

Table 6 (Continued)

Amway Spray Adjuvant	4 oz	4	6	4	4.67	bcde
Tersan 1991	4 oz	5	5	4	4.67	bcde
Amway Spray Adjuvant	8 oz	6	4	5	5	cde
Cleary 3336	8 oz	8	3	4	5	cde
EL 222	3 oz	2	8	6	5.33	de
Lesco 2833	8 oz	9	6	2	5.67	e
Cleary 3336	4 oz	9	4	4	5.67	e

Results

The Fusarium blight occurred in Michigan this season during May when we experienced unseasonably warm weather. The disease did not appear again even though hot dry weather occurred in both July and August. As a result, no treatment was significantly better than the untreated control.

This study was conducted on a heavy clay soil. In addition, high nematode populations were also present. Those plots which recovered the best from the early Fusarium blight infections were the ones treated with a nematicide or wetting agent, either alone, or in combination with a fungicide. The exceptions were BFN 7544, RP 26019 and GA-1-105, which by themselves, had a rating of less than 3.

Anthracnose - Fungicide Study 1977

Introduction

The 1977 anthracnose (*Collectotrichum graminicola*) fungicide study was conducted at the Dearborn Country Club in Dearborn, Michigan on an irrigated annual bluegrass fairway mowed at a 1/2" height of cut.

The liquid treatments were applied with a small plot CO₂ sprayer at a rate of 40 gallons/A. The granular formulations were applied with a 3' Scotts drop-type spreader. The plots were 6 ft X 9 ft and were replicated three times in a random block design.

The fungicide applications were made on July 26 and August 16, with the reading being taken on September 12.

Table 7. Anthracnose Fungicide Study - 1977
% Disease

<u>Treatment</u>	<u>Rate/1000 ft²</u>	<u>% Anthracnose/Plot</u>			
Pro Turf Fert. + DSB	1X	0	0	0	0 a
Tersan 1991	2 oz	0	0	0	0 a
Tersan 1991 + RP 26019	1 oz + 2 oz	0	0	0	0 a
Tersan 1991 + DPX 4424	1 oz + 2 oz	0	0	0	0 a
Tersan 1991 + Daconil 2787	1 oz + 6 oz	0	0	0	0 a
Tersan 1991 + Tersan 75	1 oz + 6 oz	0	0	0	0 a
Lesco 1644	4 oz	0	0	0	0 a
Lesco 2883	3 oz	0	0	0	0 a
Lesco 2887	3 oz	0	0	0	0 a
GA-1-105	5 gm (ai)	0	0	0	0 a
BFN 7544	5 oz (fl)	0	0	0	0 a
Tersan 1991	1 oz	5	0	0	1.7 ab
BFN 7544	10 oz (fl)	5	0	0	1.7 ab
Acti-dione-RZ	.55 oz	10	0	0	3.3 ab
Acti-dione-TGF	.34 oz	0	0	10	3.3 ab
Daconil 2787	3 oz	10	0	0	3.3 ab
Daconil 2787	6 oz	0	10	0	3.3 ab
Daconil 2787 (wp)	6 oz	10	0	0	3.3 ab
Daconil 2787 (wp)	3 oz	10	0	0	5.0 ab
Acti-dione RZ + Ferrous Sulfate	.55 oz + 1 oz	10	0	15	5.0 ab
Acti-dione TGF + Ferrous Sulfate	.34 oz + 1 oz	0	0	15	5.0 ab
Acti-dione RZ + TGF + Ferrous Sulfate	.55 oz + .34 oz + 1 oz	15	0	0	5.0 ab
GA-1-105	2.5 gm (ai)	10	0	10	6.7 ab
Acti-dione RZ + TFG	.55 oz + .34 oz	5	10	10	8.3 ab
Tersan 1991 + EL 222	1 oz + 2 oz	10	10	10	10 ab
EL 222	2 oz	20	5	5	10 ab
EL 222*	4 oz	10	20	0	10 ab
RP 26019	2 oz	0	0	30	10 ab
RP 26019	1 oz	0	5	30	11.7 ab
DPX 4424	2 oz	0	10	30	13.3 ab
Check	-	25	10	10	15 b

* Phytotoxicity observed.

Table 8. Anthracnose - Fungicide Study - 1977.

