2000 Dollar Spot Control Evaluation (Fairway)

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PURPOSE

To evaluate chemicals for the control of dollar spot on creeping bentgrass (*Agrostis palustris 'Crenshaw')* caused by the pathogen *Sclerotinia homoeocarpa.*

EXPERIMENTAL METHODS

This evaluation was conducted at the O. J. Noer Turfgrass Research and Education Facility on creeping bentgrass maintained under golf course fairway management conditions, at 0.5-inch cutting height. Individual plots, 3 ft x 10 ft, were arranged in a randomized complete block design with three replications. The experimental area was not inoculated and all disease pressure was natural. Treatments were applied with a CO_2-powered boom sprayer, using XR Teejet 8005 VS nozzles, at 30 psi, in water equivalent to 2 gal per 1000 sq. ft. All applications were initiated on June 3, 2000 and followed their respective spray schedule listed below. Final applications were made on August 6. The test area received 1/2# of Nitrogen from Feed Grade Urea (46-0-0) on both May 25 and July 28. Percent infection was rated on July 10, 16, 29 and August 14, 2000. Data obtained was subjected to analysis of variance and LSD was used to determine significant differences between treatment means.

RESULTS

A majority of the treatments provided excellent control of dollar spot on bentgrass maintained under fairway conditions. All of the reduced-rate mixtures have provided near 100 percent control, but all of the components need their rates adjusted. Every reduced-rate component can be reduced except Bayleton and Daconil Ultrex, which can be kept at the same rate. In theory, each component should be providing around 33% control at their reduced-rates. At their current rates Daconil Ultrex and Bayleton provide around 50% control. The rates of Banner Maxx, Chipco Triton, Chipco 26 GT, and Cleary's 3336 are providing over 70% control and would defeat the purpose of reduced rate mixtures. These rates will be adjusted in the future to find a rate that will provide around 1/3 control.

Several experimental granular treatments were evaluated and did not seem to provide any control. All of the DMI treatments seem to provide sufficient control for highly acceptable fairway standards.

