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The Rutgers Turfgrass Proceedings is published yearly by the Rutgers Center for Turfgrass Science, Rutgers Cooperative Extension, and the New Jersey Agricultural Experiment Station, Cook College, Rutgers, The State University of New Jersey in cooperation with the New Jersey Turfgrass Association. The purpose of this document is to provide a forum for the dissemination of information and the exchange of ideas and knowledge. The proceedings provide turfgrass managers, research scientists, extension specialists, and industry personnel with opportunities to communicate with co-workers. Through this forum, these professionals also reach a more general audience, which includes the public.

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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EFFICACY OF FUNGICIDES AND BIORATIONAL PRODUCTS FOR THE CONTROL OF DOLLAR SPOT ON A CREEPING BENTGRASS GREEN

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Fungicides were evaluated in 2005 for their ability to control dollar spot (caused by *Sclerotinia homoeocarpa*) at the Rutgers Turf Research Farm in North Brunswick, NJ on creeping bentgrass (*Agrostis stolonifera*) maintained under golf course greens conditions. Turf was established September 1996 on a Norton loam with a pH of 6.5. Mowing was performed daily at a height of 0.125 inches with clippings collected. The site was irrigated as needed to prevent drought stress. Fertilizer was applied as 16-4-8 on 1 April (0.55 lb nitrogen (N)/1000 ft²) and 19 April (0.43 lb N/1000 ft², urea (0.46 lb N/1000 ft²) on 17 May, and ammonium nitrate (0.5 lb N/1000 ft²) on 20 June. Localized dry spots were controlled with Primer wetting agent (4 oz/1000 ft²) on 22 June. Dimension 1E (24 fl oz/A) was applied on 11 May for pre-emergence weed control. Prostar 70W (2.5 oz/1000 ft²) was applied to the entire test area on 16 August to suppress brown patch. Insect pests were controlled with Turcam 7.6W (1.0 oz/1000 sq ft²) on 15 June and 29 July. On 15 July, Merit 75WSP (0.17 oz/1000 ft²) was applied for additional control of insects. The site was aerified with 0.5-inch hollow tines on 4-inch centers and topdressed with a sand root zone mix on 18 April. Plots were 3 x 9 ft and were arranged in a randomized complete block with four replications.

Fungicides were applied in water equivalent to 1.9 gal/1000 ft² with a CO₂ powered sprayer at 30 psi using TeeJet 8003VS flat fan nozzles. Treatments (trt) were initiated on 24 May when environmental conditions were conducive to dollar spot development. Fungicides were reapplied at the appropriate intervals as indicated in Tables 1A and 1B. Turf was visually evaluated for number of dollar spot infection centers per plot on 3, 13, and 23 June, 1, 12, and 21 July, 5, 17, and 30 August, and 9 and 23 September,

and for percent turf area infested with brown patch (caused by *Rhizoctonia solani*) on 1 July. Data were subjected to analysis of variance and means were separated using the Waller-Duncan *k*-ratio *t*-test (*k* = 100).

Dollar spot was first observed on 1 June. Disease pressure increased rapidly and became uniform throughout the study by 13 June (Table 1A). Except for RU 2125-05B FS (trt 9), Compass 50WG (trts 10 and 89), SP102000012987 (trts 11-13), Compass 50WG + SP102000012987 (trts 14-16), TS-12 (trt 17), DK-060 (trt 19), the GW products (trts 20-26), the OK entries (trts 27-28), OK-25S1 + Heritage TL 0.8ME (trt 35), TS-12 + OK 34 (trt 36), Heritage TL 0.8ME (trt 42), RU 20189-05 L (trts 43-45), Rubigan 1AS (trt 46 and 49), EcoGuard (trt 70-71), RU 42116-05 SC (trt 80), Eagle 1.67EW (trts 86-87), Plant Food Tank Mixture # 1 (trt 94) and #2 (trt 95), CS-A 25W (trts 98-100), CS-M 25W (trts 101-103), and CS-N 25W (trt 104-105), most fungicide entries provided good to excellent control of dollar spot until 21 July when disease pressure was very high (i.e., approximately 120 lesion centers per plot on untreated turf). After that date, only RU 2125-05A W (trt 8), RU 2125-05A W + RU 2125-05B FS (trts 2-4), TS-21 + B2 20% + Chipco 26GT 2SC (trt 38), Chipco 26GT 2SC (trt 50), RU 21196-A05 SC (trts 54-58), RU 21196-B05 WG (trts 59-62), Emerald 70WG (trts 63-65 and 85), Emerald 70WG + PX056 (trt 66) or Curalan 50DF (trt 67), RU 42116-05 SC (trts 77-78), Eagle 1.67EW + Daconil Ultrex 82.5WDG (trt 82), Spectator 41.8EC (trt 90), and Banner Maxx 1.3ME (trt 107) afforded adequate protection (i.e., less than 10 lesion centers per plot) through 17 August. Excellent residual control was reported 31 to 52 days post-treatment (on 9 and/or 23 September) for RU 2125-05A W+ RU 2125-05B FS (trts 2-4), TS-21 Plus + TS 21B2 40% +

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Chipco 26GT 2SC (trt 37), Banner Maxx 1.3MC (trts 40 and 107), RU 21196- A05 SC (trts 54-58), RU 21196-B05 WG (trts 59-62), Emerald 70WG (trts 63-65 and 85), Emerald 70WG+ PX056 (trt 66) or Curalan 50DF (trt 67), and Spectator 41.8EC (trt 90).

The biorational product TS-21 provided excellent control throughout most of the study, either alone (trt 18) or in combination with synthetic fungicides (trts 31-33 and 37). In fact, the tank mixture of TS-21 + Compass 50WG (trt 33) or TS 21B2 40% + Chipco 26GT 2SC (trt 38) resulted in significantly better disease control than were afforded by the individual components on 17 August (trt 33), 30 August (trt 38), and 9 September (trt 38). Daconil Ultrex 82.5WDG at 3.25 oz (trt 73) provided better suppression of dollar

spot than Echo Ultimate 82.5WDG at 3.25 oz (trt 52) or Echo 720 6F at 3.6 fl oz (trt 53) on several dates in late July and August (Tables 1A, 1B). Moreover, the combination of Eagle 1.67 EW + Daconil Ultrex 82.5WDG (trt 82) afforded superior control of this disease on 21 July and 9 August than did the individual components alone (trts 73 and 86).

With the exception of RU 2125-05B FS (trt 9), TS-21 (trt 18), GW-252 (trt 21), GW 254-259 (trts 23-26), OK-34 (trt 28), RU 20189-05 L (trts 43-45), Emerald 70WG (trts 63-65 and 85), EcoGuard L (trts 70-71), and Curalan 50DF (trt 84), all of the entries in this study adequately controlled brown patch on the 1 July evaluation. No phytotoxicity was observed for any of the treatments.

Table 1A. Evaluation of Fungicides and Biorational Products for the Control of Dollar Spot on Greens, New Brunswick, NJ, 2005.

