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This publication includes lecture notes of papers presented at the 2005 New Jersey Turfgrass Expo. Publication of these lectures provides a readily available source of information covering a wide range of topics and includes technical and popular presentations of importance to the turfgrass industry.

This proceedings also includes research papers that contain original research findings and reviews of selected subjects in turfgrass science. These papers are presented primarily to facilitate the timely dissemination of original turfgrass research for use by the turfgrass industry.

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Dr. Ann Brooks Gould, Editor
Dr. Bruce B. Clarke, Coordinator

MANAGEMENT OF ANTHRACNOSE BASAL ROT ON AN ANNUAL BLUEGRASS GREEN WITH SELECTED FUNGICIDES

Bruce B. Clarke, Pradip R. Majumdar, Dennis Fitzgerald, Mark Peacos, Paul Goldberg, Kyle Gaugler, Lindsay Jepsen, and John Inguagiato[1]

Fungicides were evaluated in 2005 for their ability to control anthracnose basal rot (caused by *Colletotrichum cereale*; formerly *C. graminicola*) on an annual bluegrass (*Poa annua*) putting green at the Rutgers Turf Research Farm in North Brunswick, NJ. The green was established October 2004 by killing the existing stand of *Agrostis* and *P. annua* with Roundup Pro 3LC (3 qt/acre) on 16 August and 7 and 28 September, and then core aerifying the site in two directions to bring dormant *P. annua* seed to the soil surface. Mowing was performed daily at a height of 0.125 inch with clippings collected. The site was irrigated as needed to prevent drought stress. Fertilizer was applied as 18-4-8 (0.55 lb nitrogen (N)/1000 ft^2) on 22 March, ammonium nitrate (NH_4N0_3; 0.2 1b N/1000 ft^2) + 20-20-20 (0.2 lb N/1000 ft^2) on 16 April, 20-20-20 (0.2 lb N/1000 ft^2) on 15 May, NH_4N0_3 (0.2 lb N/1000 ft^2) + 20–20–20 (0.24 lb/N 1000 ft^2 on 29 May, and NH_4N0_3 (0.4 lb N/1000 ft^2) on 28 June. Dimension 1E (24 fl oz/A) was sprayed on 11 May for pre-emergence weed control.

Diseases other than anthracnose (e.g., dollar spot, brown patch, and snow mold) were suppressed in the test area with Cleary 3336 2G (7.1 lb/1000 ft^2) on 22 March, Daconil Ultrex 82.5 WDG (14 lb/A) on 1 May, Curalan 50EG (1.7 oz/1000 ft^2) on 2 June, Curalan 50EG (1.1 oz/1000 ft^2) + Prostar 70W (2.3 oz/1000 ft^2) on 19 June, Emerald 70WG (0.18 oz/1000 ft^2) + Prostar 70W (2.5 oz/1000 ft^2) on 30 June and 30 July, and Curalan 50EG (1.7 oz/1000 ft^2) on 18 September. Previous research by the authors have shown that Curalan 50EG, Prostar 70W, and Emerald 70WG do not affect anthracnose development at the rates used in this study. The growth regulator Primo MAXX 1ME (0.14 fl oz/1000 ft2) was applied on 18 September and 2 October. Insect pests were controlled with Telstar GC 0.67 LC (20 fl oz/A) on 28 June and Dylox 80 (3.67 oz/1000 ft^2) on 6 July. Turf was topdressed with a sand root zone mix on 30 April and 20 September. Plots were 3 x 9 ft and were arranged in a randomized complete block with four replications.

The test site was artificially inoculated with *C. cereale* (isolate NJ 11328) on 18 July (9 x 10^3 conidia/ml) and 8, 10, and 11 August (4 x 10^4 conidia/ml) by lightly irrigating the foliage 2 hours before sunset, spraying the conidial suspension in 2 gal water/1000 ft^2, and immediately covering the entire study with plastic overnight to encourage infection and reduce desiccation.

