Treatment	Rate/1000 ft <sup>2b</sup>	Interval	I	II	III	IV	AVG. (LSD-.05) <sup>a</sup>
CH26019 + 3336F	2 fl oz + 2 fl oz	14 days	.25	3	0	1	1.06FG
Thalonil (90F)	3.5 fl oz	14 days	.25	0	0	5	1.31FG
WAC 71	4 oz	14 days	1	.25	2	3	1.56FG
CH.26019 FLO	2 fl oz	14 days	.5	5	.25	.5	1.56FG
Terraguard	2 oz	14 days	5	3	0	.25	2.06FG
Dac. Weather Stik	2.2 fl oz	14 days	10	20	.25	2	8.1E
Terraguard	1 oz	14 days	7	3	3	20	8.25E
A-815-50WP -EXP	1 oz	14 days	15	3	7	12	9.25E
Heritage	0.2 oz	14 days	35	35	40	40	37.5 BC
Control	---	---	40	35	40	40	38.8B

<sup>a</sup>Treatment means followed by the same letter are not significantly different from each other at the 5% level (LSD-.05).

<sup>b</sup>Rates are formulation/1000 ft<sup>2</sup>.

<sup>c</sup>Applied in 2x water rate (2 gal/1000 ft<sup>2</sup>).

#### Brown Patch Fungicide Study - 1997

Hancock Turfgrass Research Center  
Michigan State University, E. Lansing, MI

The 1997 brown patch fungicide study was conducted on a mixed stand of colonial bentgrass and annual bluegrass at the Hancock Turfgrass Research Center on the campus of MSU in E. Lansing, MI. The turf was maintained at about 1 1/2 inches, was well irrigated, and was fertilized with 1/2 # N/1000 ft<sup>2</sup> per week. To encourage disease development, plots were inoculated with *Rhizoctonia solani*, the causal agent of brown patch. The inoculum was grown on a sand/cornmeal medium and applied with a drop spreader over the entire study area on a weekly basis from 6/10/97 through 8/4/97. In addition, for better disease development, plots were covered at night with plastic greenhouse trays to maintain humidity. Treatments were applied preventively to 4 replications of 2' x 4.5' plots arranged in a randomized complete block design. Treatments were applied beginning on 6/24/97, unless otherwise indicated, with re-applications made according to company protocols as listed in the data table. Spray applications were made using a CO<sub>2</sub> back pack sprayer at a 48 GPA spray volume. Sprayer pressure was 42 PSI and a flat-fan (8002E) nozzle was utilized.

Data were collected by visually estimating the percent of the area covered by the plastic greenhouse trays in each plot which was infected with brown patch (see Table 4.) Areas that were not covered at night did not develop disease symptoms. As it was a relatively cool summer, disease development was not as strong as we like and there was some variability in disease pressure. The control plots had an average of only 11% infection, and this, coupled with the variability in pressure, led to statistical separation of treatment means which was not as strong as we usually see. No phytotoxicity was observed.