

**TURFGRASS DISEASE MANAGEMENT REPORT - 1990-91**  
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## **INTRODUCTION**

The fungicide field trials conducted this year were established under a standard format of 3 replications/treatment in a randomized block design. Plot size was generally 6' x 9', with the exception of the dollar spot trial on creeping bentgrass and the melting-out fungicide trials on Kentucky bluegrass where a 3' x 6' plot was used.

All sprayable (WP, WDG, FL, EC, etc.) treatments were applied with a CO<sub>2</sub> back-pack sprayer utilizing Tee-jet flat fan nozzles (8002E) producing 48 gal. of spray volume/acre at 30 PSI. Granular (non-sprayable) treatments were pre-weighed and hand-applied.

Data were analyzed using an analysis of variance test and a Duncan's multiple range test at a 5% level of significance.

A list of all compounds tested this season is included at the end of this report, providing formulation and manufacturer information.

## **SNOW MOLD FUNGICIDE STUDY - 1990-91**

### **Boyne Highland Resort, Harbor Springs, MI**

The 1990-91 snow mold (*Typhula incarnata*, *Typhula ishikariensis*) fungicide study was conducted at the Boyne Highlands Resort in Harbor Springs, MI, on an irrigated, moderately fertilized Pennecross (*Agrostis palustris*) creeping bentgrass/annual bluegrass (*Poa annua*) fairway which was mowed at 1/2" height of cut. Treatments were applied preventively on 10/29/91.

The plots were rated as soon as the snow cover melted off on 4/5/91. The predominant gray snow mold organism present this year was *Typhula incarnata*. Disease pressure was moderate this year, but most treatments gave significant control of the disease compared with the untreated control. Among the many effective treatments were traditional standards such as the mercuries, Terraclor, Scotts FFII, and Daconil 2787 with Chipco 26019, Fungo 50, or Tersan 1991, and a number of new experimental materials such as Rizolex, Sentinel and SAN 832.

Table 1. Snow Mold Fungicide Study - 1990-91

Boyne Highlands Resort, Harbor Springs, MI  
 Percent plot area infected with gray snow mold  
 (*Typhula incarnata*, *Typhula ishikariensis*) on 4/5/91

Treatment	Rate/1000 ft <sup>2b</sup>	I	II	III	AVE	DMR <sup>a</sup>
Terraclor (F)	.75 lb. ai.	0	1	0	.33	D
Calo-Clor	3 oz	0	1	0	.33	D
D. 2787 + Ch. 26019	8 fl oz + 4 fl oz	0	1	1	.67	D
D. 2787 + Fungo 50 (F)	8 fl oz + 2 fl oz	0	1	2	1.0	D
Rizolex	85.05 gm ai	1	1	1	1.0	D
Terraclor (F)	.375 lb ai	3	1	1	1.67	D
D. 2787 + ASC. 67019	8 fl oz + 1:40 dilution	3	1	3	2.33	D
SAN. 619 F	7.56 gm ai	5	2	0	2.33	D
Terraclor (W)	.375 lb ai	2	1	5	2.67	D
Scts. FFII	1 X	2	3	5	3.33	D
ASC. 66791	8 oz	0 <sup>d</sup>	10 <sup>c</sup>	0 <sup>c</sup>	3.33	D
D. 2787	16 fl oz	0	7	3	3.33	D
Scts. FFII	2X	1	5	5	3.67	D
San 832 F	63.78 gm ai	0	10	1	3.67	D
Terraclor (F) + G-425	.1875lb ai+.1875lb ai	0	1	10	3.67	D
D.2787 + Tersan 1991	8 fl oz + 2 oz	5	1	7	4.33	D
D. 2787 + ASC. 67019	16 fl oz+ 1:40 dilution	1	10	3	4.67	D
San 832 F	85.04 gm ai	0	0	15	5.0	D
Ch. 26019	4 fl oz	10	1	10	7.0	D
D. 2787 + Fungo 50 (F)	4 fl oz + 8 fl oz	15	7	1	7.67	D
Vorlan + Fungo 50 (F)	4 fl oz + 8 fl oz	10	3	10	7.67	D
San 619 F	3.78 gm ai	10	10	3	7.67	D
Vorlan	4 fl oz	7	7	10	8.0	D
D. 2787	8 fl oz	10	7	7	8.0	D
Calo Gran	6 lbs	20	3	1	8.0	D
PCNB (G)	7.5 lbs	25	1	1	9.0	D
D. 2787	8 fl oz	2	5	20	9.0	D
EXP. 10064 B	1.5 fl oz	10	5	15	10.0	D
EXP. 10064 B	3 fl oz	20	3	7	10.0	D

Table 1. Snow Mold Fungicide Study - 1990-91 (cont.)

Treatment	Rate/1000 ft <sup>2b</sup>	I	II	III	AVE	DMR <sup>a</sup>
Ch. 26019 + EXP 10064 B	4 fl oz + 1.5 fl oz	15	10	5	10.0	D
ASC. 66791 + ASC. 67019	8 oz + 1:40 dilution	0	1	30	10.33	D
Ch. 26019	4 fl oz	15	7	10	10.67	D
Vorlan + Fungo 50 (F)	2 fl oz + 2 fl oz	5	7	20	10.67	D
Vorlan	2 fl oz	7	7	20	11.33	D
Terraclor (F) + G-425	.094 lb ai + .094 lb ai	15	5	15	11.67	D
Terraclor (W)	.1875 lb ai	20	7	20	15.67	CD
Terraclor (F)	.1875 lb ai	7	20	20	15.67	CD
PCNB (G)	5 lbs	20	2	30	17.33	BCD
Urea	1 lb N	25	20	10	18.33	BCD
Lesco Elite + PCNB	4 lbs	25	10	20	18.33	BCD
Sustane	½ lb N	30	15	15	20.0	BCD
Lesco Elite + PCNB	6 lbs	25	15	20	20.0	BCD
Control	—	40	40	15	31.67	ABC
Urea	½ lb N	60	15	25	33.33	ABC
ASC 67019	1:40 dilution	35	20	50	35.0	AB
Fungo 50 (F)	8 fl oz	35	40	30	35.0	AB
Fungo 50 (F)	2 fl oz	50	35	35	40.0	A
Turf Restore	½ lb N	40	15	70	41.67	A
Turf Restore	1 lb N	35	20	80	45.0	A
Sustane	1 lb N	75	35	30	46.67	A

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

<sup>b</sup>Rates listed are formulation unless listed as "ai" (active ingredient).

<sup>c</sup>Mild phytotoxicity observed.

<sup>d</sup>Moderately severe phytotoxicity observed.