Treatment	Rate (per 1000 sq ft)	Spray Interval (days) ²	Number of Lesion Centers per Plot ¹						
			3 June	13 June	23 June	1 July	12 July	21 July	
1	RU2125-05AW 1.2 oz + RU2125-05BFS 0.035 oz	21	2.8 a-j	2.8 a-f	2.0 a-d	7.0 c-j	3.5 a-e	14.5 d-i	
2	RU2125-05AW 1.2 oz + RU2125-05BFS 0.071 oz	21	1.8 a-f	2.0 a-e	1.8 a-c	6.0 b-j	2.5 a-d	8.3 a-e	
3	RU2125-05AW 1.2 oz + RU2125-05BFS 0.106 oz	21	2.8 a-j	3.3 a-g	3.5 a-f	5.8 b-i	4.3 a-e	10.0 a-e	
4	RU2125-05AW 1.2 oz + RU2125-05BFS 0.141 oz	21	3.5 a-j	2.0 a-e	1.8 a-c	6.8 c-j	2.8 a-d	8.5 a-e	
5	RU2125-05AW 1.2 oz + RU2125-05BFS 0.177 oz	21	1.8 a-f	2.3 a-e	1.3 ab	6.5 c-j	2.5 a-d	19.3 e-k	
6	RU2125-05AW 1.2 oz + RU2125-05BFS 0.212 oz	21	3.0 a-j	3.3 a-g	4.0 a-h	7.5 d-k	3.8 a-e	31.3 l-n	
7	RU2125-05AW 1.2 oz + RU2125-05BFS 0.244 oz	21	3.5 a-j	2.5 a-f	3.8 a-g	8.0 e-l	4.5 a-e	19.0 e-j	
8	RU2125-05AW 1.2 oz + RU2125-05BFS 0.244 oz	21	1.8 a-f	0.8 a-e	1.8 a-c	6.8 c-j	2.5 a-d	10.3 a-e	
9	RU2125-05BFS 0.244 oz	21	6.0 i-l	13.0 n-r	17.5 w-z	24.3 w-z'a	26.5 w-z'	91.5 z'b'-h'	
10	Compass 50WG 0.1 oz	14	0.8 ab	5.8 e-k	3.5 a-f	15.0 m-t	27.0 w-z'	113.3 z'l'-p'	
11	SP102000012987 3.0 fl oz	14 ³	4.3 b-k	15.8 q-v	18.0 x-z	16.3 n-u	49.3 z'g'-h'	121.0 z'o'-q'	
12	SP102000012987 6.0 fl oz	14 ³	3.5 a-j	15.0 p-v	13.8 q-w	16.0 n-u	28.3 y-z'a	105.8 z'i'-m'	
13	SP102000012987 12.0 fl oz	14 ³	3.5 a-j	16.3 q-v	14.0 r-x	14.3 m-s	25.5 v-z'	84.0 z-z'd'	
14	Compass 50WG 0.1 oz + SP102000012987 3.0 fl oz	14 ³	4.8 d-l	18.8 u-w	18.0 x-z	15.5 n-t	24.5 u-z'	95.8 z'e'-i'	
15	Compass 50WG 0.1 oz + SP102000012987 6.0 fl oz	14 ³	4.0 b-k	12.5 m-q	11.5 n-s	15.0 m-t	19.3 n-v	69.5 t-x	
16	Compass 50WG 0.1 oz + SP102000012987 12.0 fl oz	14 ³	4.8 d-l	15.3 p-v	14.3 s-x	18.5 q-v	20.0 o-v	32.0 l-n	
17	TS-12 4 fl oz	14 ⁴	7.3 kl	11.3 l-p	9.8 k-q	16.0 n-u	29.5 z-z'b'	95.3 z'd'-i'	
18	TS-21 4 fl oz	14	1.8 a-f	3.3 a-g	1.3 ab	3.0 a-g	7.0 b-h	26.5 j-m	
19	DK-060 4 fl oz	14	2.8 a-j	5.3 d-k	7.3 f-m	10.8 i-n	20.8 p-w	59.5 r-u	
20	GW-251 4 fl oz	14	5.3 f-l	13.8 o-s	13.3 p-v	14.5 m-s	24.0 t-z	101.3 z'g'-k'	

(Continued)

Table 1A (continued).

Treatment	Rate (per 1000 sq ft)	Spray Interval (days) ²	Number of Lesion Centers per Plot ¹						
			3 June	13 June	23 June	1 July	12 July	21 July	
21 GW -252	4 fl oz	14	5.3 f-l	14.3 p-t	16.0 t-y	29.8 z'a'-b'	41.3 z'd'-f'	118.3 z'n'-p'	
22 GW-253	4 fl oz	14	6.0 i-l	13.0 n-r	8.0 h-n	11.5 j-o	25.0 v-z'	110.5 z'k'-o'	
23 GW-254	4 fl oz	14	5.8 h-l	14.5 p-u	14.0 r-x	26.3 z'-a'	35.3 z'b'-d'	124.0 z'p'-q'	
24 GW0255.....	4 fl oz	14 ⁵	8.3 l	13.0 n-r	13.5 p-w	19.3 s-y	37.5 z'c'-e'	88.5 z'a'-f'	
25 GW-257	4 fl oz	14	2.8 a-j	9.3 j-n	10.8 m-s	17.5 p-u	24.3 t-z	90.5 z'a'-g'	
26 GW-259	4 fl oz	14	4.5 c-k	16.8 q-v	13.0 p-u	24.8 y-z'a'	30.8 z'-b'	84.5 z'-e'	
27 OK-025	4 fl oz	14	4.0 b-k	9.5 k-o	8.3 i-o	21.3 u-z'	28.8 y-z'a'	81.3 y-z'c'	
28 OK-034	4 fl oz	14	6.3 j-l	17.5 s-w	17.5 w-z	37.5 z'c'-d'	34.5 z'a'-c'	76.3 v-z'	
29 TS-21	4 fl oz								
+ OK-25	4 fl oz	14	2.8 a-j	3.8 a-g	4.5 b-i	9.8 h-m	14.0 i-o	75.8 v-z'	
30 TS-21S1.....	4 fl oz								
+ Heritage TL 0.8ME	0.5 fl oz	14	0.8 ab	0.5 ab	1.0 ab	4.3 a-h	5.3 a-f	71.0 u-y	
31 TS-21S2.....	4 fl oz								
+ Banner MAXX 1.3MC	0.5 fl oz	14	1.3 a-d	0.0 a	0.5 ab	0.5 ab	1.5 a-c	16.8 e-j	
32 TS-21B1.....	4 fl oz								
+ Chipco 26GT 2SC	1.5 fl oz	14	2.0 a-g	0.0 a	0.0 a	0.0 a	1.5 a-c	27.0 j-m	
33 TS-21B2.....	4 fl oz								
+ Compass 50WG	0.15 oz	14	1.3 a-d	0.0 a	0.0 a	0.5 ab	2.0 a-c	19.3 e-k	
34 OK-25B1	4 fl oz								
+ Chipco 26GT 2SC	1.5 fl oz	14	2.8 a-j	0.0 a	0.0 a	0.0 a	2.8 a-d	46.5 o-q	
35 OK-25S1	4 fl oz								
+ Heritage TL 0.8ME	0.5 fl oz	14	0.5 a	4.5 b-i	5.5 c-j	17.8 p-u	16.3 k-s	95.3 z'd'-i'	
36 TS-12	4 fl oz								
+ OK-34	4 fl oz	14	6.0 i-l	15.8 q-v	17.3 v-y	40.3 z'c'-e'	29.3 z-z'b'	131.0 z'p'-q'	
37 TS-21 Plus	4 fl oz								
+ TS21B2 40%.....	4 fl oz	14	1.0 a-c	0.0 a	0.0 a	0.0 a	1.8 a-c	18.3 e-j	
+ Chipco 26GT 2SC	1.5 fl oz								
38 TS-21	4 fl oz								
+ B2 20%	4 fl oz	14	2.0 a-g	0.0 a	0.0 a	0.0 a	0.8 ab	3.5 a-d	
+ Chipco 26GT 2SC	1.5 fl oz								

