

## Dollarspot Fungicide Studies - 1981

### Establishment

Three dollarspot (*Sclerotinia homeocarpa*) studies were conducted this year. One was established on an annual bluegrass (*Poa annua*) fairway and two were placed on a Toronto creeping bentgrass green. Liquid applications were made with a CO<sub>2</sub> small-plot sprayer at a volume of 40 gal/acre. Granular formulations were laid out in a random block design with two studies containing three replications and one study containing four replications.

### Annual Bluegrass Study

The annual bluegrass dollarspot study was conducted at Burroughs Farms Golf Course in Brighton, MI, on an irrigated *Poa annua* fairway maintained at 1/2" height of cut. All treatments were applied preventatively on August 7, and some were re-applied on August 18 or August 28, as indicated on the data chart (Table 5). The ratings were taken on September 8, 1981. The plot size was 6' x 9'.

### Toronto Creeping Bentgrass Studies

The Toronto creeping bentgrass dollarspot studies were conducted at the MSU Crops and Soils Field Laboratory on an irrigated putting green. Treatments were applied preventatively on the dates indicated on the data charts. Study #1 (Table 6) contained 3 replications, study #2 (Table 7) contained 4 replications. All ratings were taken on September 18, 1981. Plots were 3' x 6' in size.

### Results

There was low disease pressure in the *Sclerotinia* dollar spot study on Burroughs Farm Study on annual bluegrass (Table 5). With the exception of a few treatments, most of the fungicides gave effective management of *Sclerotinia* dollarspot at most rates.

Crops Barn Creeping Bentgrass Dollarspot Fungicide Study #1. All treatments gave significant management of *Sclerotinia* dollarspot compared to the untreated control (Table 6). The 2 oz. rate of Daconil 2787 (500) was as effective as the 6 oz. rate of Daconil 2787 (500) when both were applied on a 14-day schedule. Likewise, Daconil 2787 (500) and WP at the 2 oz. rates at 10-day intervals gave management equivalent to that of the Daconil 2787 6 oz. (500) treatment applied at the 14-day interval. This supports similar findings last season under more severe disease pressure where the 2 oz. rate of Daconil 2787 WP every 10 days gave management comparable to that of the 6 oz. flowable rate every 14 days. This should make the use of Daconil 2787 more economical. Chipco 26019 gave significant management of *Sclerotinia* dollarspot for a 28-day period under moderate disease pressure. Actidione TGF was phytotoxic after repeated applications, causing a browning and thinning of the turf from eye level. Close examination revealed a yellowing of the leaf tissue as well.

All treatments gave significant management of *Sclerotinia* dollarspot in study #2 at the Crop Science Field Laboratory (Table 7). EL-222 was shown to have excellent activity against *Sclerotinia* dollarspot under severe disease pressure. It also is compatible with Daconil 2787.

Table 5. Burroughs Farms Annual Bluegrass Dollarspot Fungicide Study - 1981.  
Rating 1 (no disease) - 9 (90% infection or greater). Rated 9/8/81.

