

irrigation during periods when the weather was conducive to disease outbreak (hot and humid). The initial application was made on July 9 and treatments were re-applied on a 14 day schedule through Sept. 3 (7/9, 7/23, 8/6, 8/21).

Brown patch disease first appeared during the week of July 15. By July 23, sufficient disease was present for a rating to be taken (Table 7), although disease pressure and distribution were not optimal. Disease pressure peaked around July 23 and gradually abated. No other diseases were noted in the plot area this year, nor were any phytotoxic effects noticed.

#### Necrotic Ring Spot Fungicide Study - 1986

The 1986 necrotic ring spot fungicide study was conducted at the Countryplace Apartment Complex in Novi, MI, on an irrigated Kentucky bluegrass lawn area which was severely infected with necrotic ring spot (Leptosphaeria korrae) disease. The disease has been intermittently active for a number of years on this location.

Studies were initiated in June with subsequent applications being made on 21 and 28 day intervals through mid-October. In past years, the disease has been observed to be active in July and in October, depending on the year. This year, however, no activity was observed and the area gradually improved through the summer and fall. Therefore, no data was available from this study this year. No phytotoxic effects were observed.

#### Red Thread Fungicide Study - 1986

The 1986 red thread (Laetisaria fuciformis) fungicide study was conducted on a mixed seeding of perennial ryegrass and Kentucky bluegrass on the MSU campus. The study was initiated curatively on August 5 following a mild disease outbreak. Treatments were applied on a 14 or 21 day schedule through the end of September. Unfortunately, the cool, rainy late summer period inhibited further disease development and disease pressure gradually abated in the controls and the treated plots. No data was available. There was some mild phytotoxicity associated with the PP 523 and SAN 619 treatments which resembled the effects observed with these products in the Emerald bentgrass dollar spot study.

#### Brown Patch Fungicide Studies - 1986

The 1986 brown patch (Rhizoctonia solani) study was conducted on the MSU campus on a simulated lawn perennial ryegrass (*Lolium perenne* L.) area which was heavily fertilized and irrigated in order to promote brown patch disease development. The study was laid out in three replications of a random block design with a 6' x 9' plot size. Treatments were applied with a CO<sub>2</sub> small plot sprayer at a volume of 48 gal/acre and 30 PSI. The initial application was made curatively on July 15 with treatments being re-applied through August 27 on either 10, 14 or 21 day schedules.

Disease pressure in the plot area persisted for only a 10 day

period in July. Since treatments were applied curatively, there was insufficient time to determine which treatments were effective against the disease. Disease ratings were taken but are omitted from this report because of ununiform disease pressure in the controls and lack of disease control by such standards as Daconil 2787 and Bayleton.

Table 1. Boyne Highlands Snow Mold Fungicide Study - 1985-86

Boyne Highlands Resort, Harbor Springs, MI

Plots rated 4/2/86

Percent plot area infected with all three snow mold organisms

<u>Treatment</u>	<u>Rate/1000 ft<sup>2</sup></u>	<u>I</u>	<u>II</u>	<u>III</u>	<u>Ave. DMR<sup>1</sup></u>
Scotts F + FII	2X	0	1	1	.7 A
Calo-Clor	3 oz	2	1	5	2.7 AB
Daconil 2787 + Tersan 1991	8 fl oz + 2 oz	10	0	10	6.7 ABC
Scotts F + FII	1X	5	15	5	8.3 ABCD
Calo-Gran SN 84364	6 lbs	10	2	15	9.0 ABCD
+ Prochloraz	5 oz + 7 fl oz	15	10	2	9.0 ABCD
Rizolex WP	6.5 oz ai.	10	7	20	12.3 ABCDE
PMAS	2 fl oz	15	5	20	13.3 ABCDE
Rizolex WP	3.3 oz ai.	5	15	30	16.7 ABCDE
Rizolex FL	1.6 oz ai.	10	2	40	17.3 ABCDE
Rizolex FL	3.3 oz ai.	10	20	30	20.0 ABCDE
Rizolex FL	4.9 oz ai.	25	20	15	20.0 ABCDE
Rizolex FL	6.5 oz ai.	35	10	20	21.7 ABCDE
PMAS + Fluf	2 fl oz + 1/4 lb.N.	30	20	15	21.7 ABCDE
Rizolex WP	4.9 oz ai.	10	30	30	23.3 BCDE
PMAS + Fluf	2 fl oz + 1/2 lb.N.	25	25	30	26.7 CDEF
Rizolex WP	4.9 oz ai.	7	30	50	29.0 DEFG
PMAS + Urea	2 fl oz + 1/2 lb.N.	15	20	60	31.7 EFGH
BRC 916 + X-77	4 gm ai. + .05%	30	60	45	45.0 FGHI
SN 843664 + X-77	7 oz + .05%	40	60	50	50.0 GHIJ
BRC 916 + X-77	2 gm ai. + .05%	15	50	90	51.7 HIJK
SN 84364	4.8 oz	40	60	60	53.3 IJK
SN 84364	6 oz	55	40	75	56.7 IJKL
PP 450	2 gm ai.	60	60	60	60.0 IJKL
Control	--	70	80	50	66.7 JKL
SN 84364 + X-77	5 oz + .05%	70	50	85	68.3 KL
PP 450	4 gm ai.	60	80	80	73.3 L
NC 28410	10 fl oz	80	60	90	76.7 L

<sup>1</sup> Treatments followed by the same letter are not significantly different from each other at the 5% level of significance.