(Continued)

Table 1A (continued).

Treatment	Rate (per 1000 sq ft)	Spray Interval (days) ²	Number of Lesion Centers per Plot ¹						
			3 June	13 June	23 June	1 July	12 July	21 July	
39 Daconil Ultrex 82.5WDG	1.8 oz	14	3.5 a-j	1.0 a-d	4.0 a-h	8.3 fl	11.3 f-k	116.3 z'm'-p'	
40 Banner MAXX 1.3MC	0.5 fl oz	14	3.5 a-j	0.0 a	0.5 ab	4.0 a-g	3.8 a-e	25.3 i-l	
41 Chipco 26GT 2SC	1.5 fl oz	14	2.5 a-i	0.0 a	0.5 ab	2.5 a-e	6.3 a-g	39.5 n-o	
42 Heritage TL 0.8ME	0.5 fl oz	14	2.0 a-g	4.5 b-i	6.3 e-l	19.3 s-y	18.3 m-u	92.5 z'c'-h'	
43 RU20189-05 L	1.0 fl oz	14	3.8 a-k	9.5 k-o	11.8 n-s	20.3 t-z	21.3 q-w	102.8 z'h'-l'	
44 RU20189-05 L	1.5 fl oz	14	2.8 a-j	8.5 h-m	9.5 j-p	19.8 s-y	18.0 l-t	81.8 y-z'c'	
45 RU20189-05 L	2.0 fl oz	14	2.8 a-j	7.5 g-l	10.0 k-r	16.3 n-u	15.5 j-r	72.5 v-z	
46 Rubigan 1AS	1.5 fl oz	14	4.8 d-l	2.8 a-f	6.0 d-k	12.8 k-p	17.0 k-s	79.5 w-z'a'	
47 Rubigan 1AS	0.75 fl oz	14	3.0 a-j	0.0 a	2.3 a-e	2.8 a-f	5.0 a-f	24.5 h-l	
48 + Daconil Ultrex 82.5WDG	1.8 oz	14	4.5 c-k	0.0 a	1.5 a-c	2.8 a-f	6.0 a-g	37.0 m-o	
49 Rubigan 1AS	0.75 fl oz	14	5.3 f-l	6.8 f-k	8.5 i-o	25.8 z-z'a'	25.0 v-z'	101.3 z'g'-k'	
50 Chipco 26GT 2SC	4 fl oz	14	1.8 a-f	0.0 a	0.0 a	0.0 a	0.0 a	3.3 a-d	
51 Echo 720 6F	3.6 fl oz	14	5.5 g-l	0.0 a	0.0 a	1.8 a-d	5.5 a-g	68.0 s-w	
52 Echo Ultimate 82.5WDG	3.25 oz	14	4.0 b-k	0.0 a	0.0 a	2.3 a-e	4.3 a-e	66.0 r-v	
53 Propensity 1.3ME	1 fl oz	14	4.0 b-k	0.0 a	0.5 ab	0.5 ab	1.3 a-c	11.5 a-g	
54 RU21196-A05 SC	0.53 fl oz	14	0.5 a	0.0 a	0.0 a	0.0 a	0.0 a	0.3 ab	
55 RU21196 -A05 SC	0.71 fl oz	14	1.3 a-d	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	
56 RU21196 -A05 SC	0.53 fl oz	21	1.3 a-d	0.0 a	0.5 ab	0.0 a	0.0 a	0.8 ab	
57 RU21196 -A05 SC	0.71 fl oz	21	2.5 a-i	0.5 ab	0.5 ab	0.0 a	0.0 a	0.8 ab	
58 RU21196 -A05 SC	0.88 fl oz	21	1.5 a-e	0.0 a	0.0 a	0.0 a	0.0 a	0.3 ab	
59 RU21196 -B05 WG	0.83 oz	14	3.0 a-j	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	
60 RU21196 -B05 WG	1.1 oz	14	1.5 a-e	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	
61 RU21196 -B05 WG	0.83 oz	21	2.0 a-g	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	
62 RU21196 -B05 WG	1.1 oz	21	1.0 a-c	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	
63 Emerald 70WG	0.13 oz	14	2.5 a-i	0.0 a	0.0 a	0.0 a	0.0 a	0.8 ab	
64 Emerald 70WG	0.18 oz	14	2.0 a-g	0.0 a	0.0 a	0.0 a	0.0 a	0.5 ab	
65 Emerald 70WG	0.13 oz	21	3.0 a-j	0.0 a	0.0 a	0.5 ab	1.0 ab	2.0 a-c	

(Continued)

Table 1A (continued).