Fungicides were applied in water equivalent to 1.9 gal per 1000 ft^2 with a $C0_2$ powered sprayer at 30 psi using Tee Jet 8003E nozzles. Treatments (trt) were initiated on 18 May, prior to the development of anthracnose. Fungicides were reapplied at the appropriate intervals until 6 September as indicated in Table 1. Turf was visually evaluated for percent turf area infested with anthracnose on 1, 12, and 26 August, 16 September, and 10 October. Turf quality was evaluated in 22 September using a 1 to 9 scale, where 9 = best turf quality. Data were subjected to analysis of variance and means separated by Waller-Duncan *k*-ratio *t*-test (*k*=100).

The disease first developed on 25 July and became uniformly distributed throughout the green by 1 August. Disease severity peaked on 26 August (67% turfgrass area infested on non-fungicide treated turf). Due to the severity of the epidemic, only a few treatments provided adequate control (i.e., less than 10% turf area infested) throughout the application period (18 May to 6 September). These entries, Lynx 45W (trts 1-2), V-10116 50WDG (trts 35-36), Insig-

[1]Extension Specialist in Turfgrass Pathology. Senior Laboratory Technician, Research Assistant, Senior Greenhouse and Field Technician, Research Assistant, Research Assistant, Research Assistant, and Graduate Assistant, respectively, New Jersey Agricultural Experiment Station, Cook College, Rutgers, The State University of New Jersey, New Brunswick, NJ 08901-8520.

nia 20WG + Propiconazole Pro 1.3MC (trt 41), rotational programs #2 and #3 (trts 67-68), and Chipco Signature 80WG (trt 76), all applied on a 14-day schedule, also provided excellent residual control 24 to 48 days post-treatment. However, the application of A14472 32.5WG (trt 12), Banner Maxx 1.3ME (trt 15), Endorse 2.5W rotational program #1 (trt 34), Insignia 20WG (trt 30), Insignia 20WG + Manicure 82.5WDG (trt 40), TM 473 480SC (= Disarm @ 0.3 fl oz, trt 58), TM 473 480SC + Daconil Ultrex 82.5WDG (trts 60-61), and TM 473 480SC + Cleary 3336 4F (trt 64) also resulted in acceptable disease control on at least three of six rating dates.

The addition of the adjuvants Revolution or Cascade Plus to Insignia 20WG (trts 43 and 44, respectively) resulted in a moderate tip burn/foliar chlorosis and reduced the level of anthracnose control compared to Insignia 20WG alone (trt 42). However, the addition of Daconil Ultrex 82.5WDG (trts 60-61) or Cleary 3336 4F (trt 64) to TM 473 480SC enhanced the degree of control on several evaluation dates, compared to TM 473 480SC alone. In general, treatments that provided adequate control of anthracnose also exhibited acceptable turf quality (i.e., a rating of 6.0 or higher on a 1 to 9 scale) on 22 September. Moreover, Headway 1.39EC (trt 5), Heritage TL 0.8ME alternated with Banner Maxx 1.3ME (trt 10), Concert 4.3SE (trt 11), A 14472 32.5WG (trt 13), Banner Maxx 1.3ME (trt 14), Spectro 90WDG (trts 29, 49), Spectro 90WDG + Alude 46L (trt 30), EcoGuard L alternated with Banner Maxx 1.3ME (trt 50), CPR Tank Mixture #2 (trt 53), TM 473 480SC (trt 56-57), and TM 473 480SC + TM 43807 2.5W (trt 63) also exhibited acceptable turf quality on that date.

Table 1. Control of anthracnose on an annual bluegrass green with selected fungicides, New Brunswick, NJ, 2005.

