

UpJohn Acti-Dione TGF - Fertilizer Study - 1982  
Hancock Turfgrass Research Center, MSU

Establishment

The UpJohn Acti-dione TGF + fertilizer study was established on a Poa annua (annual bluegrass) research area which was mowed at 5/8" height of cut and irrigated as needed. Treatments were initiated on May 27 and were re-applied on a 14 day schedule through September 16 (9 applications). Applications were made to three replications of 6' x 9' plots in a randomized block design using a CO<sub>2</sub> small-plot sprayer at a volume of 40 gallons/acre. The study received no supplemental nitrogen during the test period.

Ratings for dollarspot incidence were taken on July 23, August 30, and September 29. (Table 11)

Results:

Acti-dione TGF applied on a 14 day schedule did not give effective management of Sclerotinia dollarspot even though the treatments were begun before the disease was evident. Several nitrogen carriers were included to help reduce the phytotoxicity, help improve turf quality and improve disease management. There was no significant difference among nitrogen carriers in improving disease management. The plots were too severely infected to accurately rate phytotoxic effect or improved turf quality.

Table 11

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 Dollar spot rating scale - 1(no disease)-9(90% infection or greater)

<u>Treatment</u>	<u>Rate/1000 ft<sup>2</sup></u>	<u>Repetition</u>				DMR
		I	II	III	AVE	
<u>Rating of July 23</u>						
AD-TGF + Urea	.34 oz. + 20.9 gm.	2	2	2	2	A
AD-TGF + Amm. Sulf.	.34 oz. + 45.4 gm	2	2	2	2	A
AD-TGF	.34 oz.	3	2	2	2.3	A
AD-TGF + Amm. Nit.	.34 oz. + 27.2 gm.	2	3	2	2.3	A
AD-TGF + Fe. Amm. Cit.	.34 oz. + 127.1 gm.	3	4	2	3	A
AD-TGF + Formolene	.34 oz. + 31.8 gm.	2	5	3	3.3	A
Control	-	7	2	4	4.3	A
<u>Rating of August 30</u>						
AD-TGF	.34 oz.	4	4	4	4	A
AD-TGF + Urea	.34 oz. + 20.9 oz.	4	3	5	4	A
AD-TGF + Amm. Nit.	.34 oz. + 27.2 oz.	4	5	3	4	A
AD-TGF + Amm. Sulf.	.34 oz. + 45.4 gm.	5	4	4	4.3	A
AD-TGF + Fe. Amm. Cit.	.34 oz. + 127.1 gm.	6	6	4	5.3	AB
AD-TGF + Formolene	.34 oz. + 31.8 gm.	6	7	6	6.3	B
Control	-	9	8	7	8	C
<u>Rating of September 29</u>						
AD-TGF	.34 oz.	7	7	8	7.3	A
AD-TGF + Urea	.34 oz. + 20.9 gm.	7	7	8	7.3	A
AD-TGF + Amm. Nit.	.34 oz. + 27.2 gm.	8	7	7	7.3	A
AD-TGF + Amm. Sulf.	.34 oz. + 45.4 gm.	8	7	8	7.7	A
AD-TGF + Formolene	.34 oz. + 31.8 gm.	7	8	8	7.7	A
AD-TGF + Fe. Amm. Cit.	.34 oz. + 127.1 gm.	9	8	8	8.3	AB
Control	-	9	9	9	9	B