Treatment	Rate (per 1000 sq ft)	Spray Interval (days) ²	Number of Lesion Centers per Plot ¹						
			3 June	13 June	23 June	1 July	12 July	21 July	
66 Emerald 70WG	0.13 oz								
+ PX056	0.32 fl oz	21	1.8 a-f	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	1.0 ab
67 Emerald 70WG	0.18 oz								
+ Curalan 50DF	1.0 oz	21	2.8 a-j	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a
68 Insignia 20WG	0.9 oz	14	2.0 a-g	0.0 a	0.0 a	0.0 a	0.0 a	1.0 ab	13.3 c-h
69 Insignia 20WG	0.9 oz								
+ PX056	0.32 fl oz	14	1.5 a-e	0.0 a	0.0 a	0.0 a	0.0 a	0.5 a	10.8 a-f
70 EcoGuard L	20 fl oz	7	1.5 a-e	15.5 p-v	11.5 n-s	21.5 u-z'	22.5 s-y	22.5 s-y	31.8 l-n
71 EcoGuard L	20 fl oz	14	1.8 a-f	13.0 n-r	13.8 q-w	24.5 x-z'a'	27.8 x-z'	27.8 x-z'	98.5 z'f'-j'
72 EcoGuard L	20 fl oz	28 ⁶							
/Daconil Ultrex 82.5WDG	3.25 oz	28 ⁶	2.0 a-g	3.5 a-g	2.3 a-e	18.8 q-w	11.8 g-l	11.8 g-l	82.0 y-z'c'
73 Daconil Ultrex 82.5WDG	3.25 oz	14	1.5 a-e	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	27.8 j-m
74 RU42116-05SC	0.33 fl oz	14	2.3 a-h	0.5 ab	1.8 a-c	2.5 a-e	5.3 a-f	5.3 a-f	73.3 v-z'
75 RU42116-05SC	0.5 fl oz	14	2.3 a-h	0.0 a	0.0 a	0.0 a	0.5 a	0.5 a	40.5 n-o
76 RU42116-05SC	0.66 fl oz	14	2.3 a-h	0.0 a	0.0 a	0.0 a	0.5 a	0.5 a	22.0 fl
77 RU42116-05SC	0.75 fl oz	14	0.8 ab	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	10.0 a-e
78 RU42116-05SC	1.0 fl oz	14	1.3 a-d	0.0 a	0.0 a	0.0 a	0.8 ab	0.8 ab	11.8 b-g
79 RU42116-05SC	0.75 fl oz	21	2.0 a-g	5.0 c-j	4.5 b-i	8.0 e-l	9.5 e-j	9.5 e-j	64.8 r-v
80 RU42116-05SC	0.75 fl oz	28	2.0 a-g	4.8 b-i	6.5 fl	3.0 a-g	15.0 i-q	15.0 i-q	99.0 z'f'-k'
81 Eagle 1.67EW	0.5 fl oz								
+ Daconil Ultrex 82.5WDG	1.8 oz	14	2.5 a-i	0.0 a	1.8 a-c	3.5 a-g	4.0 a-e	4.0 a-e	44.0 o
82 Eagle 1.67EW	1.0 fl oz								
+ Daconil Ultrex 82.5WDG	3.25 oz	21	1.0 a-c	0.0 a	1.0 ab	2.5 a-e	2.5 a-d	2.5 a-d	9.5 a-e
83 Daconil Ultrex 82.5WDG	3.25 oz	21	3.3 a-j	5.0 c-j	6.0 d-k	11.0 i-n	12.8 h-m	12.8 h-m	59.5 r-u
84 Curalan 50DF	1.0 oz	21	1.3 a-d	0.0 a	0.0 a	2.0 a-d	2.5 a-d	2.5 a-d	22.8 g-l
85 Emerald 70WG	0.18 oz	21	3.0 a-j	1.3 a-d	0.8 ab	0.0 a	0.0 a	0.0 a	0.5 ab
86 Eagle 1.67EW	1.0 fl oz	21	3.5 a-j	7.5 g-l	7.3 f-m	17.0 o-u	16.3 k-s	16.3 k-s	57.8 q-s
87 Eagle 1.67EW	0.5 fl oz	14	3.0 a-j	4.3 a-h	7.0 f-m	13.3 l-q	17.5 k-s	17.5 k-s	80.3 x-z'b'
88 PX056	0.32 fl oz	21	5.8 h-l	21.8 w	21.5 z	40.0 z'c'-e'	54.8 z'h'	54.8 z'h'	101.0 z'g'-k'
89 Compass 50WG	0.15 oz	14	2.8 a-j	4.3 a-h	3.5 a-f	11.5 j-o	19.3 n-v	19.3 n-v	83.3 z-z'c'

(Continued)

Table 1A (continued).

Treatment	Rate (per 1000 sq ft)	Spray Interval (days) ²	Number of Lesion Centers per Plot ¹						
			3 June	13 June	23 June	1 July	12 July	21 July	
90 Spectator 41.8EC	0.37 fl oz	14	2.8 a-j	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	0.8 ab
91 Spectator 41.8EC	0.72 fl oz	28	2.5 a-i	0.0 a	4.0 a-h	0.0 a	0.0 a	5.3 a-f	30.8 k-n
92 18 Plus Flowable 23.3F	2.0 fl oz	14	2.3 a-h	0.0 a	0.0 a	0.0 a	0.0 a	2.5 a-d	45.8 o-p
93 Banner MAXX 1.3ME	2 fl oz	28	2.8 a-j	0.0 a	2.0 a-d	0.5 ab	0.5 ab	7.5 c-h	66.0 r-v
94 Plant Food Tank Mix #1	-	14 ⁷	3.8 a-k	19.3 vw	18.8 yz	35.0 z'b'-c'	35.0 z'b'-c'	37.8 z'c'-e'	100.5 z'g'-k'
95 Plant Food Tank Mix #2	-	14 ⁸	3.3 a-j	14.8 p-u	10.3 l-s	18.0 p-v	18.0 p-v	8.8 d-i	64.8 r-v
96 Untreated check	-	-	5.0 e-l	18.5 t-w	17.0 u-y	45.3 z'e'-f'	40.5 z'c'-e'	40.5 z'c'-e'	108.3 z'j'-n'
97 Untreated check	-	-	5.0 e-l	17.3 r-v	16.8 u-y	42.5 z'd'-f'	43.0 z'e'-g'	43.0 z'e'-g'	108.8 z'j'-n'
98 CS-A 25W	0.31 oz	14	4.8 d-l	8.8 i-n	12.3 o-t	23.5 v-z'	47.5 z'f'-g'	21.8 r-x	90.8 z'a'-z'g'
99 CS-A 25W	0.62 oz	14	4.0 b-k	6.8 f-k	9.5 j-p	19.0 r-x	19.0 r-x	21.8 r-x	88.8 z'a'-f'
100 CS-A 25W	1.24 oz	14	4.5 c-k	4.0 a-g	6.0 d-k	13.5 l-r	13.5 l-r	18.0 l-t	82.3 y-z'c'
101 CS-M 25W	0.31 oz	14	3.8 a-k	7.5 g-l	7.8 g-n	18.0 p-v	24.5 u-z'	24.5 u-z'	104.3 z'i'-l'
102 CS-M 25W	0.62 oz	14	2.5 a-i	2.0 a-e	3.8 a-g	8.5 g-l	8.5 g-l	13.0 h-n	58.0 q-t
103 CS-M 25W	1.24 oz	14	3.3 a-j	3.3 a-g	4.5 b-i	5.8 b-i	5.8 b-i	14.5 i-p	57.5 q-s
104 CS-N 25W	0.31 oz	14	2.8 a-j	5.8 e-k	7.8 g-n	18.8 q-w	18.8 q-w	25.5 v-z'	109.5 z'j'-o'
105 CS-N 25W	0.62 oz	14	4.0 b-k	5.0 c-j	7.0 f-m	12.8 k-p	12.8 k-p	15.0 i-q	83.3 z-z'c'
106 CS-N 25W	1.24 oz	14	3.5 a-j	1.8 a-e	4.5 b-i	4.0 a-g	4.0 a-g	9.8 e-j	73.3 v-z'
107 Banner MAXX 1.3ME	1 fl oz	14	1.3 a-d	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	9.8 a-e
108 Insignia 20WG	0.5 oz	14	2.3 a-h	0.0 a	0.8 ab	2.0 a-d	2.0 a-d	4.5 a-e	56.0 p-r
109 Untreated Check	-	-	4.3 b-k	15.0 p-v	16.5 u-y	47.0 z'f'	47.0 z'f'	43.8 z'e'-g'	119.8 z'n'-q'

INT ⁹	DAT ¹⁰	DAT	DAT	DAT	DAT	DAT
7	3	6	2	3	1	2
14	10	6	2	3	7	2
21	10	20	9	3	7	16
28	10	20	2	10	21	2

(Continued)

Table 1A (continued).