	Treatment	Rate (per 1000 sq ft)	Spray Interval (days)[2]	Turf Area Infested (%) per Plot[1] 1 Aug.	12 Aug.	26 Aug.	16 Sept.	10 Oct.	Turf Quality[16] 22 Sept.
1	Lynx 45W	0.6 oz	14	3.0 a-c	5.8 ab	7.5 a-d	4.5 a-c	1.5 a-d	7.3 l
2	Lynx 45W	1.2 oz	14	2.8 ab	3.3 a	3.3 ab	4.0 ab	2.0 a-d	7.0 kl
3	Vital Sign 4L	6.0 fl oz	14	10.3 b-m	20.3 l-u	32.3 v-z'e'	57.0 z'g'-i'	28.5 tu	4.3 a-d
4	Vital Sign 4L	4.0 fl oz							
	+ Daconil Ultrex 82.5WG	2.5 oz	14	6.0 a-f	12.8 c-i	20.5 g-p	31.0 y-z'b'	15.3 l-p	4.5 b-e
5	Headway 1.39EC	1.5 fl oz	14	10.5 b-n	12.3 c-g	21.0 g-q	11.8 a-i	2.5 a-f	6.0 g-k
6	Headway 1.39EC	3.0 fl oz	21	9.0 a-l	21.0 m-w	27.8 m-z'	18.5 i-s	4.3 a-g	5.5 e-i
7	Heritage TL 0.8ME	1.0 fl oz							
	+ Banner MAXX 1.3ME	1.0 fl oz	14	8.5 a-k	19.3 j-s	32.3 v-z'e'	21.0 k-w	2.3 a-e	5.5 e-i
8	Heritage TL 0.8ME	2.0 fl oz							
	+ Banner MAXX 1.3ME	2.0 fl oz	21	12.3 e-p	22.5 p-z	28.3 o-z'	26.0 r-z'	3.3 a-g	5.3 d-h
9	Heritage TL 0.8ME	1.0 fl oz	14	12.0 d-p	19.8 k-t	23.3 i-t	19.0 i-u	1.5 a-d	5.5 e-i
10	Heritage TL 0.8ME	1.0 fl oz	14[3]						
	/Banner MAXX 1.3ME	1.0 fl oz	14[3]	9.0 a-l	20.5 m-v	31.8 u-z'd'	23.0 n-y	2.0 a-d	6.0 g-k
11	Concert 4.3SE	4.2 fl oz	14	9.3 a-l	12.8 c-i	18.8 f-m	8.5 a-g	0.5 a	6.8 j-l
12	A14472 32.5WG	0.5 oz	14	6.8 a-h	10.5 b-e	19.8 g-n	15.3 d-n	2.5 a-f	6.8 j-l
13	A14472 32.5WG	1.0 oz	21	7.0 a-h	16.5 e-p	29.0 q-z'	13.0 c-k	0.8 ab	6.8 j-l
14	Banner MAXX 1.3ME	1 fl oz	14	5.0 a-e	16.0 e-o	24.5 k-w	13.5 d-l	1.8 a-d	6.3 h-l
15	Banner MAXX 1.3ME	2 fl oz	21	6.3 a-f	7.8 a-c	18.8 f-m	12.3 b-j	1.5 a-d	6.8 j-l
16	Daconil Ultrex 82.5WG	3.2 oz	14	13.8 f-r	12.0 b-g	26.5 m-y	24.5 p-z'	4.5 a-g	5.8 f-j
17	RU21196A05 SC	0.53 fl oz	14	9.3 a-l	23.3 q-z'	40.5 z'e'-i	42.3 z'd'e'	18.5 n-q	4.0 a-c
18	RU21196A05 SC	0.71 fl oz	14	8.8 a-k	22.0 o-y	34.0 y-z'f'	42.8 z'd'-f'	17.5 m-q	4.0 a-c
19	RU21196A05 SC	0.88 fl oz	14	7.0 a-h	21.0 m-w	29.5 r-z'	29.3 w-z'a'	3.3 a-g	4.8 b-f
20	RU21196B05 WG	0.55 oz	14	22.3 t-y	28.3 y-d'	33.8 y-z'e'	30.3 x-z'b'	4.3 a-g	5.3 d-h
21	RU21196B05 WG	0.83 oz	14	14.3 g-s	24.0 r-a'	29.0 q-z'	24.3 o-z	4.8 a-h	5.3 d-h
22	RU21196B05 WG	1.1 oz	14	13.3 f-q	19.3 j-s	28.8 p-z'	23.0 n-y	0.8 ab	5.5 e-i
23	Cleary 3336 4F	6.0 fl oz	14	5.3 a-e	20.5 m-v	21.5 h-r	12.3 b-j	8.3 f-j	5.8 f-j
24	Cleary 3336 PLUS 19.4F	6.0 fl oz	14	6.8 a-h	29.0 z'-d'	44.0 z'h'-k'	30.8 y-z'b'	12.5 i-m	5.0 c-g
25	Cleary 3336 PLUS 19.4F	4.0 fl oz							
	+ Alude 46L	5.5 fl oz	14	15.5 h-u	17.3 f-q	21.5 h-r	29.8 x-z'b'	19.0 o-r	4.5 b-e

