

Anthracnose Fungicide Studies-1987

Oak Pointe Golf Course, Brighton, MI and Hancock Turfgrass Research Center, MSU, E. Lansing, MI

Two anthracnose (Colletotrichum graminicola) fungicide studies were conducted this year, one at Oak Pointe Golf Club in Brighton, MI and another at the Hancock Turfgrass Research Center on the MSU campus. Both studies were conducted on moderately fertilized, irrigated annual bluegrass (Poa annua) fairways in three replications of a random block design with 6' x 9' plots. All applications were made with a CO₂ small-plot sprayer at 30 PSI and 48 gal/acre. Both fairway areas were mowed at ½" height of cut.

Initial applications were made preventively on June 25 (Oak Pointe) and June 18 (Hancock Center). Subsequent applications were made at the intervals indicated on the data table. When the disease ratings were taken at the Oak Pointe site (Aug. 28) the 14 day treatments had been applied 5 times (6/25, 7/9, 7/23, 8/6, 8/17) and the 21 day treatments had been applied 3 time (6/25, 7/16, 8/6), except as noted on the data table (Table 3).

Despite the hot, dry weather we experienced this summer, anthracnose pressure was light to moderate in this study. This might be attributable to reduced inoculum levels resulting from fairway fungicide applications in previous years. As the data shows, a number of experimental compounds (DPX-H6573, PP523, HWG1608) look promising for anthracnose control, as Tersan 1991 continues to perform well. Among the other standard fungicides, Rubigan performed moderately well, however, Bayleton proved less effective than anticipated this year.

Following the second 21 day application a mild phytotoxicity (yellowing) was observed in the HWG1608 (14 gm.ai.) treatment. Mild phytotoxicity was also observed on other treatments at the time of the 8/28 disease rating, as indicated on the data table.

As stated previously, this anthracnose study was duplicated on the Hancock Turfgrass Research Center on the MSU campus. Disease levels, however, remained very low in the controls (10% or less) throughout the summer, so no data was available.

Emerald Creeping Bentgrass Dollar Spot Fungicide Study-1987

Hancock Turfgrass Research Center, MSU, E. Lansing, MI

The 1987 dollar spot (Moellerodiscus spp., Lanzia spp.) fungicide study was conducted on a moderately fertilized, irrigated Emerald creeping bentgrass (Agrostis palustris) green at the Hancock Turfgrass Research Center on the MSU campus. Treatments were applied preventively in three replications of a random block design (3' x 6' plots) using a CO₂ small-plot sprayer at a volume of 48 gal/acre and 30 PSI. Granular treatments were pre-weighed and applied by hand.

Initial treatments were applied preventively on July 10. By the final rating date (9/7), the 14 day treatments had been applied four times (7/10, 7/28, 8/12, 9/1) and the 21 day treatments had been applied three time (7/10, 7/31, 8/20) (Table 4). Exceptions are noted on the data table.

Table 3. Anthracnose Fungicide Trial-1987

Oak Pointe Golf Club, Brighton, MI

Disease rating scale: 0 (no disease) -9 (90% infection or greater)