- 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).
- ² Fungicides were applied on 24 May (all treatments except treatments 11-16, 94, and 95), 31 May (7 day treatment), 7 June (7 and 14 day treatments, treatments 94 and 95 begun), 14 June (7 and 21 day treatments), 21 June (7, 14, and 28 day treatments), 28 June (7 day treatment), 5 July (7, 14, and 21 day treatments, treatment 11-16 begun, last application for treatments 99, 100, 102, 103, 105, and 106), 12 July (7 day treatment), 19 July (7, 14, and 28 day treatments, last application for treatments 98, 101, and 104), 26 July (7 and 21 day treatments), 2 August (7 and 14 day treatments), and 9 August (7 day treatment).
- ³ Daconil Ultrex 82.5WDG (3.25 oz) was applied once on June 21 to control existing dollar spot infection centers prior to initiating treatments 11-16 on 5 July.
- ⁴ Treatment 17 discontinued after 24 May due to severe foliar burn.
- ⁵ Treatment 24 rate reduced from 4 fl oz to 2 fl oz on 7 June through 2 August due to toxicity at the higher (4 fl oz) rate.
- ⁶ For treatment 72, EcoGuard L (20 fl oz) was applied on 24 May, 21 June, and 19 July; whereas Daconil Ultrex 82.5WDG (3.25 oz) was sprayed on 7 June, 5 July, and 2 August.
- ⁷ Treatment 94 (Plant Food Tank Mix 1) consisted of Thio-Sul 12-0-0-26 S (6 fl oz) + Green T 12-3-12 50%SRN (6 fl oz) + Tecmangam 32% (3.2 oz) + Sugar Cal 10% Ca (2 fl oz) + Adams Earth (2 fl oz) + Flo Thru (2 fl oz).
- ⁸ Treatment 95 (Plant Food Tank Mix 1) consisted of Thio-Sul 12-0-0-26 S (6 fl oz) + Green T 12-3-12 50%SRN (6 fl oz) + Tecmangam 32% (3.2 oz) + Sugar Cal 10% Ca (2 fl oz) + Adams Earth (2 fl oz) + Flo Thru (2 fl oz) + 12-3-12 Organic (24 oz) + Daconil Ultrex 82.5WDG (1 oz).
- ⁹ Spray intervals in days
- ¹⁰ Days after treatment (DAT) for each spray interval.

Table 1B. Evaluation of Fungicides and Biorational Products for the Control of Dollar Spot on Greens, New Brunswick, NJ, 2005.

Treatment	Rate (per 1000 sq ft)	Spray Interval (days) ²	Number of Lesion Centers per Plot ¹					Brown Patch (%) ¹¹ 1 July
			5 Aug.	17 Aug.	30 Aug.	9 Sept.	23 Sept.	
1 RU2125-05AW 1.2 oz								
+ RU2125-05BFS 0.035 oz		21	0.0 a	2.5 a-d	24.0 d-k	15.0 a-j	54.3 d-p	0.0 a
2 RU2125-05AW 1.2 oz								
+ RU2125-05BFS 0.071 oz		21	0.0 a	0.8 ab	21.5 d-j	10.0 a-f	43.8 b-k	0.0 a
3 RU2125-05AW 1.2 oz								
+ RU2125-05BFS 0.106 oz		21	0.0 a	0.0 a	19.0 b-i	7.0 a-d	55.5 e-q	0.0 a
4 RU2125-05AW 1.2 oz								
+ RU2125-05BFS 0.141 oz		21	0.0 a	0.0 a	17.5 a-h	9.0 a-e	47.5 b-m	3.8 a-d
5 RU2125-05AW 1.2 oz								
+ RU2125-05BFS 0.177 oz		21	2.5 a-d	4.5 a-f	21.8 d-j	24.8 a-p	52.5 c-n	0.0 a
6 RU2125-05AW 1.2 oz								
+ RU2125-05BFS 0.212 oz		21	0.0 a	1.3 a-c	16.3 a-g	15.3 a-j	44.3 b-k	0.0 a
7 RU2125-05AW 1.2 oz								
+ RU2125-05BFS 0.244 oz		21	0.0 a	1.3 a-c	21.3 d-j	21.3 a-n	47.5 b-m	0.0 a
8 RU2125-05AW 1.2 oz								
+ RU2125-05BFS 0.244 oz		21	0.0 a	1.5 a-c	23.8 d-k	13.8 a-h	49.3 c-n	0.0 a
9 RU2125-05BFS 0.244 oz								
+ Compass 50WG 0.1 oz		21	20.8 r-w	8.8 d-n	116.5 z'd'-k'	33.3 e-u	57.5 e-r	23.8 lm
10 SP102000012987 3.0 fl oz		14	15.5 j-r	19.5 q-x	211.3 z'u'	40.0 j-w	96.3 p-z'i'	0.0 a
11 SP102000012987 6.0 fl oz		14 ³	27.0 v-x	4.3 a-f	64.8 q-u	39.3 i-w	121.3 z'b'-l'	2.5 a-c
12 SP102000012987 6.0 fl oz		14 ³	20.3 p-v	2.5 a-d	52.3 n-r	32.5 e-u	95.5 o-z'i'	2.5 a-c
13 SP102000012987 12.0 fl oz		14 ³	18.0 m-t	2.0 a-d	30.8 g-m	30.5 d-s	88.8 m-z'g'	2.5 a-c
14 Compass 50WG 0.1 oz								
+ SP102000012987 3.0 fl oz		14 ³	10.0 e-k	0.0 a	76.5 t-w	44.3 m-z	116.3 z-z'l'	3.0 a-c
15 Compass 50WG 0.1 oz								
+ SP102000012987 6.0 fl oz		14 ³	7.5 b-h	0.0 a	76.0 t-w	37.8 h-w	115.8 z-z'l'	2.5 a-c
16 Compass 50WG 0.1 oz								
+ SP102000012987 12.0 fl oz		14 ³	7.8 b-i	0.0 a	25.8 e-l	24.3 a-o	72.5 g-y	1.3 ab
17 TS-12 4 fl oz		14 ⁴	16.8 k-s	21.8 s-x	95.0 x-z'b'	37.5 h-w	108.8 v-z'l'	10.0 e-h
18 TS-21 4 fl oz		14	8.0 c-i	2.5 a-d	64.8 r-u	42.3 l-y	100.5 s-z'i'	15.0 h-k
19 DK-060 4 fl oz		14	7.8 b-i	3.3 a-e	74.3 t-w	41.3 k-x	88.3 m-z'f'	10.5 e-h
20 GW-251 4 fl oz		14	24.3 t-w	18.8 p-v	131.3 z'j'-p'	52.8 q-z'	142.5 z'j'-n'	2.5 a-c

(Continued)

Table 1B. Evaluation of Fungicides and Biorational Products for the Control of Dollar Spot on Greens, New Brunswick, NJ, 2005.