Treatment	Rate/1000 ft ²	Turf Quality Rating (1-best, 9-worst)			
		I	II	III	AVE (DMR)
Tersan 1991	2 oz	1	1	1	1.0 a
Tersan 1991 + Daconil 2787	1 oz + 6 oz	1	1	1	1.0 a
Tersan 1991 + RP 26019	1 oz + 2 oz	1	1	1	1.0 a
Tersan 1991 + Tersan 75	1 oz + 6 oz	1	1	1	1.0 a
Tersan 1991 + DPX 4424	1 oz + 6 oz	1	1	1	1.0 a
Lesco 2833	3 oz	1	1	1	1.0 a
Lesco 2887	3 oz	1	1	1	1.0 a
Tersan 1991	1 oz	1	1	6	1.3 ab
Pro-Turf Fert. + DSB	1X	1	2	1	1.3 ab
Lesco 1644	4 oz	2	1	1	1.3 ab
RP 26019	2 oz	1	1	3	1.6 abc
RP 26019	1 oz	2	2	2	2.0 abc
DPX 4424	2 oz	1	2	3	2.0 abc
Daconil 2787	6 oz	2	3	1	2.0 abc
GA-1-105	2.5 gm (ai)	2	3	2	2.3 abcd
BFN 7544	5 oz (fl)	2	3	2	2.3 abcd
BFN 7544	10 oz (fl)	2	3	2	2.3 abcd
Daconil 2787 (wp)	6 oz	4	1	3	2.6 abcd
GA-1-105	5.0 gm (ai)	5	1	2	2.6 abcd
Acti-dione TGF + Ferrous Sulfate	.34 oz + 1 oz	3	2	3	2.6 abcd
Acti-dione TGF + RZ	.34 oz + .55 oz	3	3	2	2.6 abcd
Acti-dione TGF + Ferrous Sulfate	.55 oz + 1 oz	6	1	2	3.0 abcde
Daconil 2787 (wp)	3 oz	2	3	4	3.0 abcde
Daconil 2787	3 oz	7	2	2	3.6 bcdef
Acti-dione TGF	.34 oz	5	2	4	3.6 bcdef
Acti-dione TGF + RZ + Ferrous Sulfate	.34 oz + .55 oz + 2 oz	5	2	4	3.6 bcdef
Acti-dione RZ	.55 oz	6	2	4	4.0 cdef
Tersan 1991 + EL 222	1 oz + 2 oz	7	5	2	4.6 def
Check	-	7	6	3	5.3 ef
El 222	2 oz	4	7	6	5.6 f
EL 222	4 oz	8	8	8	8.0 g

* Phytotoxicity observed

Results

Two sets of readings were taken, one on percent disease present and the other on turfgrass quality. This was done because some treatments, in addition to controlling the disease, also improved the quality of the turf, which is a prime consideration in choosing any fungicide. While there was heavy anthracnose infection in the adjacent anthracnose-fertility study, there was only moderate infection in the anthracnose-fungicide plots. However, there was enough infection in the plots to

show significant differences. The results can be seen in Table 7. The treatments ranking the highest were Pro Turf Fert + DSB 1X, Tersan 1991 2 oz, Tersan 1991 + RP 26019 1 oz + 2 oz, Tersan 1991 + DPX 4424 1 oz + 2 oz, Tersan 1991 + Daconil 2787 1 oz + 6 oz, Tersan 1991 + Tersan 75 1 oz + 6 oz, Lesco 1644 4 oz, Lesco 2833 3 oz, Lesco 2887 3 oz, GA-1-105 5 gm (ai) and BFN 7544 5 oz.

Where turfgrass quality was concerned, those treatments showing significantly better quality than the check (Table 8) included, Tersan 1991 2 oz, Tersan 1991 + Daconil 2787 1 oz + 6 oz, Tersan 1991 + RP 26019 1 oz + 2 oz, Tersan 1991 + Tersan 75 1 oz + 6 oz, Tersan 1991 + DPX 4424 1 oz + 2 oz, Lesco 2833 3 oz, Lesco 2887 3 oz, Tersan 1991 0 oz, Pro-Turf Fert. + DSB 1X, Lesco 1644 4 oz, RP 26019 2 oz, RP 26019 1 oz, DPX 4424 2 oz, Daconil 2787 6 oz, GA-1-105 2.5 gm (ai), BFN 7544 5 oz, BFN 7544 10 oz, Daconil 2787 (wp) 6 oz, GA-1-105 5.0 gm (ai), Acti-dione - TGF + Ferrous Sulfate .34 oz + 1 oz, Acti-dione TGF + RZ .34 oz + .55 oz, and Acti-dione RZ + Ferrous Sulfate .55 oz + 1 oz.

Anthracnose Nitrogen Fertility Study

Introduction

The 1977 Anthracnose-fertility study was conducted at the Dearborn Country Club in Dearborn, Michigan on an irrigated annual bluegrass fairway mowed at a 1/2 inch height of cut. There were 2 separate studies involved. In study A, the fertilizer was applied once on May 26. It consisted of a quick release nitrogen, urea, and two slow release nitrogen carriers, IBDU and Uramite. The plots were read on September 12.

In Study B commercial fertilizers were used. Some contained only nitrogen, some nitrogen and phosphorus, and some nitrogen, phosphorus and potassium. Phosphorus and potassium without nitrogen was also included. The treatments were applied on May 16, June 20, July 18 and August 16. The plots were read on September 12.

Results

In both study A and B, no treatment gave significant control compared to the untreated control. It would seem that fertility alone will not control anthracnose during the years of severe disease pressure. What is needed is combined programs of fertilizer and fungicides to control anthracnose at the least possible costs.