Dollarspot Fungicide Studies - 1980

Two <u>Sclerotinia</u> dollarspot (<u>Sclerotinia</u> <u>homeocarpa</u>) studies were conducted, one on an annual bluegrass fairway and the other on a Toronto creeping bentgrass green. Liquid applications were made with a CO₂ small-plot sprayer at a volume of 40 gal/acre. Granular formulations were applied with a Scotts 3 foot drop-type spreader. Both studies were laid out in three replications of a random block design.

The annual bluegrass Sclerotinia dollarspot study was conducted at Burroughs Farms Golf Course in Brighton, MI, on an irrigated Poa annua fairway maintained at 1/2 inch height of cut. Treatments were applied preventatively to 6 feet x 9 feet plots on July 1, July 15, August 15, and September 4, except as noted on the data charts. The Sclerotinia dollarspot ratings were taken on September 11.

The Toronto creeping bentgrass dollarspot study was conducted at the MSU Crops and Soils Field Laboratory on an irrigated putting green which was infected prior to treatment. Treatments were applied curatively on September 10 and September 22. The dollarspot ratings were made on September 30.

Results and Conclusions

Toronto Creeping Bentgrass Sclerotinia Dollarspot Study

Table 6 shows the most effective fungicides following two fungicide applications at a 12 day interval. The dollar spot infestation was exceptionally heavy this season. The entire plot areas in the untreated check and ineffective fungicide plots became almost completely covered by the disease. The systemic fungicides and combination (systemic and contact) fungicides gave the best control under the severe disease pressure. Those treatments giving significant control over the untreated check were: F-7498, F-7458, F-9177, F-7888, Bromosan 4 oz, Cleary 3336 1 and 2 oz, Fungo 50 1 and 2 oz, Tersan 1991 1 and 2 oz, IBDU + Bayleton .25 and .50 oz ai, Bayleton 2 oz and .125 oz ai, Chipco 26019 2 oz, Bayleton and Acti-dione TGF .125 oz ai + .34 oz, CGA-64251 8 and 4 gm ai, Duosan 3.3 and 6.6 oz, Ronilan 2 oz, Daconil 2787 Fl 6 fl oz and 3 fl oz, Acti-dione TGF .69 oz, Daconil 2787 WP 1.84 oz, Acti-dione TGF + Daconil 2787 WP .34 oz + .92 oz.

Annual Bluegrass Sclerotinia Dollarspot Study

The Sclerotinia dollar spot infection was also heavy in the preventive study at Burroughs Farms. CGA-64251 at 8 and 4 gm ai, IBDU + Bayleton at .25 and .50 oz ai, F-7458, F-7594, F-9177, Bayleton 2 oz and .125 oz ai, Ronilan 2 oz, Bromosan 4 oz, Duosan 6.6 oz, Daconil 2787 GR 13.5 oz, and 3.3 oz, Fungo 50 1 and 2 oz, Tersan 1991 1 and 2 oz, Bayleton + Acti-dione TGF .125 oz ai + .34 oz, Chipco 2 oz, Cleary 3336 1 and 2 oz, Acti-dione TGF + Daconil 2787 WP .34 oz + .92 oz all gave significant control compared to the untreated check (Table 7). The applications were made on 14 day and greater intervals which may have favored the systemic fungicides over the contact fungicides.

Table 6. 1980 Dollarspot Fungicide Study - Creeping Bentgrass Crop and Soils Field Laboratory, East Lansing, MI Disease Rating - 1, no disease; 9, severe disease. 9/30/80

Treatment	Rate/1000 ft ²	Replication				
		I	II	III	AVE	DMR (5%)
F-7498	2X	1	1	1	1	A
F-7458	2X	1	1	1	1	Α
Bromosan	4 oz.	2	1	1	1.3	AB
Cleary 3336	2 oz.	1	2	1	1.3	AB
Cleary 3336	1 oz.	1	2	1	1.3	AB
Fungo 50	2 oz.	2	1	1	1.3	AB
Tersan 1991	2 oz.	2	2	1	1.7	AB
Bayleton + IBDU	.5 oz. ai./5 lbs.	2	2	1	1.7	AB
Bayleton	2 oz.	3	2	1	2	AB
Tersan 1991	l oz.	3	2	1	2	AB
Chipco 26019	2 oz.	2	3	1	2	AB
Fungo 50	1 oz.	4	1	2	2.3	AB
Bayleton + IBDU	.25 oz. ai./5 lbs.	3	2	2	2.3	AB
Bayleton + Acti-dione TGF	.125 oz. ai. + .34 oz.					
CGA-64251	4 gm. ai.	3	4	1	2.7	ABC
Duosan	3.3 oz.	4	3	1	2.7	ABC
Duosan	6.6 oz.	5	2	1	2.7	ABC
Ronilan	2 oz.	3	3	2	2.7	ABC
CGA-64251	8 gm. ai.	2	4	3	3	ABC
F-9177	2X	3	3	4	3.3	BCD
Daconil 2787 FL	6 fl. oz.	3	4	3	3.3	BCD
Daconil 2787 FL	3 fl. oz.	6	4	3	4.3	CDE
Bayleton	.125 oz. ai.	6	4	5	5	DEF
Acti-dione TGF	.69 oz.	7	4	5	5.3	EF
Daconil 2787 WP	1.84 oz.	5	5	6	5.3	EF
F-7888	2X	4	7	5	5.3	EF
F-9177	1X	9	5	4	6	EF
Acti-dione TGF + Daconil 2787 WP	.34 oz. + .92 oz.	8	5	5	6	EF
Acti-dione TGF	.34 oz.	8	6	6	6.7	FG
Daconil 2787 WP	.92 oz.	8	6	6	6.7	FG
Kalo 591-05-80	7.6 gm.	9	6	9	8	GH
Check	-	9	9	7	8.3	GH
Biofilm	7 fl. oz./100 gal.	9	8	9	8.7	H
Powder Blue + Hyd. Lime	2 1bs. + 1 1b.	9	9	8	8.7	Н
Kalo 589-05-80	7.6 gm.	9	9	8	8.7	H
Kalo 589 + Biofilm	7.6 gm. + 7 fl. oz./100 gal.	9	9	9	9	H
Kalo 591 + Biofilm	7.6 gm. + 7 fl. oz./100 gal.	9	9	9	9	Н

