

Upjohn Acti-Dione RZ Helminthosporium Melting-Out Fungicide Study - 1983  
 Hancock Turfgrass Research Center, MSU.

The Upjohn Acti-dione RZ Helminthosporium melting-out (*Drechslera vagans*) fungicide-fertility timing study was conducted on a Kenblue Kentucky bluegrass area which was mowed at 1 1/2", unfertilized and irrigated as needed. The study was initiated in the fall of 1982 with some treatments receiving a single application on Nov. 30. Spring 1983 treatments were initiated on April 26 and reapplied on May 11, May 26, and June 8. Urea was applied (to treatments as indicated on the data tables) at a 1 lb N/1000 ft<sup>2</sup> rate on Nov. 30, 1982, and April 27, 1983, and a .1 lb N/1000 ft<sup>2</sup> rate on May 11, May 26, and June 8. Disease ratings were taken on June 14. The study was laid out in three replications of a randomized block design with 3' x 6'; plots. Treatments were applied with a CO<sub>2</sub> small plot sprayer at a volume of 40 gal/acre.

Table 4. Upjohn Acti-Dione RZ Helminthosporium Melting-Out Fungicide Study - 1983. Hancock Turfgrass Research Center. Rating scale - 1 (no disease) - 9 (90% infection or greater). Rating data - 6/14/83

Treatment	Rate*/1000 ft <sup>2</sup>	Repetition				DMR**
		I	II	III	AVE	
Acti-dione RZ + Urea	.55 oz. + 1.3 lb. N (Fall + Spring - 14 day sch.)	1	2	1	1.3	A
Urea	2.3 lb. N (Fall + Spring - 14 day sch.)	1	1	2	1.3	A
Acti-dione RZ + Urea	1 oz. + 1.3 lb. N (Fall + Spring - 14 day sch.)	2	2	3	2.3	A
Urea	1.3 lb. N (Spring only)	1	2	4	2.3	A
Acti-dione RZ + Urea	.55 oz. + 1.3 lb. N (Spring only)	2	3	4	3	AB
Acti-dione RZ + Urea	1 oz. + 1.3 lb. N (Spring only)	3	4	5	4	BC
Urea	1 lb. N (Fall only)	7	5	4	5.3	CD
Acti-dione RZ + Urea	1 oz. + 1 lb. N (Fall only)	4	7	7	6	DE
Acti-dione RZ + Urea	.55 oz. + 1 lb. N (Fall only)	6	5	8	6.3	DEF
Acti-dione RZ	.55 oz. (Fall + Spring - 14 day sch.)	7	6	8	7	EFG
Acti-dione RZ	.55 oz. (Spring only - 14 day sch.)	8	8	7	7.7	EFG
Acti-dione RZ	1 oz. (Fall only)	7	8	8	7.7	EFG
Acti-dione RZ	.55 oz. (Fall only)	8	8	8	8	FG
Acti-dione RZ	1 oz. (Spring only - 14 day sch.)	8	8	8	8	FG
Check	-	8	8	8	8	FG
Acti-dione RZ	1 oz. (Fall + Spring - 14 day sch.)	8	9	8	8.3	G

\* Urea rates represent total pounds actual nitrogen per 1000 sq.ft. over duration of study.

\*\* Treatments followed by the same letter are not significantly different from each other at the 5% level. 48