## Necrotic Ring Spot Fungicide Studies - Michigan State University 1994

Fertilizer/fungicide studies for the management of necrotic ring spot (*Leptosphaeria korrae*) were conducted on irrigated, previously diseased Kentucky bluegrass turf at the Blue Care Network headquarters in Lansing, MI and at the Hancock Turfgrass Research Center on the MSU campus in East Lansing, MI. Experimental design and treatment application was as previously described in this report. The turfs were maintained at approximately 2" height of cut and were fertilized at ¼ lb-3/4 lb N/1000 ft²/mo. (except for fertilizer treatments) with Country Club fertilizer (18-4-10). Irrigation was provided as necessary to prevent wilt. Ratings were taken as percent recovery from original disease levels since disease symptoms were already present when the studies were established. Unfortunately, new disease pressure was mild in both studies, so statistical treatment separation was limited (Tables 11 &12).

## Necrotic Ring Spot Study #2, Hancock Turfgrass Research Center, East Lansing, MI

This study was initiated on August 24, 1994 with the application of all fertilizer and fungicide treatments. These treatments were re-applied on Sept. 22. Ratings were taken on Oct. 17, 1994.

As the data in Table 12 indicates, all fungicide and fertilizer treatments gave statistically significant reductions in disease, compared to the fertilized control. In this study, once again, the 1.b. N/1000 ft<sup>2</sup> plots of **Sustane**, IBDU and Ringer Turf Restore exhibited superior density and overall turf quality.

No phytotoxicity was observed.

Table 12. Necrotic Ring Spot Study #2 - 1994

Hancock Turfgrass Research Center Michigan State University, East Lansing, MI

Rating Scale: Percent recovery/plot from pre-treatment disease levels.

Rating Date: Oct. 17, 1994

Treatment	Rate/1000 ft <sup>2b</sup>	I	II	III	IV	Avg	Tukeys(.05) <sup>a</sup>
Sustane Fertilizer	1lb. N./mo.	100	<mark>86</mark>	100	100	<mark>96.5</mark>	A
Ringer Turf Restore Fert.	1lb. N./mo.	77	100	100	100	94.5	Α
Fluazinam	1 fl. oz.	80	100	100	87	91.8	Α
Banner	4 fl. oz.	80	100	70	85	83.8	Α
EXP 10452A	4 oz.	57	90	75	72	73.5	Α
Fluazinam 500	2 fl. oz.	90	77	80	60	76.8	Α
ASC 67098-2	3.6 oz.	100	100	80	25	76.3	Α
Ch. 26019 (WDG)	4 oz.	83	80	80	50	73.3	Α
Rubigan	4 fl. oz.	50	71	100	70	72.8	Α
ICIA 5504	.02 oz.	80	92	90	25	71.8	Α
RH-0611	10 oz.	75	90	70	43	69.5	Α
EXP 10452A	3 oz.	85	88	25	75	68.3	Α
IBDU Fertilizer	1 lb. N	33	100	75	14	55.5	Α
Eagle	0.6	53	100	40	60	63.3	Α
Thatch X	3 lbs/mo.	57	90	53	0	50.0	Α
Control (unfertilized)		30	40	71	33	43.3	AB
Control (fertilized)	0.25 lb. N./mo	30	87	-214	-114	-52.8	В

<sup>&</sup>lt;sup>a</sup>Treatments followed by the same letter are not significantly different from each other at the 5% level.

<sup>&</sup>lt;sup>b</sup>Rates are formulation