Treatment	Rate/1000 ft <sup>2</sup>	Replication			AVE	DMR
		I	II	III		
El 222	.5 lb. ai./A. <sup>1</sup>	1	1	1	1	A
Bayleton + Urea	2 oz. + 1/2 lb. N. <sup>2</sup>	1	1	1	1	A
Bayleton + Urea	4 oz. + 1/2 lb. N. <sup>2</sup>	1	1	1	1	A
Bayleton	4 oz. <sup>3</sup>	1	1	1	1	A
Bayleton	1 oz. <sup>2</sup>	1	1	1	1	A
Bayleton	2 oz. <sup>2</sup>	1	1	1	1	A
Bayleton	4 oz. <sup>2</sup>	1	1	1	1	A
ProTurf DSB	2X <sup>1</sup>	1	1	1	1	A
CGA-64251	1 fl. oz. <sup>1</sup>	1	1	1	1	A
CGA-64250	.16 fl. oz. <sup>1</sup>	1	1	1	1	A
CGA-64250	.32 fl. oz. <sup>1</sup>	1	1	1	1	A
Par Ex + CGA-64251	.8 lbs. N./8 gm. ai. <sup>1</sup>	1	1	1	1	A
Par Ex + CGA-64251	.8 lbs. N./12 gm. ai. <sup>1</sup>	1	1	1	1	A
Par Ex + CGA-64250	.8 lbs. N./8 gm. ai. <sup>1</sup>	1	1	1	1	A
Par Ex + CGA-64250	.8 lbs. N./12 gm. ai. <sup>1</sup>	1	1	1	1	A
Cleary 3336	1 oz. <sup>1</sup>	1	1	1	1	A
Bromosan FL	4 fl. oz. <sup>1</sup>	1	1	1	1	A
BAS 43600	1 oz. ai. <sup>2</sup>	1	1	1	1	A
BAS 43600	2 oz. ai. <sup>2</sup>	1	1	1	1	A
Bayleton WDG	2 oz. <sup>3</sup>	1	1	1	1	A
Bayleton WDG	4 oz. <sup>3</sup>	1	1	1	1	A
Bayleton WDG	1 oz. <sup>2</sup>	1	1	1	1	A
Bayleton WDG	2 oz. <sup>2</sup>	1	1	1	1	A
Bayleton WDG	4 oz. <sup>2</sup>	1	1	1	1	A
El 222	.125 lb. ai./A. <sup>1</sup>	2	1	1	1.3	AB
Bayleton + Urea	1 oz. + 1/2 lb. N. <sup>2</sup>	1	1	2	1.3	AB
Bayleton + Urea	4 oz. + 1/2 lb. N. <sup>3</sup>	1	2	1	1.3	AB
Fungo 50	1 oz. <sup>1</sup>	1	2	1	1.3	AB
Bayleton	1 oz. <sup>3</sup>	1	2	1	1.3	AB
Bayleton	2 oz. <sup>3</sup>	1	1	2	1.3	AB
Acti-dione TGF	.34 oz. <sup>2</sup>	1	1	2	1.3	AB
BAS 43600	.5 oz. ai. <sup>2</sup>	1	1	2	1.3	AB
Daconil 2787 FL	3.75 qts./A. <sup>2</sup>	1	1	2	1.3	AB
El 222	.25 lbs. ai./A. <sup>1</sup>	1	2	2	1.7	AB
CGA-64251	.5 fl. oz. <sup>1</sup>	1	1	3	1.7	AB
Daconil 2787 WDG	8 lbs./A. <sup>2</sup>	3	1	1	1.7	AB
Acti-dione Thiram	2 oz. <sup>2</sup>	2	1	2	1.7	AB
Bayleton + Urea	2 oz. + 1/2 lb. N. <sup>3</sup>	2	1	3	2	ABC
Acti-dione TGF	.68 oz. <sup>2</sup>	1	4	1	2	ABC
Daconil 2787 WP	1.84 oz. <sup>2</sup>	3	1	2	2	ABC
Daconil 2787 FL	7 qts./A. <sup>2</sup>	1	2	3	2	ABC
OAC 3890	2 oz. <sup>1</sup>	2	2	2	2	ABC
Bayleton WDG	1 ox. <sup>3</sup>	1	1	4	2	ABC
Bayleton + Urea	1 oz. + 1/2 lb. N. <sup>3</sup>	1	4	3	2.7	ABCD
Daconil 2787 WP	.92 oz. <sup>2</sup>	3	2	3	2.7	ABCD
Acti-dione RZ	1.6 oz. <sup>2</sup>	2	1	5	2.7	ABCD
Acti-dione RZ + Acti-dione TGF	.55 oz. + .34 oz. <sup>2</sup>	3	3	2	2.7	ABCD
Acti-dione TGF + Daconil 2787 WP	.34 oz. + .92 oz. <sup>2</sup>	4	3	2	3	BCD
OAC 3890	4 oz. <sup>2</sup>	3	2	6	3.7	CD
Panasea	1 fl. oz. <sup>2</sup>	2	4	6	4	D
Daconil 2787 WDG	4.33 lbs./A. <sup>2</sup>	2	5	5	4	D
Check	---	5	1	6	4	D

All treatments followed by the same letter are not significantly different at the 5% level.

<sup>1</sup>Treatments applied on 8/7 and 8/28.

<sup>2</sup>Treatments applied on 8/7 and 8/18.

<sup>3</sup>Treatments applied 8/7 only.

Table 6. Crops Barn Creeping Bentgrass Dollarspot Fungicide Study #1 - 1981.  
Disease Rating - Number of Dollarspots/Plot. Rated 9/18/81.

