

# University of GA Coop Ext Service

Effect of Re-seeding Interval on Perennial Ryegrass Tolerance to MON 44951.

Trial ID: Turf1-03

Study Dir.: Bill Nutt

Location: GA Station

Investigator: Tim R Murphy

## GENERAL TRIAL INFORMATION

Study Director: Bill Nutt

Title: ARC I

Affiliation: UGA-CAES

Investigator: Tim R Murphy

Title: Weed Scientist

Affiliation: UGA-CAES

## TRIAL LOCATION

City: Griffin

Trial Status: Archived

State/Prov.: GA

Postal Code: 30223

Initiation Date: 9-20-2002

## COOPERATOR/LANDOWNER

Cooperator: Dennis Williamson

Org: Monsanto

City: Mt. Pleasant

State/Prov: SC

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

## CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	POAAN	Annual bluegrass	Poa annua

Crop 1: CYNDA CYNODON DACTYLON HYBRID BERMUDAGRASS

Variety: Tifway Perennial Age: 16 yrs

Crop 2: LOLPE LOLIUM PERENNE RYEGRASS, PERENNIAL

Variety: Sunrise Primo Blend Lot #144M-1-OSP019G

Pure Seed	Variety	Kind	Germ	Total	Origin
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39.27% Jet Perennial Ryegrass 85% 85% OR

39.07% Primo Perennial Ryegrass 85% 85% OR

19.08% Wind Star Perennial Ryegrass 85% 85% OR

Planting Date: 9-30-2002 Planting Method: Broadcast Rate: 10 LB/1000FT2

## SITE AND DESIGN

Plot Width, Unit: 6 FT Plot Length, Unit: 12 FT Reps: 3

Site Type: Simulated golf course fairway Study Design: SPLIT-PLOT

## MAINTENANCE

Field Prep./Maintenance: Mowed at 0.625 inch with reel mower, clippings returned.

Irrigated site.

# University of GA Coop Ext Service

## APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	9-20-2002	9-23-2002	9-27-2002	3-3-2003
Time of Day:	1:45 pm	2:15 pm	3:00 pm	3:00 pm
Application Method:	Broadcast	Broadcast	Broadcast	Broadcast
Application Timing:	Pre	Pre	Pre	Post
Applic. Placement:	Folr/Soil	Folr/Soil	Folr/Soil	Foliar
Air Temp., Unit:	83 F	80 F	74 F	59 F
% Relative Humidity:	72	70	82	30
Wind Velocity, Unit:	4 mph	3 mph	2 mph	2.8 mph
Dew Presence (Y/N):	N	N	N	N
Soil Temp., Unit:	82 F	80 F	74 F	55 F
Soil Moisture:	Good	Good	Very High	High
% Cloud Cover:	70	90	98	98

## CROP STAGE AT EACH APPLICATION

	A	B	C	D
Crop 1 Code, Stage:	CYNDA 100%Green	CYNDA 100%Green	CYNDA 100%Green	CYNDA Dormant
Height, Unit:	0.75 inch	1.0 inch	1.0 inch	.625 inch
Crop 2 Code, Stage:	LOLPE	LOLPE	LOLPE	LOLPE Active
Height, Unit:				0.75 inch

## WEED STAGE AT EACH APPLICATION

	A	B	C	D
Weed 1 Code, Stage:	POAAN	POAAN	POAAN	POAAN Seedhead emerging from leaf sheath ¼ - ½ inch.
Stage Scale:				1-3" Dia, Multitillered
Density, Unit:				30 %

## APPLICATION EQUIPMENT

	A	B	C	D
Appl. Equipment:	Backpack	Backpack	Backpack	Backpack
Operating Pressure:	26 psi	26 psi	26 psi	26 psi
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	8004	8004	8004	8004
Nozzle Spacing, Unit:	20 inch	20 inch	20 inch	20 inch
Boom Length, Unit:	5 feet	5 feet	5 feet	5 feet
Boom Height, Unit:	19 inch	19 inch	19 inch	19 inch
Ground Speed, Unit:	3 mph	3 mph	3 mph	3 mph
Carrier:	Water	Water	Water	Water
Spray Volume, Unit:	25 gpa	25 gpa	25 gpa	25 gpa
Propellant:	C02	C02	C02	C02
Tank Mix (Y/N):	N	N	N	N

# University of GA Coop Ext Service

Effect of Reseeding Interval on Perennial Ryegrass Tolerance to MON 44951.

Trial ID: Turf1-03

Study Dir. : Bill Nutt

Location: GA Station

Investigator: Tim R Murphy

## Trial Comments

10-21-02

Broadcast 1 lb N/1000 sq.ft. as 34-0-0 fertilizer with Vicon spreader.

2-25-03

Broadcast 1 lb N/1000 sq.ft. as 10-10-10 fertilizer.

### WEED DENSITY RATINGS FOR UNTREATED CONTROL CHECK PLOTS

	<u>121</u>	<u>122</u>	<u>217</u>	<u>218</u>	<u>303</u>	<u>304</u>
POAAN,3-4-03	20	20	15	15	20	20
POAAN,3-11-03	60	20	20	.	25	.
POAAN,3-18-03	.	25	25	.	20	.
POAAN,3-31-03	.	20	25	.	30	.

# University of GA Coop Ext Service

Effect of Re-seeding Interval on Perennial Ryegrass Tolerance to MON 44951.