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

Table 7. 1980 Dollarspot Fungicide Study - Poa annua
Burroughs Farms Golf Course, Brighton, MI
Disease Rating - 1, no disease; 9, severe disease. 9/11/80.

Treatment	Rate/1000 ft ²	Replication				
		I	II	III	AVE	DMR (5%
CGA-64251	8 gm. ai.	1	1	1	1	Α
Bayleton + IBDU	.25 oz. ai./4.76 lbs.	1	1	1	1	Α
Tersan 1991	2 oz.	1	1	1	1	A
Bayleton + IBDU	.5 oz. ai./4.76 lbs.	1	1	1	1	A
F-7458	2X	1	1	1	1	A
Bayleton	2 oz.	1	1	1	1	Α
Ronilan	2 oz.	1	1	1	1	A
Bromosan	4 oz.	2	1	1	1.3	A
Duosan	6.6 oz.	2	1	1	1.3	A
F-9177	2X	2	1	1	1.3	A
Daconil 2787 GR	13.3 oz.	2	1	1	1.3	A
F-9594*	2X	2	1	1	1.3	A
Fungo 50	2 oz.	2	1	2	1.7	AB
Duosan	3.3 oz.	2	2	1	1.7	AB
Fungo 50	1 oz.	2	3	1	2	ABC
Bayleton +	a aed	777	0.5	1/20	573	
Acti-dione TGF	.125 oz. ai. + .34 oz.	3	1	2	2	ABC
Chipco 26019	2 oz.	2	2	2	2	ABC
	1 oz.	2	1	3	2	ABC
Cleary 3336 F-9594*	1X	3	2	2	2.3	ABCD
Daconil 2787 GR	3.3 oz.	5	2	1	2.7	ABCDE
F-9177	1X	2	4	2	2.7	ABCDE
Tersan 1991	1 oz.	1	6	1	2.7	ABCDE
Bayleton	.125 oz. ai.	2	3	3	2.7	ABCDE
CGA-64251	4 gm. ai.	4	2	2	2.7	ABCDE
Acti-dione TG + Daconil 2787 WP	.34 oz. + .92 oz.	2	4	4	3.3	ABCDEF
Cleary 3336	2 oz.	2	1	7	3.3	ABCDEF
F-7888	2X	3	7		4.3	BCDEFG
Daconil 2787 FL	6 fl. oz.	4	6	3	4.3	BCDEFG
Kalo 591-05-80	7.6 gm.	7	3	3	4.3	BCDEFG
Daconil 2787 GR	1.67 oz.	6	4	4	4.7	CDEFGH
Daconil 2787 FL	3 fl. oz.	5	6	4	5	DEFGH
Kalo 591 + Biofilm	7.6 gm. + 7 fl. oz./100 gal.	7	8	1	5.3	EFGHI
F-7498	2X	4	5	8	5.7	FGHIJ
Acti-dione TGF	.34 oz.	7	7	4	6	FGHIJ
Acti-dione TGF	.69 oz.	8	5	5	6	FGHIJ
alo 589-05-80	7.6 gm.	8	6	4	6	FGHIJ
Daconil 2787 WP	1.84 oz.	5	7	7	6.3	GHIJ
Check		8	7	4	6.3	GHIJ
Powder Blue + Hyd. Lime	2 1b. + 1 1b.	9	7	4	6.7	GHIJ
Bioflim	7 fl. oz./100 gal.	9	8	5	7.3	HIJ
Kalo 589 + Biofilm	7.6 gm. + 7 fl. oz./100 gal.	8	8	8	8	IJ
Daconil 2787 WP	.92 oz.	9	8	8	8.3	J
Daconii 2/0/ WF	• 72 02 •	,	o	o	0.5	3

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

^{* -} was not applied on September 4.