Plots rated 8/28/87

TREATMENT	RATE/1000 ft ²	INTERVAL	I	II	III	AVE	DMR ¹
DPX-H6573 + Tersan 1991	.25 oz ai + 1 oz ai	21 days	0	0	0	0	A
PP523 (SC) + X-77	6 gm ai + .05% v/v	"	0*	0	0*	0	A
PP523 (SC) + X-77	8 gm ai + .05% v/v	"	0*	0	0	0	A
HWG1608 (250EC)	14 gm ai	"	0	0	0	0	A
RH-3486	3 oz ai	"	0	0	0	0	A
Prochloraz + SN596	3 fl oz + .5 oz	"	1	0	0	.3	AB
PP523 (SC) + X-77	4 gm ai + .05% v/v	"	0	0*	1	.3	AB
PP523 (G) + X-77	8 gm ai + .05% v/v	"	1	0	0	.3	AB
HWG1608 (250EC)	7 gm ai	"	1	0	0	.3	AB
DPX-H6573 + DPX 965	.03 oz ai + 1 oz ai	"	0	1	0	.3	AB
DPX-H6573 + Tersan 1991	.03 oz ai + 1 oz ai	"	1	0	0	.3	AB
DPX-H6573 + Tersan 1991	.06 oz ai + 1 oz ai	"	0	0	1	.3	AB
DPX-H6573	.25 oz ai	"	0	1	0	.3	AB
Rizolex + Ditek	2 oz ai + 1 oz ai	"	0	1	0	.3	AB
Tersan 1991	.5 oz ai	"	0	0	1	.3	AB
Dac. 2787 (F)	3 fl oz	14 days	1	1	0	.6	ABC
Dac. 2787 (F) + SDS66533	6 fl oz + 1 fl oz	21 days	2	0	0	.6	ABC
Prochloraz	4.5 fl oz	"	1	1	0	.6	ABC
FBC 39865	1 oz	"	1	0	1	.6	ABC
EXP 2185A	.4 oz ai	"	1	0	1	.6	ABC
PP523 (SC) + X-77	2 gm ai + .05% v/v	"	0*	1	1	.6	ABC
DPX-H6573 + Tersan 1991	.125 oz ai + 1 oz ai	"	0	2	0	.6	ABC
Rizolex + CH26019 (W)	2 oz ai + 1 oz ai	"	1	1	0	.6	ABC
Tersan 1991	1 oz ai	"	0	1	1	.6	ABC
Rubigan (W)	.2 oz	"	1	1	0	.6	ABC
Prochloraz + SN596	1.5 fl oz + .5 oz	"	2	0	1	1.0	ABCD
PP523 (W) + X-77	2 gm ai + .05% v/v	"	1	1	1	1.0	ABCD
RH-3486	1.5 oz ai	"	1	1	1	1.0	ABCD
Ditek	1 oz ai	"	1	1	1	1.0	ABCD
Dac. 2787 (F) + SDS 66533	3 fl oz + .5 fl oz	14 days	2	1	1	1.3	ABCDE
PP523 (W) + X-77	6 gm ai + .05% v/v	21 days	1	2	1	1.3	ABCDE
Bayleton TOF	50 oz	"	0	3	1	1.3	ABCDE
HWG 1608 (1.2EC)	7 gm. ai.	"	2	0	2	1.3	ABCDE
HWG 1608 (1.2EC)	14 gm ai.	"	2	1	1	1.3	ABCDE
STJ 3762 (250 EC)	14 gm. ai.	"	1	2	1	1.3	ABCDE
DPX-H6573	.06 oz ai	"	2	0	2	1.3	ABCDE
Rizolex + Ditek	2 oz ai + .5 oz ai	"	1	2	1	1.3	ABCDE
Rubigan (W)	.8 oz	"	1	1	2	1.3	ABCDE
Rubigan (W) ²	2 oz	"	2	0	2	1.3	ABCDE
RH-3486	.75 oz. ai.	"	2	2	0	1.3	ABCDE

Plots rated 8/28/87 (cont.)

TREATMENT	RATE/1000 ft ²	INTERVAL	I	II	III	AVE	DMR ¹
FBC 39865	.5 oz	"	3	1	1	1.6	ABCDEF
EXP2185A	.2 oz ai	"	2	1	2	1.6	ABCDEF
Baycor (300EC)	46.7 ml	"	1	1	3	1.6	ABCDEF
DPX-H6573	.25 oz ai	21 days	1	2	2	1.6	ABCDEF
Rizolex	3 oz ai	"	2	1	2	1.6	ABCDEF
Rubigan (W)	.4 oz	"	2	2	1	1.6	ABCDEF
Rubigan AS ²	7.5 fl oz	"	2	2	1	1.6	ABCDEF
Tersan 1991 ²	4 oz	"	2	3	0	1.6	ABCDEF
Turficide (G)	7.5 lbs	"	2	2	2	2.0	BCDEFG
EXP 2185A	.1 oz ai	"	2	4	0	2.0	BCDEFG
Baycor 300EC	23.3 ml	"	3	2	1	2.0	BCDEFG
Rizolex	2 oz ai	"	2	2	2	2.0	BCDEFG
Dac. 2787 (F)	6 fl oz	"	3	2	2	2.3	CDEFG
Bayleton (DF)	.25 oz ai	"	3	3	1	2.3	CDEFG
CH 26019 (F)	.5 oz ai	"	4	0	3	2.3	CDEFG
Bayleton TOF	2 oz	"	2	1	4	2.3	CDEFG
Rizolex	1 oz ai	"	2	3	2	2.3	CDEFG
SN596	1 oz	"	3	3	3	2.6	DEFG
Control	-	-	3	2	3	2.6	DEFG
Bayleton (1G)	25 oz	"	3	4	2	3.0	EFG
Banner ²	1 fl oz	"	2	3	4	3.0	EFG
CH26019 (W)	.5 oz ai	"	3	4	3	3.3	FG
Turficide (G) ²	2 lbs	"	5	1	5	3.6	G

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

²Applied twice only (7/16, 8/6). Also, Turficide (EC) at 1.5 qt. rate not applied due to phytotoxicity.

*Mild phytotoxicity observed.