Table 1. Percent Dollar Spot Damage

#	Treatment[1]	Form	Rate	Rate Unit	Interval (Days)	% Damage 7-10-00		% Damage 7-16-00		% Damage 7-29-00		% Damage 8-14-00	
1	***Daconil Ultrex***	82.5 WDG	2.5	oz/M ft2	21	26.7	C	36.7	CD	0.0	C	33.3	C
2	***Daconil Ultrex***	82.5 WDG	3.8	oz/M ft2	21	16.7	C-F	20.0	DE	0.0	C	18.3	D
3	***Bayleton***	50 WDG	0.11	oz/M ft2	21	50.0	B	48.3	BC	5.0	C	35.0	C
4	***Bayleton***	50 WDG	1.0	oz/M ft2	21	6.7	D-H	1.7	F	0.0	C	3.3	EF
5	***Banner Maxx***	1.3 MC	0.22	fl oz/M ft2	21	20.0	CD	16.7	EF	1.7	C	8.3	DEF
6	***Banner Maxx***	1.3 MC	2.0	fl oz/M ft2	21	10.0	D-H	8.3	EF	0.0	C	5.0	EF
7	***Chipco Triton***	1.67 SC	0.25	fl oz/M ft2	21	10.0	D-H	5.0	EF	1.7	C	6.7	DEF
8	***Chipco Triton***	1.67 SC	1.5	fl oz/M ft2	21	1.7	GH	1.7	F	0.0	C	3.3	EF
9	***Chipco 26 GT***	2 SC	2.0	fl oz/M ft2	21	3.3	FGH	3.3	EF	0.0	C	0.0	F
10	***Chipco 26 GT***	2 SC	3.0	fl oz/M ft2	21	8.3	D-H	8.3	EF	1.7	C	1.7	F
11	***Cleary's 3336***	4F	0.22	fl oz/M ft2	21	8.3	D-H	11.7	EF	10.0	C	18.3	D
12	***Cleary's 3336***	4 F	1.75	fl oz/M ft2	21	6.7	D-H	3.3	EF	8.3	C	15.0	DE
13	***Daconil Ultrex***	82.5 WDG	2.5	oz/M ft2	21	0.0	H	0.0	F	0.0	C	0.0	F
	Cleary's 3336	4F	0.22	fl oz/M ft2									
	Chipco 26 GT	2 SC	2.0	fl oz/M ft2									
14	***Daconil Ultrex***	82.5 WDG	2.5	oz/M ft2	21	0.0	H	0.0	F	0.0	C	1.7	F
	Chipco 26 GT	2 SC	2.0	fl oz/M ft2									
	Bayleton	50 WDG	0.11	oz/M ft2									
15	***Daconil Ultrex***	82.5 WDG	2.5	oz/M ft2	21	0.0	H	0.0	F	0.0	C	1.7	F
	Chipco 26 GT	2 SC	2.0	fl oz/M ft2									
	Banner Maxx	1.3 MC	0.22	fl oz/M ft2									
16	***Daconil Ultrex***	82.5 WDG	2.5	oz/M ft2	21	0.0	H	0.0	F	1.7	C	0.0	F
	Chipco 26 GT	2 SC	2.0	fl oz/M ft2									
	Chipco Triton	1.67 SC	0.25	fl oz/M ft2									
17	***Daconil Ultrex***	82.5 WDG	2.5	oz/M ft2	21	0.0	H	0.0	F	5.0	C	5.0	EF
	Cleary's 3336	4F	0.22	fl oz/M ft2									
	Bayleton	50 WDG	0.11	oz/M ft2									
18	***Daconil Ultrex***	82.5 WDG	2.5	oz/M ft2	21	0.0	H	0.0	F	0.0	C	3.3	EF
	Cleary's 3336	4F	0.22	fl oz/M ft2									
	Banner Maxx	1.3 MC	0.22	fl oz/M ft2									
19	***Daconil Ultrex***	82.5 WDG	2.5	oz/M ft2	21	3.3	FGH	0.0	F	0.0	C	5.0	EF
	Cleary's 3336	4F	0.22	fl oz/M ft2									
	Chipco Triton	1.67 SC	0.25	fl oz/M ft2									
20	***Chipco 26 GT***	2 SC	2.0	fl oz/M ft2	21	1.7	GH	1.7	F	0.0	C	1.7	F
	Cleary's 3336	4F	0.22	fl oz/M ft2									
	Bayleton	50 WDG	0.11	oz/M ft2									
21	***Chipco 26 GT***	2 SC	2.0	fl oz/M ft2	21	1.7	GH	3.3	EF	0.0	C	5.0	EF
	Cleary's 3336	4F	0.22	fl oz/M ft2									
	Banner Maxx	1.3 MC	0.22	fl oz/M ft2									
22	***Chipco 26 GT***	2 SC	2.0	fl oz/M ft2	21	1.7	GH	1.7	F	0.0	C	1.7	F
	Cleary's 3336	4F	0.22	fl oz/M ft2									
	Chipco Triton	1.67 SC	0.25	fl oz/M ft2									
23	Banner Maxx	1.24 MC	0.22	fl/M ft2	21	3.3	FGH	1.7	F	0.0	C	3.3	EF
	Bayleton	50 WDG	0.125	oz/M ft2									
24	Banner Maxx	1.24 MC	0.22	fl/M ft2	21	5.0	E-H	3.3	EF	0.0	C	1.7	F
	Chipco 26 GT	2.0 SC	0.75	fl/M ft2									
25	Banner Maxx	1.24 MC	0.22	fl/M ft2	21	5.0	E-H	1.7	F	0.0	C	3.3	EF
	Daconil Ultrex	82.5 WDG	0.95	oz/M ft2									
26	Daconil Ultrex	82.5 WDG	2.0	oz/M ft2	14	8.3	D-H	0.0	F	0.0	C	6.7	DEF
27	Experimental 23	0.39 G	4.0	oz/M ft2	14	51.7	B	58.3	AB	48.3	B	60.0	AB
28	Experimental 24	0.62 G	2.5	oz/M ft2	14	51.7	B	58.3	AB	51.7	AB	68.3	A
29	Experimental 23	0.39 G	8.0	oz/M ft2	28	60.0	AB	58.3	AB	50.0	B	60.0	AB
30	Experimental 24	0.62 G	5.0	oz/M ft2	28	61.7	AB	55.0	AB	53.3	AB	51.7	B
31	Experimental 23	0.39 G	4.0	oz/M ft2	14	61.7	AB	60.0	AB	58.3	AB	68.3	A
32	Experimental 24	0.62 G	2.5	oz/M ft2	14	73.3	A	68.3	A	61.7	A	71.1	A
33	Experimental 23	0.39 G	8.0	oz/M ft2	28	71.7	A	68.3	A	61.7	A	61.7	AB
34	Experimental 24	0.62 G	5.0	oz/M ft2	28	56.7	B	36.7	CD	50.0	B	60.0	AB
35	Experimental 44	87.5 WP	7.0	oz/M ft2	28	1.7	GH	1.7	F	1.7	C	1.7	F
36	Eagle	40 WP	0.6	oz/M ft2	14	1.7	GH	0.0	F	0.0	C	3.3	EF
37	Eagle	40 WP	1.2	oz/M ft2	28	5.0	E-H	1.7	F	3.3	C	6.7	DEF
38	Daconil Ultrex	82.5 WDG	3.2	oz/M ft2	14	1.7	GH	0.0	F	0.0	C	0.0	F
39	Banner Maxx	1.24 MC	0.5	fl/M ft2	28	18.3	CDE	0.0	F	1.7	C	5.0	EF
40	Bayleton	50 WG	0.5	oz/M ft2	28	15.0	C-G	1.7	F	5.0	C	5.0	EF
41	Chipco Triton	1.67 SC	1.0	fl/M ft2	28	5.0	E-H	1.7	F	3.3	C	5.0	EF
42	Check					60.0	AB	56.7	AB	50.0	B	65.0	A
LSD (P = 0.05)						**13.68**		**16.80**		**10.43**		**12.98**	

[1]Treatments in Italics are part of the reduced-rate mixture study and are applied at off-label rates.
Means followed by the same letter do not statistically differ (P=0.05)