(Continued)

Table 1 (continued).

	Treatment	Rate (per 1000 sq ft)	Spray Interval (days)[2]	Turf Area Infested (%) per Plot[1] 1 Aug.	12 Aug.	26 Aug.	16 Sept.	10 Oct.	Turf Quality[16] 22 Sept.
26	CL-EXP-4 10W	1 oz	14	13.8 f-r	35.8 z'e'-i'	56.0 z'l'	54.8 z'g'-i'	20.5 p-s	4.0 a-c
27	CL-EXP-4 10W + Alude 46L	1 oz + 5.5 fl oz	14	4.5 a-e	12.8 c-i	15.0 d-i	38.3 z'b'-d'	22.8 q-t	4.8 b-f
28	Endorse 2.5W	4.0 oz	14	6.8 a-h	17.3 f-q	28.5 p-z'	8.0 a-f	8.8 g-k	5.3 d-h
29	Spectro 90WDG	4 oz	14	10.3 b-m	15.0 d-m	14.3 d-h	17.3 h-q	5.3 a-h	6.8 j-l
30	Spectro 90WDG + Alude 46L	4 oz + 5.5 fl oz	14	11.8 d-p	13.5 c-k	21.0 g-q	22.5 m-y	5.5 a-h	6.0 g-k
31	Spectro 90WDG /Endorse 2.5W	5.75 oz + 4.0 oz	14[4] + 14[4]	14.3 g-s	17.8 g-r	24.3 k-v	17.5 h-r	4.0 a-g	5.5 e-i
32	Heritage TL 0.8ME	2.0 fl oz	21	20.8 q-x	26.8 v-z'd'	35.5 z'-g'	26.0 r-z'	0.8 ab	5.0 c-g
33	Heritage 50WG	0.2 oz	14	28.0 x-z'b'	30.5 z'b'-e'	44.5 z'h'-k'	33.0 z'-c'	0.8 ab	4.3 a-d
34	Rotational Program #1	--	14[5]	5.0 a-e	11.0 b-f	15.5 d-j	9.3 a-h	4.3 a-g	5.8 f-j
35	V-10116 50WDG	0.18 oz	14	2.8 ab	5.8 ab	5.3 a-c	4.0 ab	2.5 a-f	7.0 kl
36	V-10116 50WDG	0.37 oz	14	2.0 a	4.0 a	1.3 a	3.3 a	3.3 a-g	6.3 h-l
37	V-10167 1.67F	0.88 fl oz	14	23.5 v-z	23.3 q-z'	38.3 z'a'-g'	25.8 q-z'	2.8 a-f	5.0 c-g
38	V-10167 1.67F	1.76 fl oz	14	18.5 o-w	27.5 x-z'd'	35.3 z-z'g'	27.3 t-z'	2.5 a-f	5.5 e-i
39	Insignia 20WG	0.9 oz	14	7.0 a-h	13.3 c-j	14.3 d-h	11.5 a-i	2.0 a-d	6.0 g-k
40	Insignia 20WG + Manicure 82.5WDG	0.9 oz + 3.2 oz	14	10.8 c-o	10.8 b-e	19.3 g-m	15.8 d-o	5.0 a-h	6.3 h-l
41	Insignia 20WG + Propiconazole Pro 1.3MC	0.9 oz + 1 fl oz	14	4.3 a-d	7.8 a-c	10.8 b-f	7.5 a-d	4.0 a-g	6.5 i-l
42	Insignia 20WG + Alude 46L	0.9 oz + 5.5 fl oz	14	10.8 c-o	14.0 c-l	22.8 i-s	16.8 g-p	4.8 a-h	5.5 e-i
43	Insignia 20WG + Revolution	0.9 oz + 6.0 fl oz	14	28.5 x-z'b'	32.5 z'd'-h'	45.3 z'h'-k'	31.8 z-z'c'	3.8 a-g	4.8 b-f
44	Insignia 20WG + Cascade Plus	0.9 oz + 8.0 fl oz	14	31.0 z-z'b'	38.8 z'h'-j'	43.5 z'g'-j'	39.8 z'c'd'	3.8 a-g	4.0 a-c
45	Insignia 20WG + Daconil Ultrex 82.5WG	0.9 oz + 3.2 oz	14	12.0 d-p	13.5 c-k	17.3 e-l	18.8 i-t	8.0 e-j	5.0 c-g
46	EcoGuard L	20 fl oz	7	35.3 z'b'	37.0 z'f'-i'	38.5 z'b'-h'	31.0 y-z'b'	24.5 r-t	4.5 b-e
47	EcoGuard L	20 fl oz	14	24.3 w-z'	27.0 w-z'd'	40.0 z'd'-h'	28.8 v-z'a'	14.8 l-p	5.3 d-h

