

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.

Table 4. Brown Patch Fungicide Study - 1997.  
**Hancock Turfgrass Research Center, E. Lansing, MI.**

**Rating scale: Percent area under pan infected.**

**Rating date: July 29, 1997.**

Treatment	Rate/1000 ft <sup>2</sup>	Interval	I	II	III	IV	Ave. (LSD <sup>a</sup> )
WAC 71	4 oz	14 days	0	0	0	0	0 I
A815-50W Expt.	2 oz	14 days	0	0	0	2	0.5 HI
Dac. Ultrex	3.8 oz	14 days	0	2	0	1	0.8 HI
Terraguard + Dac. 2787	1 oz + 5.8 fl oz	14 days	0	1	2	0	0.8 HI
Heritage	0.2 oz	21 days	5	0	0	0	1.3 G-I
Dac. Weather Stik	3.6 fl oz	10 days	0	5	0	0	1.3 G-I
Thalonil 4L	6 fl oz	14 days	0.5	5	0	0	1.4 G-I
Dac. 2787	3.1 fl oz	14 days	0	1	0.5	5	1.6 G-I
Heritage	0.4 oz	21 days	1	5	1	0	1.8 G-I
Procymidone	3 oz <sup>b</sup>	14 days	5	0	2	0	1.8 G-I
A815-50W Expt.	1 oz	14 days	0	1	0	7	2 G-I
Terraguard	1 oz	14 days	5	0.5	3	0	2.1 F-I
Terraguard + Dac 2787	2 oz + 3.1 fl oz	14 days	1	1	2	5	2.3 F-I
Procymidone	10 oz <sup>b</sup>	14 days	0	10	0	0	2.5 F-I
Terraguard	4 oz	14 days	0	0	10	0	2.5 F-I
Spotrete	5 oz	7 days	0.5	0	0	10	2.6 F-I
Procymidone	5 oz <sup>b</sup>	14 days	0.5	5	0	5	2.6 F-I
RH-0753	0.25 oz ai	June 10 only	0	5	10	0	3.8 E-I

Table 4. cont.

Treatment	Rate/1000 ft <sup>2</sup>	Interval	I	II	III	IV	Ave. (LSD <sup>a</sup> )
RH-0753	0.5 oz ai	28 days	0	0.5	10	5	3.9 E-I
Thalonil 90 DF	3.5 oz	14 days	2	0	15	0	4.3 E-I
RH-0753	0.25 oz ai	28 days	5	15	0	0	5 D-I
Terraguard	2 oz	14 days	10	15	0	0	6.3 C-I
Prostar	3 oz	21 days	10	10	2	5	6.8 C-I
Prostar Plus	2.5 oz	28 days	5	5	5	20	8.8 C-I
3336 WP	4 oz	14 days	5	5	5	20	8.8 C-I
RH-0753	0.5 oz ai	June 10 only	2	25	5	10	10.5 C-H
RH-0753	0.5 oz ai	June 10 + June 24	10	15	10	10	11.3 C-G
Ch 26GT + 3336 F	2 fl oz+ 2 fl oz	14 days	25	20	0	0	11.3 C-G
Control	-----	-----	5	5	5	30	11.3 C-G
RH-0753	0.25 oz ai	June 10 + June 24	5	40	30	25	25 B

<sup>a</sup>Means followed by the same letter are not significantly different from each other based on the least significant difference test (LSD) at the 5% level.

<sup>b</sup>Treatments applied in 3x water rate (3 gal/1000 ft<sup>2</sup>.)

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

The 1997 Pythium blight fungicide study was conducted on a perennial ryegrass/annual bluegrass mixed stand at the Hancock Turfgrass Research Center on the campus of MSU in E. Lansing, MI. The turf was maintained at about a 1 1/2 inch height of cut and was fertilized with 1/2 # N/1000 ft<sup>2</sup> per week. To encourage disease development, plots were inoculated with *Pythium aphanidermatum*, the causal agent of Pythium blight. 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 and/or a large plastic tarp 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 until 8/19/97. 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 on July 18 and July 29, 1997 by visually estimating the percent of the plot area which was infected with Pythium blight (see Table 5.) As it was a relatively cool summer, disease development was weak and the control plots averaged only 15% disease. However, there was significant disease control by the chemical standards. No phytotoxicity was observed.