Treatment	Rate (per 1000 sq ft)	Spray Interval (days) ²	Number of Lesion Centers per Plot ¹					Brown Patch (%) ¹¹ 1 July
			5 Aug.	17 Aug.	30 Aug.	9 Sept.	23 Sept.	
21 GW -252	4 fl oz	14	35.8 yz	14.3 l-r	147.5 z'o'-r'	65.0 x-z'	111.3 x-z'l'	15.0 h-k
22 GW-253	4 fl oz	14	33.8 xy	20.0 r-x	129.5 z'i'-o'	51.8 q-z'	76.3 g-z'	6.3 b-f
23 GW-254	4 fl oz	14	21.5 r-w	13.0 j-r	108.0 z'a'-g'	42.0 l-x	116.3 z-z'l'	25.0 m
24 GW0255.....	4 fl oz	14 ⁵	23.8 s-w	10.0 e-o	136.8 z'm'-p'	48.0 o-z'	115.0 y-z'l'	16.3 i-k
25 GW-257	4 fl oz	14	19.5 n-u	8.3 c-m	83.8 v-z	33.0 e-u	86.3 k-z'd'	17.5 jk
26 GW-259	4 fl oz	14	13.3 h-q	15.8 n-t	92.0 w-z'a'	25.8 c-p	91.3 n-z'i'	15.0 h-k
27 OK-025	4 fl oz	14	15.5 j-r	5.5 a-i	37.5 j-o	23.3 a-o	77.5 g-z'a'	1.3 ab
28 OK-034	4 fl oz	14	20.0 o-v	16.3 o-u	119.8 e'-m'	52.0 q-z'	131.8 z'h'-m'	11.3 f-i
29 TS-21	4 fl oz	14	15.0 i-r	6.8 b-k	62.3 p-t	34.8 f-v	128.8 z'e'-l'	9.3 d-g
30 + OK-25	4 fl oz	14	16.3 j-r	25.3 v-y	178.0 z's'-u'	123.3 z'a'	120.0 z'a'-l'	0.0 a
31 + Heritage TL 0.8ME	0.5 fl oz	14	1.5 a-c	0.0 a	35.0 h-n	24.5 a-p	75.0 g-z	2.5 a-c
32 + Banner MAXX 1.3MC	0.5 fl oz	14	1.5 a-c	1.3 a-c	71.5 s-v	41.3 k-x	92.0 n-z'i'	2.5 a-c
33 + Chipco 26GT 2SC	1.5 fl oz	14	8.0 c-i	7.8 b-l	82.0 u-y	45.0 n-z	123.8 z'c'-l'	0.0 a
34 + Compass 50WG	0.15 oz	14	6.0 a-h	2.0 a-d	54.8 o-s	44.3 m-z	125.0 z'd'-l'	0.0 a
35 + Chipco 26GT 2SC	1.5 fl oz	14	18.8 n-u	12.8 j-q	148.8 z'p'-r'	115.5 z'a'	150.0 z'l'-n'	0.0 a
36 + Heritage TL 0.8ME	0.5 fl oz	14	49.8 z'a'	15.5 n-t	128.5 z'h'-n'	55.3 s-z'	126.3 z'd'-l'	5.0 a-e
37 + OK-34	4 fl oz	14	3.0 a-e	0.0 a	8.0 a-e	15.0 a-j	90.0 m-z'h'	5.0 a-e
38 + TS21B2 40%	4 fl oz	14	0.5 ab	0.0 a	20.3 c-j	16.8 a-k	85.5 j-z'd'	11.3 f-i
+ Chipco 26GT 2SC	1.5 fl oz	14	0.5 ab	0.0 a	20.3 c-j	16.8 a-k	85.5 j-z'd'	11.3 f-i

(Continued)

Table 1B (continued).

