TURFGRASS DISEASE MANAGEMENT REPORT FOR 1985-1986

J. M. Vargas, Jr., R. Detweiler, M. Hendricks, S. Beiber, T. McNally, and S. Buchner Department of Botany and Plant Pathology Michigan State University

Snow Mold Fungicide Trial - 1985-1986

The 1985-1986 snow mold fungicide studies were conducted at the Boyne Highlands Resort in Harbor Springs, MI, on irrigated Penncross creeping bentgrass fairways which were mowed at 1/2" height of cut. Treatments were applied preventively to 6' x 9' plots in three replications of a random block design on November 7, 1985. The sprayable formulations were applied with a CO₂ small-plot sprayer at a volume of 48 gal/acre and 30 PSI. The granular treatments were preweighed and applied by hand. The plots were rated for disease on April 2, 1986, immediately following snow cover melt-off.

As can be seen from the controls (Table 1), disease pressure was moderately severe this year. There was, however, a good deal of variation in disease pressure within some of the listed treatments. The standard treatments (Calo-Clor, Calo-Gran, Scotts F + F II, Daconil 2787 + Tersan 1991), however, continued to show consistently effective control of all three snow mold organisms (<u>Typhula incarnata</u>, <u>Typhula ishikariensis</u>, <u>Fusarium nivale</u>).

No phytotoxicity was observed.

Kentucky Bluegrass Melting-out Fungicide Trial - 1986

The 1986 <u>Dreschlera poae</u> (formerly <u>Helminthosporium vagans</u>) fungicide trial was conducted at the Hancock Turfgrass Research Center on the MSU campus on Kenblue Kentucky bluegrass maintained at 1 1/2" height of cut. The study was set up in a random block design consisting of three replications/treatment with a plot size of 3' x 6'. All treatments were applied with a CO₂ small-plot sprayer at 30 PSI at a volume of 48 gal/acre.

Treatments were initiated curatively on May 2 with subsequent applications being made on 14, 21 or 28 day intervals as indicated on the data table. The plots were rated on June 13, at which time the 14 day treatments had been applied three times (5/2, 5/17, 5/30) and the 21 and 28 day treatments had been applied twice (5/2, and 5/24 or 5/30 respectively).

Disease pressure was moderate this year so the treatments were clustered in a relatively narrow range (Table 2). Most of the compounds tested, however, did give significant disease control compared to the controls.

No phytotoxicity was observed.

Table 2. Kentucky Bluegrass Melting-Out Fungicide Trial - 1986

Hancock Turfgrass Research Center, MSU, E. Lansing, MI Disease rating scale: 1 (no disease) - 9 (90% infection) Plots rated 6/13/86

Treatment	<u>Rate/1000 ft²</u>	<u>Interval</u>	Ī	<u>ΙΙ</u>	III	<u>Ave.</u>	$\underline{\mathtt{DM}}\underline{\mathtt{R}}^1$
Prochloraz	4.5 fl oz	14 day	2	2	2	1.7	А
Prochloraz - MN/Dac. 2787	6.9 oz	14 day	2	1	2	1.7	A
Daconil 2787	6 fl oz	14 day	1	2	2	1.7	А
Chipco 26019 (50 WP)	2 oz ai.	21 day	3	2	2	2.3	AB
Chipco 26019 (4 FL)	.5 oz ai.	21 day	4	2	1	2.3	AB
DPXH6573	.25 oz ai. 7	days apart	3	1	3	2.3	AB
Dyrene 4F	1 oz ai.	21 day	3	2	2	2.3	AB
Dyrene 4F	2 oz ai.	28 day	2	3	2	2.3	AB
Chipco 26019 (4 FL)	2 oz ai.	21 day	3	3	2	2.7	ABC
DPXH6573	2 oz ai.	21 day	3	2	3	2.7	ABC
Chipco 26019 (50WP)	.5 oz ai.	21 day	3	3	3	3.0	ABCD
DPXH6573	.5 oz ai.	21 day	4	3	2	3.0	ABCD
Prochloraz + AD-TGF	3 oz + .34 oz	14 day	3	5	1	3.0	ABCD
Dyrene 4F	1 oz ai.	14 day	3	3	3	3.0	ABCD
Prochloraz + AD-TGF	1.5 oz + .34 oz	14 day	4	3	4	3.7	BCDE
PP523	8 gm ai.	21 day	5	5	2	4.0	BCDE
DPXH6573	1 oz ai.	21 day	4	4	4	4.0	BCDE
Control	-	-	4	4	5	4.3	CDE
AD-TGF	.34 oz	14 day	6	3	5	4.7	CDE
PP523	4 gm ai.	21 day	5	6	4	5.0	E
PP523	6 gm ai.	21 day	5	4	6	5.0	Е

¹ Treatments followed by the same letter are not significantly different from each other at the 5% level.