(Continued)

Table 1 (continued).

	Treatment	Rate (per 1000 sq ft)	Spray Interval (days)[2]	Turf Area Infested (%) per Plot[1] 1 Aug.	12 Aug.	26 Aug.	16 Sept.	10 Oct.	Turf Quality[16] 22 Sept.
48	EcoGuard L	20 fl oz	14[6]						
	/Daconil Ultrex 82.5WDG	3.2 oz	14[6]	22.0 s-y	26.5 u-z'd'	30.3 s-z'b'	16.3 e-p	6.0 a-h	5.8 f-j
49	Spectro 90WDG	5.75 oz	14	8.3 a-j	13.8 c-k	13.0 c-g	13.0 c-k	5.3 a-h	6.8 j-l
50	EcoGuard L	20 fl oz	14[7]						
	/Banner MAXX 1.3MC	1.0 fl oz	14[7]	6.5 a-g	25.0 s-z'b'	33.0 x-z'e'	13.3 d-k	1.5 a-d	6.8 j-l
51	Alude 46L	5.5 fl oz	14	9.5 b-m	16.5 e-p	23.5 j-u	37.0 z'a'-d'	25.5 s-u	4.5 b-e
52	CPR Tank Mix #1	--	14[8]	22.0 s-y	29.3 z'-d'	30.0 s-z'a'	21.0 k-w	6.0 a-h	5.0 c-g
53	CPR Tank Mix #2	--	14[9]	14.5 g-t	23.5 q-z'a'	26.0 m-y	12.8 c-k	5.0 a-h	6.0 g-k
54	Daconil Ultrex 82.5WDG	1.8 oz	14	15.3 h-u	16.3 e-p	27.0 m-z	28.0 v-z'	10.5 h-l	5.0 c-g
55	Gary's Green Tank Mix	--	14[10]	33.5 z'-'b'	43.8 z'j'	48.5 z'i'-l'	60.8 z'h'-i'	27.0 tu	3.3 a
56	TM 473 480 SC	0.1 fl oz	14	15.3 h-u	21.0 m-w	31.0 s-z'c'	29.0 v-z'a'	3.0 a-g	6.0 g-k
57	TM 473 480 SC	0.2 fl oz	14	10.8 c-o	18.3 h-r	26.8 m-y	14.3 d-m	4.3 a-g	6.0 g-k
58	TM 473 480 SC	0.3 fl oz	14	7.3 a-h	15.5 d-n	17.0 e-l	9.5 a-h	1.3 a-c	6.0 g-k
59	TM 473 480 SC	0.1 fl oz							
	+ Bayleton 50DF	0.25 oz	14	13.5 f-r	26.5 u-z'd'	31.3 t-z'c'	20.8 j-w	3.3 a-g	5.5 e-i
60	TM 473 480 SC	0.1 fl oz							
	+ Daconil Ultrex 82.5WDG	1.8 oz	14	9.0 a-l	17.3 f-q	15.5 d-j	7.8 a-e	0.3 a	6.0 g-k
61	TM 473 480 SC	0.2 fl oz							
	+ Daconil Ultrex 82.5WDG	1.8 oz	14	7.8 a-i	11.8 b-g	15.5 d-j	11.3 a-i	1.8 a-d	5.8 f-j
62	TM 473 480SC	0.1 fl oz							
	+ Chipco 26GT 2SC	2 fl oz	14	18.3 n-w	29.8 z'a'-e'	39.3 z'c'-h'	22.0 l-x	4.3 a-g	5.3 d-h
63	TM 473 480 SC	0.1 fl oz							
	+ TM 43807 2.5W	4.5 oz	14	8.3 a-j	18.8 i-s	27.0 m-z	15.8 d-o	2.0 a-d	6.0 g-k
64	TM 473 480 SC	0.1 fl oz							
	+ Cleary 3336 4F	4 fl oz	14	11.0 d-o	20.3 l-u	27.0 m-z	9.5 a-h	3.5 a-g	6.3 h-l
65	Urea 46-0-0	0.13 lb N	14	22.8 u-y	31.8 z'c'-g'	51.0 z'k'-l'	50.8 z'e'-g'	30.5 u	4.0 a-c
66	Curalan 50DF	1 oz	14	34.8 z'a'-b'	32.5 z'd'-h'	53.8 z'l'	51.3 z'f'-g'	20.0 o-s	4.0 a-c
67	Rotational Program #2	--	14[11]	6.5 a-g	8.5 a-c	10.3 b-e	11.3 a-i	6.5 b-h	5.8 f-j
68	Rotational Program #3	--	14[12]	6.5 a-g	11.0 b-f	10.8 b-f	11.8 a-i	5.3 a-h	5.5 e-i
69	Medallion 50W	0.25 oz	14	27.0 x-a'	28.8 z-z'd'	50.5 z'j'-l'	44.3 z'd'-f'	25.5 s-u	3.8 ab
70	Chipco 26GT 2SC	2 fl oz	14	21.3 r-x	37.3 z'g'-i'	56.3 z'l'	53.5 z'-h'	19.5 o-r	3.8 ab

