

MICHIGAN STATE UNIVERSITY TURFGRASS DISEASE MANAGEMENT REPORT FOR 1982

J. M. Vargas, Jr., R. Detweiler, and V. Sheridan  
Department of Botany and Plant Pathology  
Michigan State University

Snow Mold Fungicide Trials - 1981-82

The 1981-82 snow mold fungicide trials were conducted at the Boyne Highlands Resort on Penncross creeping bentgrass mowed at 1/2". Treatments were applied to 6' x 9' plots in three replications of a random block design on October 30, 1981. The wettable powders and flowables were applied with a small-plot CO<sub>2</sub> sprayer at a volume of 40 gal/acre. The granular applications were pre-weighed and applied by hand. The plot ratings were made on April 29, 1982. (Tables 1,2 and 3)

Helminthosporium (Melting-Out) Fungicide Studies - 1982

The 1982 Helminthosporium melting-out (Helminthosporium vagans) fungicide study was conducted at the Hancock Turfgrass Research Center on the Michigan State University campus on Kenblue Kentucky bluegrass maintained at 1 1/2" height of cut. Fungicides were applied at various intervals as indicated in the data chart with all treatments being applied for the first time on May 10. When fungicide treatments were suspended, the 10 day treatments had been applied 5 times, the 14 day treatments had been applied 4 times, and the 28 day treatments had been applied twice. All treatments were applied with a CO<sub>2</sub> small-plot sprayer at a volume of 40 gal/acre.

The study was set up in a randomized block design consisting of three replications/treatment with a plot size of 3' x 6'. The plots were rated for disease and phytotoxic effects on June 28, 1982. (Table 4)

Table 1

Boyne Highlands Snow Mold Study - 1981-82

Percent area infected with all snow molds (Typhula incarnata, Typhula ishkariensis, and Fusarium nivale)

Ratings taken 4/29/82

<u>Treatment</u>	<u>Rate/1000 ft<sup>2</sup></u>	<u>Repetition</u>				DMR
		I	II	III	AVE	
Calo-Gran	6 lbs	0	0	0	0	A
Calo-Clor	3 oz.	0	0	0	0	A
BAS 43600 + Chipco 26019	8 oz. + 4 oz.	1	0	0	.3	A
Scotts F + F II	2X	5	2	0	2.3	A
Scotts F + F II	1X	0	1	15	5.3	AB
BAS 43600 + Chipco 26019	4 oz. + 4 oz.	10	5	1	5.3	AB
Daconil 2787 FL	16 fl. oz.	10	10	5	8.3	ABC
Terraclor GR	60 oz.	10	15	5	10	ABC
Terraclor WP	8 oz.	20	5	5	10	ABC
Daconil 2787 FL	8 fl. oz.	2	10	30	14	ABCD
Acti-dione RZ	8 oz.	25	15	5	15	ABCD
EL 222	4 lb. ai./A	15	6	30	17	ABCDE
Terraclor WP	4 oz.	20	15	20	18.3	ABCDE
BAS 43600	8 oz.	20	20	30	23.3	ABCDE
EL 222	1 lb. ai./A	25	16	30	23.7	ABCDE
EL 222	3 lb. ai./A	40	30	20	30	BCDEF
Chipco 26019	4 oz.	5	50	35	30	BCDEF
Terraclor GR	30 oz.	20	30	50	33.3	CDEFG
OAC 3890	4 oz.	40	30	40	36.7	DEFGH
EL 222	2.5 lb. ai./A	25	60	25	36.7	DEFGH
EL 222	2 lb. ai./A	15	60	40	38.3	DEFGH
Tersan SP	9 oz.	50	60	7	39	DEFGH
OAC 3890 GR	32 oz.	35	40	50	41.7	EFGH
OAC 3890 GR	16 oz.	50	50	50	50	FGHI
Check	-	70	40	40	50	FGHI
BAS 43600	4 oz.	40	50	60	50	FGHI
Oxamide C	2 lb. N.	75	40	50	55	FGHI
OAC 3890	2 oz.	60	60	50	56.7	GHI
Oxamide FA	2 lb. N.	70	85	30	61.7	HI
Oxamide C	1 lb. N.	80	60	70	70	I
Oxamide FA	1 lb. N.	80	70	70	73.3	I

Treatments followed by the same letter are not significantly different from each other at the 5% level.