Treatment	Rate (per 1000 sq ft)	Spray Interval (days) ²	Number of Lesion Centers per Plot ¹					Brown Patch (%) ¹¹ 1 July
			5 Aug.	17 Aug.	30 Aug.	9 Sept.	23 Sept.	
39 Daconil Ultrex 82.5WDG	1.8 oz	14	36.0 yz	19.3 q-w	162.5 z'q'-s'	56.0 t-z'	110.8 x-z'l'	2.5 a-c
40 Banner MAXX 1.3MC	0.5 fl oz	14	2.8 a-e	0.0 a	18.3 a-h	22.0 a-n	73.8 g-z	1.3 ab
41 Chipco 26GT 2SC	1.5 fl oz	14	3.8 a-f	8.8 d-n	105.3 z'a'-e'	61.3 w-z'	133.0 z'i'-n'	1.3 ab
42 Heritage TL 0.8ME	0.5 fl oz	14	52.0 z'a'	26.3 w-z	231.3 z'v'	172.5 z'b'	168.8 z'm'-n'	0.0 a
43 RU20189-05 L	1.0 fl oz	14	24.3 t-w	13.5 k-r	111.0 z'b'-h'	46.3 n-z'	128.8 z'e'-l'	18.8 j-l
44 RU20189-05 L	1.5 fl oz	14	24.0 s-w	18.8 p-v	131.0 z'j'-p'	54.5 r-z'	109.3 w-z'l'	25.0 m
45 RU20189-05 L	2.0 fl oz	14	16.8 k-s	11.3 f-o	114.0 z'c'-j'	56.3 t-z'	111.3 x-z'l'	16.3 i-k
46 Rubigan 1AS	1.5 fl oz	14	13.0 h-p	15.0 m-s	96.8 y-z'c'	41.3 k-x	70.5 g-x	3.8 a-d
47 Rubigan 1AS	0.75 fl oz	14	4.5 a-g	3.8 a-e	54.3 o-s	38.0 h-w	81.8 i-z'c'	6.3 b-f
48 + Daconil Ultrex 82.5WDG	1.8 oz	14						
Rubigan 1AS	1.5 fl oz	14						
49 + Daconil Ultrex 82.5WDG	1.8 oz	14	7.5 b-h	3.0 a-e	41.8 k-o	31.5 d-t	77.5 g-z'a'	2.5 a-c
Rubigan 1AS	0.75 fl oz	14	15.0 i-r	8.0 c-m	76.0 t-w	45.0 n-z'	88.8 m-z'g'	8.8 d-g
50 Chipco 26GT 2SC	4 fl oz	14	0.0 a	1.8 a-d	28.5 f-l	22.5 a-n	63.8 f-u	2.5 a-c
51 Echo 720 6F	3.6 fl oz	14	12.8 h-o	12.8 j-q	106.8 z'a'-f'	68.3 z-z'	107.5 v-z'k'	0.0 a
52 Echo Ultimate 82.5WDG	3.25 oz	14	11.3 g-m	12.0 h-p	132.5 k'-p'	60.3 w-z'	87.5 l-z'e'	0.0 a
53 Propensity 1.3ME	1 fl oz	14	0.0 a	0.0 a	11.5 a-f	14.5 a-i	53.8 d-p	0.0 a
54 RU21196-A05 SC	0.53 fl oz	14	0.0 a	0.0 a	0.5 a	3.5 a-c	43.0 b-j	6.3 b-f
55 RU21196 -A05 SC	0.71 fl oz	14	0.0 a	0.0 a	0.5 a	2.0 a-c	43.8 b-k	1.3 ab
56 RU21196 -A05 SC	0.53 fl oz	21	1.5 a-c	0.8 ab	9.8 a-e	10.8 a-f	55.5 e-q	10.0 e-h
57 RU21196 -A05 SC	0.71 fl oz	21	0.0 a	1.3 a-c	5.8 a-d	6.8 a-d	42.5 b-i	1.3 ab
58 RU21196 -A05 SC	0.88 fl oz	21	0.0 a	0.5 a	2.5 a-c	4.0 a-c	38.8 a-h	1.8 ab
59 RU21196 -B05 WG	0.83 oz	14	0.0 a	0.0 a	0.0 a	1.5 a-c	7.5 ab	0.0 a
60 RU21196 -B05 WG	1.1 oz	14	0.0 a	0.0 a	0.0 a	1.5 a-c	7.5 ab	0.0 a
61 RU21196 -B05 WG	0.83 oz	21	0.0 a	0.0 a	0.8 ab	1.8 a-c	21.3 a-e	0.0 a
62 RU21196 -B05 WG	1.1 oz	21	0.0 a	0.0 a	0.8 ab	1.8 a-c	26.3 a-f	0.0 a
63 Emerald 70WG	0.13 oz	14	0.0 a	0.0 a	0.0 a	1.3 a-c	12.0 a-c	17.5 jk
64 Emerald 70WG	0.18 oz	14	0.0 a	0.0 a	0.0 a	0.0 a	2.5 a	15.0 h-k
65 Emerald 70WG	0.13 oz	21	0.0 a	0.0 a	0.3 a	2.0 a-c	53.0 c-o	20.0 k-m

(Continued)

Table 1B (continued).

Treatment	Rate (per 1000 sq ft)	Spray Interval (days) ²	Number of Lesion Centers per Plot ¹					Brown Patch (%) ¹¹ 1 July
			5 Aug.	17 Aug.	30 Aug.	9 Sept.	23 Sept.	
66 Emerald 70WG + PX056	0.13 oz 0.32 fl oz	21	6.3 a-h	0.0 a	0.3 a	0.5 ab	35.5 a-g	7.5 c-f
67 Emerald 70WG + Curalan 50DF	0.18 oz 1.0 oz	21	0.0 a	0.0 a	0.0 a	0.0 a	13.3 a-d	3.0 a-c
68 Insignia 20WG	0.9 oz	14	0.5 ab	4.8 a-g	47.3 m-q	38.3 h-w	98.8 r-z ⁱ	0.0 a
69 Insignia 20WG + PX056	0.9 oz 0.32 fl oz	14	0.8 a-c	3.0 a-e	38.0 j-o	25.5 c-p	74.3 g-z	0.0 a
70 EcoGuard L	20 fl oz	7	0.8 a-c	7.8 b-l	63.3 q-t	52.8 q-z'	96.3 p-z ⁱ	15.0 h-k
71 EcoGuard L	20 fl oz	14	15.0 i-r	23.0 u-x	119.8 z'e'-m'	56.8 u-z'	97.5 q-z ⁱ	31.3 n
72 EcoGuard L /Daconil Ultrex 82.5WDG	20 fl oz 3.25 oz	28 ⁶	10.5 f-l	1.3 a-c	126.3 z'g'-m'	69.5 z'	118.8 z-l'	5.0 a-e
73 Daconil Ultrex 82.5WDG	3.25 oz	14	9.3 d-j	2.5 a-d	99.5 y-z'd'	51.3 q-z'	103.8 t-z ^j	0.0 a
74 RU42116-05SC	0.33 fl oz	14	12.8 h-o	11.3 f-o	112.5 z'b'-i'	58.8 v-z'	130.0 z'f'-l'	2.5 a-c
75 RU42116-05SC	0.5 fl oz	14	8.0 c-i	3.8 a-e	70.5 r-v	40.0 j-w	82.5 i-z'c'	0.0 a
76 RU42116-05SC	0.66 fl oz	14	5.0 a-g	2.5 a-d	47.8 m-q	28.8 d-q	66.3 f-v	0.0 a
77 RU42116-05SC	0.75 fl oz	14	1.0 a-c	0.0 a	16.0 a-g	12.5 a-g	55.8 e-q	0.0 a
78 RU42116-05SC	1.0 fl oz	14	3.8 a-f	0.0 a	12.5 a-g	19.5 a-m	56.8 e-r	0.0 a
79 RU42116-05SC	0.75 fl oz	21	38.8 yz	46.3 z'-c'	125.0 z'f'-m'	25.8 c-p	57.5 e-r	0.0 a
80 RU42116-05SC	0.75 fl oz	28	9.8 d-k	25.8 v-z	181.3 t'	112.5 z'a'	113.8 y-z ⁱ	0.0 a
81 Eagle 1.67EW + Daconil Ultrex 82.5WDG	0.5 fl oz 1.8 oz	14	7.5 b-h	3.3 a-e	37.0 i-o	30.0 d-r	80.5 h-z'b'	1.3 ab
82 Eagle 1.67EW	1.0 fl oz	21	0.0 a	11.8 g-p	63.5 q-t	24.5 a-p	57.5 e-r	0.0 a
83 Daconil Ultrex 82.5WDG	3.25 oz	21	12.5 h-n	58.8 z'd'	146.8 z'n'-r'	53.8 q-z'	66.3 f-v	1.0 ab
84 Curalan 50DF	1.0 oz	21	3.3 a-f	23.5 v-x	86.8 v-z'	42.8 l-y	106.3 u-z'k'	13.8 g-j
85 Emerald 70WG	0.18 oz	21	0.0 a	0.0 a	0.0 a	0.0 a	13.5 a-d	18.8 j-l
86 Eagle 1.67EW	1.0 fl oz	21	8.0 c-i	5.0 a-h	60.5 p-t	32.5 e-u	61.3 e-t	6.3 b-f
87 Eagle 1.67EW	0.5 fl oz	14	12.5 h-n	0.8 ab	23.5 d-k	16.8 a-k	78.8 h-z'a'	0.5 a
88 PX056	0.32 fl oz	21	20.5 q-w	13.0 j-r	55.3 p-s	25.0 b-p	82.0 i-z'c'	8.8 d-g
89 Compass 50WG	0.15 oz	14	13.0 h-p	23.8 v-x	165.0 z'r'-t'	66.8 y-z'	38.8 a-h	0.0 a

(Continued)

Table 1B (continued).