(Continued)

Table 1 (continued).

	Treatment	Rate (per 1000 sq ft)	Spray Interval (days)[2]	Turf Area Infested (%) per Plot[1] 1 Aug.	12 Aug.	26 Aug.	16 Sept.	10 Oct.	Turf Quality[16] 22 Sept.
71	Chipco 26GT 2SC	4 fl oz	14	19.0 p-w	30.8 z'b'-f'	42.3 z'f'-j'	32.8 z-z'c'	13.0 j-n	4.3 a-d
72	Cleary 3336 4F	4 fl oz	14	10.8 c-o	21.8 n-x	20.0 g-o	18.5 i-s	3.8 a-g	5.3 d-h
73	Bayleton 50DF	0.25 oz	14	17.5 m-w	23.3 q-z'	32.8 w-z'e'	26.3 s-z'	3.3 a-g	5.3 d-h
74	Bayleton 50DF	1 oz	14	15.8 j-v	26.0 t-z'c'	29.8 r-z'	20.5 j-v	4.8 a-h	4.5 b-e
75	Prostar 70W	2.2 oz	14	32.0 z'-b'	32.3 z'c'-g'	56.5 z'l'	54.5 z'g'-i'	22.8 q-t	4.3 a-d
76	Chipco Signature 80WG	4.0 oz	14	6.8 a-h	9.3 a-d	10.3 b-e	14.8 d-n	7.0 c-i	5.3 d-h
77	Daconil Ultrex 82.5WG	2.5 oz	14	16.8 l-w	21.3 m-x	16.3 e-k	16.5 f-p	7.3 d-j	5.8 f-j
78	Cleary 3336 Plus 19.4F	4.0 fl oz	14	9.3 a-l	23.0 q-z'	25.0 l-x	27.5 u-z'	14.5 k-o	5.0 c-g
79	Plant Food Tank Mix	--	14[13]	16.3 k-v	30.5 z'b'-e'	31.8 u-z'd'	22.5 m-y	15.8 l-p	5.3 d-h
80	Untreated Check	--	--	29.3 y-z'b'	40.5 z'i'-j'	66.8 z'm'	63.0 z'i'	37.0 v	3.3 a
			INT[14]	DAT[15]	DAT	DAT	DAT	DAT	DAT
			7	6	3	3	17	41	23
			14	6	3	3	24	48	30
			21	13	3	17	17	41	23