Table 2

## Boyne Highlands Snow Mold Study - 1981-82

Percent area infected with Typhula incarnata snow mold

Ratings taken 4/29/82

<u>Treatment</u>	<u>Rate/1000 ft<sup>2</sup></u>	<u>Repetition</u>				DMR
		I	II	III	AVE	
BAS 43600 + Chipco 26019	8 oz. + 4 oz.	0	0	0	0	A
Chipco 26019	4 oz.	0	0	0	0	A
Calo-Gran	6 lbs	0	0	0	0	A
Calo-Clor	3 oz.	0	0	0	0	A
Daconil 2787 FL	8 fl. oz.	2	3*	0	1.7	A
Scotts F + F II	2X	5	0	0	1.7	A
EL 222	4 lb. ai./A.	0	6*	0	2	A
BAS 43600 + Chipco 26019	4 oz. + 4 oz.	5	5	0	3.3	A
Tersan SP	9 oz.	0	10	0	3.3	A
Terraclor WP	8 oz.	0	5	5	3.3	A
Scotts F + F II	1X	0	0	15	5	AB
Daconil 2787 FL	16 f. oz.	7	10*	5*	7.3	AB
Terraclor GR	60 oz.	5	15	5	8.3	AB
EL 222	3 lb. ai./A	0	15	10	8.3	AB
EL 222	1 lb. ai./A	20*	8	0	9.3	ABC
OAC 3890 WP	4 oz.	15*	15	0	10	ABC
Oxamide FA	2 lb. N.	35	0	0	11.7	ABCD
EL 222	2 lb. ai./A	5*	20	10	11.7	ABCD
Terraclor WP	4 oz.	10	15*	10	11.7	ABCD
Acti-dione RZ	8 oz.	25	15	5	15	ABCDE
Oxamide C	2 lb. N.	25	20	0	15	ABCDE
OAC 3890 WP	2 oz.	20	20	10	16.7	ABCDE
BAS 43600	8 oz.	20	20	30	23.3	BCDEF
Oxamide C	1 lb. N.	10	40	30	26.7	CDEF
Terraclor GR	30 oz.	5	30	50	28.3	DEF
OAC 3890 GR	16 oz.	30	30	30	30.0	EF
OAC 3890 GR	32 oz.	30	37.5*	25	30.8	EF
Check	-	50	40	20	36.7	FG
Oxamide FA	1 lb. N.	60	30	30	40	FG
BAS 43600	4 oz.	40	50	60	50	G

\*Plots showing infection by Fusarium patch (Fusarium nivale) as well as Typhula blight (Typhula incarnata).

Treatments followed by the same letter are not significantly different from each other at the 5% level.

Table 3  
 Boyne Highlands Snow Mold Study - 1981-82  
 Percent area infected with Typhula ishikariensis snow mold  
 Ratings taken 4/29/82

Treatment	Rate/1000 ft <sup>2</sup>	Repetition				DMR
		I	II	III	AVE	
BAS 43600	4 oz.	0	0	0	0	A
BAS 43600	8 oz.	0	0	0	0	A
Calo-Gran	6 lbs	0	0	0	0	A
Calo-Clor	3 oz.	0	0	0	0	A
Acti-dione RZ	8 oz.	0	0	0	0	A
BAS 43600 + Chipco 26019	8 oz. + 4 oz.	1	0	0	.3	A
Scotts F + F II	1X	0	1	0	.3	A
Scotts F + F II	2X	0	2	0	.7	A
Daconil 2787 FL	16 fl. oz.	3	0	0	1	A
Terraclor GR	60 oz.	5	0	0	1.7	AB
BAS 43600 + Chipco 26019	4 oz. + 4 oz.	5	0	1	2	AB
Terraclor GR	30 oz.	15	0	0	5	ABC
Terraclor WP	4 oz.	10	0	10	6.7	ABC
Terraclor WP	8 oz.	20	0	0	6.7	ABC
OAC 3890 GR	32 oz.	5	2.5	25	10.8	ABCD
Daconil 2787 FL	8 fl. oz.	0	7	30	12.3	ABCD
Check	-	20	0	20	13.3	ABCD
EL 222	1 lb. ai./A	5	8	30	14.3	ABCD
EL 222	4 lb. ai./A	15	0	30	15	ABCDE
OAC 3890 GR	16 oz.	20	20	20	20	ABCDEF
EL 222	3 lb. ai./A.	40	15	10	21.7	ABCDEF
OAC 3890 WP	4 oz.	25	15	40	26.7	BCDEFG
EL 222	2 lb. ai./A	10	40	30	26.7	BCDEFG
EL 222	2.5 lb. ai./A	25	40	20	28.3	CDEFG
Chipco 26019	4 oz.	5	50	35	30	CDEFG
Oxamide FA	1 lb. N.	20	40	40	33.3	DEFG
Tersan SP	9 oz.	50	50	7	35.7	DEFG
OAC 3890	2 oz.	40	40	40	40	EFG
Oxamide C	2 lb. N.	50	20	50	40	EFG
Oxamide C	1 lb. N.	70	20	40	43.3	FG
Oxamide FA	2 lb. N.	35	85	30	50	G

Treatments followed by the same letter are not significantly different from each other at the 5% level.