Treatment	Rate (per 1000 sq ft)	Spray Interval (days) ²	Number of Lesion Centers per Plot ¹					Brown Patch (%) ¹¹ 1 July
			5 Aug.	17 Aug.	30 Aug.	9 Sept.	23 Sept.	
90 Spectator 41.8EC	0.37 fl oz	14	0.0 a	0.0 a	1.8 ab	4.0 a-c	45.5 b-l	0.0 a
91 Spectator 41.8EC	0.72 fl oz	28	3.8 a-f	4.8 a-g	44.0 l-p	19.3 a-m	81.3 h-z'b'	0.0 a
92 18 Plus Flowable 23.3F	2.0 fl oz	14	4.3 a-g	10.0 e-o	117.3 z'd'-l'	55.0 r-z'	130.8 z'g'-l'	0.5 a
93 Banner MAXX 1.3ME	2 fl oz	28	9.5 d-k	16.0 o-u	105.0 z'-e'	53.0 q-z'	101.3 s-z'j'	0.0 a
94 Plant Food Tank Mix #1	-	14 ⁷	19.3 n-u	12.5 i-q	108.8 z'a'-g'	37.3 g-w	88.8 m-z'g'	4.3 a-d
95 Plant Food Tank Mix #2	-	14 ⁸	17.5 l-t	6.3 a-j	101.3 z-z'd'	52.5 q-z'	127.0 z'd'-l'	5.0 a-e
96 Untreated check	-	-	39.3 yz	22.5 t-x	120.3 z'e'-m'	51.8 q-z'	146.3 z'k'-n'	17.5 jk
97 Untreated check	-	-	42.3 zz'	26.3 w-z	121.3 z'e'-m'	49.5 p-z'	172.5 z'n'	16.3 i-k
98 CS-A 25W	0.31 oz	14	20.8 r-w	16.3 o-u	106.5 z'a'-e'	37.3 g-w	76.8 g-z'	0.0 a
99 CS-A 25W	0.62 oz	14	21.3 r-w	23.5 v-x	115.0 z'c'-k'	34.5 f-v	56.3 e-r	1.3 ab
100 CS-A 25W	1.24 oz	14	25.8 u-w	26.5 x-z	130.5 z'i'-p'	31.3 d-t	60.0 e-s	0.0 a
101 CS-M 25W	0.31 oz	14	21.3 r-w	40.8 z'-b'	145.0 z'n'-q'	32.8 e-u	70.0 g-x	4.3 a-d
102 CS-M 25W	0.62 oz	14	18.8 n-u	31.3 y-z'	128.8 z'h'-n'	34.3 f-v	59.5 e-s	2.5 a-c
103 CS-M 25W	1.24 oz	14	22.0 r-w	22.5 t-x	109.0 z'b'-g'	22.0 a-n	70.8 g-x	0.0 a
104 CS-N 25W	0.31 oz	14	27.8 w-x	32.5 zz'	129.5 z'i'-o'	41.3 k-x	88.8 m-z'g'	2.5 a-c
105 CS-N 25W	0.62 oz	14	27.0 v-x	40.0 z'-b'	110.5 z'b'-h'	30.0 d-r	66.8 f-w	3.0 a-c
106 CS-N 25W	1.24 oz	14	27.3 v-x	51.3 z'-c'	76.8 t-x	18.8 a-l	60.0 e-s	0.0 a
107 Banner MAXX 1.3ME	1 fl oz	14	0.5 ab	0.0 a	14.0 a-g	14.0 a-h	48.3 b-m	1.3 ab
108 Insignia 20WG	0.5 oz	14	10.0 e-k	15.0 m-s	135.0 z'l'-p'	69.5 z'	175.0 z'n'	0.0 a
109 Untreated Check	-	-	49.0 z'a'	37.0 z'a'	156.5 z'q'-r'	53.8 q-z'	172.5 z'n'	20.0 k-m

INT ⁹	DAT ¹⁰	DAT	DAT	DAT	DAT	DAT
7	3	1	21	31	45	3
14	3	15	28	38	52	3
21	10	22	35	45	59	3
28	17	29	42	52	66	10

(Continued)

Table 1B (continued).

- 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 ($k=100$).
- ² Fungicides were applied on 24 May (all treatments except treatments 11-16, 94, and 95), 31 May (7 day treatment), 7 June (7 and 14 day treatments, treatments 94 and 95 begun), 14 June (7 and 21 day treatments), 21 June (7, 14, and 28 day treatments), 28 June (7 day treatment), 5 July (7, 14, and 21 day treatments, treatment 11-16 begun, last application for treatments 99, 100, 102, 103, 105, and 106), 12 July (7 day treatment), 19 July (7, 14, and 28 day treatments, last application for treatments 98, 101, and 104), 26 July (7 and 21 day treatments), 2 August (7 and 14 day treatments), and 9 August (7 day treatment).
- ³ Daconil Ultrex 82.5WDG (3.25 oz) was applied once on June 21 to control existing dollar spot infection centers prior to initiating treatments 11-16 on 5 July.
- ⁴ Treatment 17 discontinued after 24 May due to severe foliar burn.
- ⁵ Treatment 24 rate reduced from 4 fl oz to 2 fl oz on 7 June through 2 August due to toxicity at the higher (4 fl oz) rate.
- ⁶ For treatment 72, EcoGuard L (20 fl oz) was applied on 24 May, 21 June, and 19 July; whereas Daconil Ultrex 82.5WDG (3.25 oz) was sprayed on 7 June, 5 July, and 2 August.
- ⁷ Treatment 94 (Plant Food Tank Mix 1) consisted of Thio-Sul 12-0-0-26 S (6 fl oz) + Green T 12-3-12 50%SRN (6 fl oz) + Tecmangam 32% (3.2 oz) + Sugar Cal 10% Ca (2 fl oz) + Adams Earth (2 fl oz) + Flo Thru (2 fl oz).
- ⁸ Treatment 95 (Plant Food Tank Mix 1) consisted of Thio-Sul 12-0-0-26 S (6 fl oz) + Green T 12-3-12 50%SRN (6 fl oz) + Tecmangam 32% (3.2 oz) + Sugar Cal 10% Ca (2 fl oz) + Adams Earth (2 fl oz) + Flo Thru (2 fl oz) + 12-3-12 Organic (24 oz) + Daconil Ultrex 82.5WDG (1 oz).
- ⁹ Spray intervals in days
- ¹⁰ Days after treatment (DAT) for each spray interval.
- ¹¹ Percent turf area infested with *Rhizoctonia solani*.