[1] Values are means of four replicates. Means followed by the same letter are not significantly different according to Waller-Duncan *k*-ratio *t*-test (*k*=100). Test area was inoculated with 9,000 conidia/ml of *Colletotrichum cereale* on 18 July.

[2] Fungicides were applied 18 May (all treatments, except treatments 56 to 64 and 79), 24 May (7 day treatment), 31 May (7 and 14 day treatments, treatments 56 to 64 begun), 7 June (7 and 21 day treatments, treatment 79 begun), 14 June (7 and 14 day treatments), 21 June (7 day treatment), 28 June (7, 14, 21 day treatments), 5 July (7 day treatment), 12 July (7 and 14 day treatments), 19 July (7 and 21 day treatments), 26 July (7 and 14 day treatments), 2 August (7 day treatment), 9 August (7, 14, 21 day treatments), 16 August (7 day treatment), 23 August (7 and 14 day treatments), 30 August (7 and 21 day treatments), and 6 September (treatment 34 only).

[3] For treatment 10, Heritage TL 0.8ME was applied on 18 May, 14 June, 12 July, and 9 August; whereas Banner MAXX 1.3ME was sprayed on 31 May, 28 June, 26 July, and 23 August.

[4] For treatment 31, Spectro 90WDG was applied on 18 May, 14 June, 12 July, and 9 August; whereas Endorse 2.5W was sprayed on 31 May, 28 June, 26 July, and 23 August.

(Continued)

Table 1 (continued).

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[5] Rotational Program 1 was applied as follows: Banner MAXX 1.3ME (2 fl oz) + Daconil Ultrex 82.5WG (3.2 oz) + Primo MAXX 1MC (0.125 fl oz) on 18 May, Medallion 50W (0.25 oz) + Daconil Ultrex 82.5WG (3.2 oz) + Primo MAXX 1MC (0.125 fl oz) on 31 May, Hertage TL 0.8ME (2 fl oz) + Banner MAXX 1.3ME (1 fl oz) + Daconil Ultrex 82.5WG (1.8 oz) + Primo MAXX 1MC (0.125 fl oz) on 14 June, Banner MAXX 1.3ME (1 fl oz) + Medallion 50W (0.25 oz) + Daconil Ultrex 82.5WG (1.8 oz) + Primo MAXX 1MC (0.125 fl oz) on 28 June, Heritage TL 0.8ME (2 fl oz) + Daconil Ultrex 82.5WG (3.2 oz) + Subdue MAXX 2MC (1 fl oz) + Primo MAXX 1MC (0.125 fl oz) on 12 July, Banner MAXX 1.3ME (1 fl oz) + Medallion 50W (0.25 oz) + Daconil Ultrex 82.5WG (1.8 oz) + Primo MAXX 1MC (0.125 fl oz) on 26 July, Heritage TL 0.8ME (2 fl oz) + Daconil Ultrex 82.5WG (3.2 oz) + Subdue MAXX 2MC (1 fl oz) + Primo MAXX 1MC (0.125 fl oz) on 9 August, Banner MAXX 1.3ME (1 fl oz) + Medallion 50W (0.25 oz) + Daconil Ultrex 82.5WG (1.8 oz) + Primo MAXX 1MC (0.125 fl oz) on 23 August, Cleary 3336 4F (4 oz) + Daconil Ultrex 82.5WG (1.8 oz) + Primo MAXX 1MC (0.125 fl oz) on 6 September. All rates were per 1000 sq ft.

