

Fertility Timing - Melting Out Disease Study - 1985-86

Our long-term investigation into the relationship between fertility and melting-out disease severity on Kentucky bluegrass continued during the past year with a study initiated in the fall of 1985 on irrigated Kenblue Kentucky bluegrass at the Hancock Turfgrass Research Center on the MSU campus. Urea and IBDU fertilizers were applied in varying amounts in the fall of 1985 and the spring of 1986. Turfgrass quality and melting-out (*Dreischlera poae*) disease levels were determined for each treatment on June 13, 1986.

The study was laid-out in three replications of a random block design utilizing 6' x 6' plots. Treatments were pre-weighed and applied by hand. No other fertility was applied to the plot area for the duration of the study.

The results of this study indicate that timely fertility applications can be useful in reducing the severity of melting-out disease (Table 8) and in improving over-all turfgrass quality in the spring (Table 9).

Table 8. Fertility Timing - Melting-Out Disease Study - 1985-86

Hancock Turfgrass Research Center, MSU, E. Lansing, MI
Turfgrass disease rating scale: 1 (no disease) - 9 (90% infection or greater)
Rating date: 6/13/86

<u>Nitrogen Carrier</u>	<u>Application Date and Rate</u>	<u>I</u>	<u>II</u>	<u>III</u>	<u>AVE</u>	<u>DMR*</u>
IBDU (Fine)	March '86 - 1 1/2 lb N.	1	1	2	1.3	A
IBDU (Fine)	Nov. '85 - 1 lb N., March '86 - 1 1/2 lb N.	1	2	2	1.7	AB
Urea	Nov. '85 - 1 lb N., March '86 - 3/4 lb N., May '86 - 3/4 lb N.	1	3	2	2.0	AB
Urea	March '86 - 3/4 lb N., May '86 - 3/4 lb N.	2	2	2	2.0	AB
Urea	Nov. '85 - 1 lb N.	2	3	5	3.3	B
IBDU (Fine)	Nov. '85 - 1 lb N.	1	5	4	3.3	B
Check	--	4	6	5	5.0	C

Table 9. Fertility Timing - Melting-Out Disease Study - 1985-86

Hancock Turfgrass Research Center, MSU, E. Lansing, MI
Turfgrass quality rating scale: 1(best) - 9(worst)
Rating date: 6/13/86

<u>Nitrogen Carrier</u>	<u>Application Date and Rate</u>	<u>I</u>	<u>II</u>	<u>III</u>	<u>AVE</u>	<u>DMR*</u>
IBDU (Fine)	March '86 - 1 1/2 lb N.	1	1	2	1.3	A
IBDU (Fine)	Nov. '85 - 1 lb N.,					

	March '86 - 1 1/2 lb N.	1	2	2	1.7	A
Urea	March '86 - 3/4 lb N.,					
	May '86 - 3/4 lb N.	2	2	2	2.0	A
Urea	Nov. '85 - 1 lb N.,					
	March '86 - 3/4 lb N.,					
	May '86 - 3/4 lb N.	1	3	2	2.0	A
Urea	Nov. '85 - 1 lb N.	1	3	5	3.0	AB
IBDU (Fine)	Nov. '85 - 1 lb N.	2	6	5	4.3	BC
Check	--	4	6	6	5.3	C

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

Fungicides Tested In 1985-86

<u>Product</u>	<u>% Active Ingredient</u>	<u>Producer</u>
AD-TGF	2.1% WP	Nor-Am Chemical Co.
Banner	1.1 EC	Ciba-Geigy Corp.
Bayleton	25% DF	Mobay Chemical Corp.
BRC 916	12% EC	ICI Americas, Inc.
Bromosan F	45% FL	W.A. Cleary Chemical Corp.
Calo-Clor	90% WP	Mallinckrodt, Inc.
Calo-Gran	2.7% GR	Mallinckrodt, Inc.
Chipco 26019 FL	240 gm. ai./l	Rhone Poulenc Inc.
Chipco 26019	50% WP	Rhone Poulenc Inc.
Clearys 3336	50% WP	W.A. Cleary Corp.
Cleary Sulfur F	6 lbs. ai./gal.	W.A. Cleary Corp.
Daconil 2787	40.4% FL	Fermenta Plant Protection Co.
DPX-H6573	20% DF	E.I. DuPont de Nemours, Inc.
Dyrene 4F	38.5% FL	Mobay Chemical Corp.
Fluf	18-0-0 flowable fertilizer	W.A. Cleary Chemical Corp.
Fungo 50	50% WP	Mallinckrodt, Inc.
Green Magic	20-0-2 fertilizer	Agro-Chem., Inc.
HWG 1608	25% WP	Mobay Chemical Corp.
IBDU (Fine)	32-0-0 fertilizer	Par-Ex Corp.
Lawn Restore	9-4-4 fertilizer	Ringer Corp.
Lesco 0586	N.A.	Lesco Chemical Corp.
Lesco R-09524	N.A.	Lesco Chemical Corp.
NC 28410	N.A.	Nor-Am Chemical Co.
Phosphorus	0-46-0	--
PMAS	10% EC	W.A. Cleary Chemical Corp.
PP 450	12.5% EC	ICI Americas, Inc.
PP 523	5% SG	ICI Americas, Inc.
Prochloraz EC	42.9% EC	Nor-Am Chemical Corp.
Prochloraz-MN/ Chlorothalonil	64% WP	Nor-Am Chemical Corp.
RH-3486	50% WP	Rohm and Haas Co.
Rizolex EC	N.A.	Mallinckrodt, Inc.
Rizolex WP	50% WP	Mallinckrodt, Inc.
Rubigan	50% WP	Elanco
Rubigan AS	11.6% FL	Elanco
S-1555	N.A.	O. M. Scotts & Sons

SAN-619	40% WP	Zoecon Corp.
Scotts F + FII	14-3-3 fertilizer, 15.4% PCNB	O. M. Scotts & Sons
SDS 63539	3 lbs. ai. sulfur, 2 lbs ai. chlorothalonil/gal.	SDS Biotech Corp.
SN 84364	50% WP	Nor-Am Chemical Co.
Tersan 1991	50% WP	E.I. DuPont de Nemours & Co.
Urea	46-0-0 fertilizer	--
Vorlan	50% WP	Mallinckrodt, Inc.
X-77	Spreader/sticker	Nor-Am Chemical Co.