Treatment	Rate 100 ft <sup>2</sup>	Replication			AVE	DMR
		I	II	III		
Chipco 26019	2 oz. <sup>2</sup>	0	0	0	0	A
Daconil 2787 (500)	2 oz. <sup>1</sup>	0	0	0	0	A
Daconil 2787 (500)	4 oz. <sup>1</sup>	0	0	0	0	A
Daconil 2787 (500)	6 oz. <sup>1</sup>	0	0	0	0	A
Daconil 2787 (500)	4 oz. <sup>2</sup>	0	0	0	0	A
Daconil 2787 (500)	6 oz. <sup>2</sup>	0	0	0	0	A
Daconil 2787 (500)	6 oz. <sup>2</sup>	0	0	0	0	A
	(rate & interval adjustable)					
Fungo 50	1 oz. <sup>2</sup>	0	0	0	0	A
Cleary 3336	1 oz. <sup>2</sup>	0	0	0	0	A
Daconil 2787 (500)	3 oz. <sup>2</sup>	0	0	2	.7	A
	(rate & interval adjustable)					
Acti-dione TGF + Daconil 2787 (WP)*	1 oz. + 1 oz. <sup>1</sup>	6	0	0	2	AB
Chipco 26019	1 oz. <sup>2</sup>	3	5	9	2.7	AB
Daconil 2787 (WP)	2 oz. <sup>1</sup>	5	0	6	3.7	AB
Daconil 2787 (500)	2 oz. <sup>2</sup>	0	9	2	3.7	AB
Acti-dione TGF*	2 oz. <sup>1</sup>	0	0	13	4.3	AB
Chipco 26019	2 oz. <sup>3</sup>	0	50	1	17	AB
Daconil 2787 (WP)	1 oz. <sup>1</sup>	20	15	18	17.7	AB
Chipco 26019	1 oz. <sup>3</sup>	3	45	6	18	AB
Acti-dione TGF*	1 oz. <sup>1</sup>	52	0	41	31	B
Check	---	148	69	59	92	C

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

\*Phytotoxicity observed after repeated applications.

<sup>1</sup>All 10 day interval treatments applied 6/17, 6/26, 7/7, 7/17, 7/27, 8/6, 8/17, 8/26, 9/9, 9/14.

<sup>2</sup>All 14 day interval treatments applied 6/17, 7/1, 7/15, 7/30, 8/12, 8/26, 9/9.

<sup>3</sup>All 28 day interval treatments applied 6/17, 7/15, 8/12, 9/14.

Table 7. Crops Science Field Lab Creeping Bentgrass Dollarspot Fungicide Study #2 - 1981. Number of Dollarspots/Plot. Rated 9/18/81.

Treatment	Rate/Acre	Replication				AVE	DMR
		I	II	III	IV		
E1 222 + Daconil 2787 (WP)	.25 lb. ai. + 8 lb. ai./A.	0	0	0	0	0	A
E1 222 + Daconil 2787 (WP)	.5 lb. ai. + 2 lb. ai./A.	0	0	0	0	0	A
E1 222 + Daconil 2787 (WP)	.5 lb. ai. + 4 lb. ai./A.	0	0	0	0	0	A
E1 222 + Daconil 2787 (WP)	.5 lb. ai. + 8 lb. ai./A.	0	0	0	0	0	A
E1 222 + Daconil 2787 (WP)	.25 lb. ai. + 4 lb. ai./A.	0	0	1	0	.3	A
E1 222	.5 lb. ai./A.	0	2	0	0	.5	A
E1 222 + Daconil 2787 (WP)	.125 lb. ai. + 8 lb. ai./A.	0	0	2	0	.5	A
E1 222 + Daconil 2787 (WP)	.25 lb. ai. + 2 lb. ai./A.	0	1	0	4	1.3	A
Daconil 2787 (WP)	8 lb. ai./A.	2	2	7	0	2.8	A
E1 222 + Daconil 2787 (WP)	.125 lb. ai. + 4 lb. ai./A.	1	8	8	6	5.8	A
E1 222 + Daconil 2787 (WP)	.125 lb. ai. + 2 lb. ai./A.	4	14	25	8	12.8	A
E1 222	.25 lb. ai./A.	3	25	20	21	17.3	A
Daconil 2787 (WP)	4 lb. ai./A.	12	45	27	64	37	AB
E1 222	.125 lb. ai./A.	15	29	33	121	49.5	AB
Daconil 2787 (WP)	2 lb. ai./A.	20	82	121	105	82	B
Check	---	150	300	350	150	237.5	C

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

All treatments applied 6/17, 7/1, 7/15, 7/30, 8/12, 8/26, 9/9.