[6] For treatment 48, EcoGuard L was applied 18 May, 14 June, 12 July, and 9 August; whereas Daconil Ultrex 82.5WG was sprayed on 31 May, 28 June, 26 July, and 23 August.

[7] For treatment 50, EcoGuard L was applied 18 May, 14 June, 12 July, and 9 August; whereas Banner MAXX 1.3MC was sprayed on 31 May, 28 June, 26 July, and 23 August.

[8] Treatment 52 consisted of a tank mixture containing CPR 4-0-1 (7.5 fl oz) + True Foliar N-Ca 15-0-0 (3.75 fl oz) + True Foliar NPK Phos 10-3-16 (3.75 fl oz) + True Foliar Si 3-0-10 (3.75 fl oz) + Daconil Ultrex 82.5WG (1.8 oz). All rates were per 1000 sq ft.

[9] Treatment 53 consisted of a tank mixture containing CPR 4-0-1 (7.5 fl oz) + True Foliar NPK Phos 10-3-16 (7.5 fl oz) + True Foliar Si 3-0-10 (3.75 fl oz) + Daconil Ultrex 82.5WG (1.8 oz). All rates were per 1000 sq ft.

[10] Treatment 55 consisted of a tank mixture containing Gary's Green 18-3-4 (6 fl oz) + Ultraplex 18-3-4 (3 fl oz) + EXPGB05BSU (1 fl oz). All rates were per 1000 sq ft.

[11] Rotational Program 2 was applied as follows: Chipco 26GT 2SC (4 fl oz) on 18 May, Banner MAXX 1.3MC (1 fl oz) on 31 May, Daconil Ultrex 82.5WG (3.2 oz) on 14 June, Chipco Signature 80WG (4 oz) + Daconil Ultrex 82.5WG (2.4 oz) on 28 June, Medallion 50W (0.188 oz) + Banner MAXX 1.3MC (0.75 fl oz) on 12 July, Chipco Signature 80WG (4 oz) + Daconil Ultrex 82.5WG (2.4 oz) on 26 July, Endorse 2.5W (3 oz) + Banner MAXX 1.3MC (0.75 fl oz) on 9 August, and Chipco Signature 80WG (4 oz) + Daconil Ultrex 82.5WG (2.4 oz) on 23 August. All rates were per 1000 sq ft.

[12] Rotational Program 3 was applied as follows: Banner MAXX 1.3MC (1 fl oz) on 18 May, Daconil Ultrex 82.5WG (3.2 oz) on 31 May, Chipco 26GT 2SC (4 fl oz) on 14 June, Chipco Signature 80WG (4 oz) + Daconil Ultrex 82.5WG (2.4 oz) on 28 June, Endorse 2.5W (3 oz) + Daconil Ultrex 82.5WG (2.4 oz) on 12 July, Chipco Signature 80WG (4 oz) + Daconil Ultrex 82.5WG (2.4 oz) on 26 July, Medallion 50W (0.188 oz) + Daconil Ultrex 82.5WG (2.4 oz) on 9 August, and Chipco Signature 80WG (4 oz) + Daconil Ultrex 82.5WG (2.4 oz) on 23 August. All rates were per 1000 sq ft.

[13] Treatment 79 consisted of a tank mixture containing 12-3-12 50% srn (12 fl oz) + Green T Micro Mix (3 fl oz) + Adams Earth (3 fl oz) + Green T Sugar Cal 10% (4 fl oz) + Flo Thro (2 fl oz) + MKP 0-52-34 (3.67 oz). All rates were per 1000 sq ft.

[14] Spray intervals in days.

[15] Days after treatment (DAT) for each spray interval.

[16] Turf quality on a 1 to 9 scale, where 9 = best quality and 6 = acceptable turf quality.