Trial ID: Turf1-03

Study Dir. : Bill Nutt

Location: GA Station

Investigator: Tim R Murphy

Weed Code							Turf	CYNDA	LOLPE	LOLPE
Crop Code							Quality	Injury	Density	Density
Part Rated							0-10	0-100	0-100	0-100
Rating Data Type							10-11-2002	10-24-2002	10-24-2002	11-13-2002
Rating Unit							21 DA-A	34 DA-A	34 DA-A	54 DA-A
Rating Date										
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Grow Unit	Appl Stg Code	1	2	3	4
1	MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	10 DBO A	9.0 a	0 c	38 b	47 bc
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring D				
	MON 44951 + Nonionic surfactant			0.5	% v/v	10 DBO A				
2	MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	10 DBO A	9.0 a	0 c	38 b	47 bc
	MON 44951 + Nonionic surfactant			0.5	% v/v	10 DBO A				
	MON 44951 + Nonionic surfactant					No spring treatment				
3	MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	10 DBO A	9.0 a	0 c	35 bcd	45 bc
	MON 44951 + Nonionic surfactant			0.5	% v/v	10 DBO A				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring D				
	MON 44951 + Nonionic surfactant			0.5	% v/v	spring D				
4	MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	10 DBO A	9.0 a	0 c	35 bcd	45 bc
	MON 44951 + Nonionic surfactant			0.5	% v/v	10 DBO A				
	MON 44951 + Nonionic surfactant					No spring treatment				
5	Velocity	80	SP	60	g ai/a	10 DBO A	9.0 a	0 c	35 bcd	48 bc
	Velocity	80	SP	60	g ai/a	spring D				
6	Velocity	80	SP	60	g ai/a	10 DBO A	9.0 a	0 c	35 bcd	48 bc
	Velocity					No spring treatment				
7	MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	7 DBO B	9.0 a	0 c	35 bcd	45 bc
	MON 44951 + Nonionic surfactant			0.5	% v/v	7 DBO B				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring D				
	MON 44951 + Nonionic surfactant			0.5	% v/v	spring D				
8	MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	7 DBO B	9.0 a	0 c	35 bcd	45 bc
	MON 44951 + Nonionic surfactant			0.5	% v/v	7 DBO B				
	MON 44951 + Nonionic surfactant					No spring treatment				
9	MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	7 DBO B	9.0 a	0 c	35 bcd	47 bc
	MON 44951 + Nonionic surfactant			0.5	% v/v	7 DBO B				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring D				
	MON 44951 + Nonionic surfactant			0.5	% v/v	spring D				
10	MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	7 DBO B	9.0 a	0 c	35 bcd	47 bc
	MON 44951 + Nonionic surfactant			0.5	% v/v	7 DBO B				
	MON 44951 + Nonionic surfactant					No spring treatment				

\*\*DBO – Days before treatment

## University of GA Coop Ext Service

Crop Code								Turf	CYNDA	LOLPE	LOLPE
Part Rated								Quality	Injury	Density	Density
Rating Data Type								0-10	0-100	0-100	0-100
Rating Unit								10-11-2002	10-24-2002	10-24-2002	11-13-2002
Rating Date								21 DA-A	34 DA-A	34 DA-A	54 DA-A
Trt-Eval Interval											
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code				4
11	TranXit + Nonionic surfactant MON 44951 + Nonionic surfactant	25	WG	0.032	lb ai/a	7 DBO	B	9.0 a	0 c	30 e	42 bcd
				0.5	% v/v	7 DBO	B				
		75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
12	TranXit + Nonionic surfactant No spring treatment	25	WG	0.032	lb ai/a	7 DBO	B	9.0 a	0 c	30 e	42 bcd
				0.5	% v/v	7 DBO	B				
13	MON 44951 + Nonionic surfactant MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	3 DBO	C	8.2 b	3 c	32 de	40 cd
				0.5	% v/v	3 DBO	C				
		75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
14	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.06	lb ai/a	3 DBO	C	8.2 b	3 c	32 de	40 cd
				0.5	% v/v	3 DBO	C				
15	MON 44951 + Nonionic surfactant MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	3 DBO	C	8.0 c	10 b	32 de	33 d
				0.5	% v/v	3 DBO	C				
		75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
16	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.125	lb ai/a	3 DBO	C	8.0 c	10 b	32 de	33 d
				0.5	% v/v	3 DBO	C				
17	MON 44951 + Roundup Pro MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	3 DBO	C	4.0 e	38 a	37 bc	45 bc
		3	SL	6.0	fl oz/a	3 DBO	C				
		75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
18	MON 44951 + Roundup Pro No spring treatment	75	WG	0.125	lb ai/a	3 DBO	C	4.0 e	38 a	37 bc	45 bc
		3	SL	6.0	fl oz/a	3 DBO	C				
19	Roundup Pro MON 44951 + Nonionic surfactant	3	SL	6.0	fl oz/a	3 DBO	C	6.0 d	37 a	58 a	67 a
		75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
20	Roundup Pro No spring treatment	3	SL	6.0	fl oz/a	3 DBO	C	6.0 d	37 a	58 a	67 a
21	Untreated Check MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D	9.0 a	0 c	33 cde	50 b
				0.5	% v/v	spring	D				
22	Untreated Check No spring treatment							9.0 a	0 c	33 cde	50 b
LSD (P=.05)								0.14	3.1	3.9	8.0
Standard Deviation								0.08	1.9	2.4	4.9
CV								1.05	23.65	6.52	10.54

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Weed Code							LOLPE	LOLPE	LOLPE	LOLPE	
Crop Code							Density	Density	Density	Density	
Part Rated							0-100	0-100	0-100	0-100	
Rating Data Type							11-25-2002	12-23-2002	1-22-2003	2-4-2003	
Rating Unit							66 DA-A	94 DA-A	124 DA-A	137 DA-A	
Rating Date											
Trt-Eval Interval											
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code				
1	MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	10 DBO	A	53 bc	57 bc	60 cde	62 b
				0.5	% v/v	10 DBO	A				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
2	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.06	lb ai/a	10 DBO	A	53 bc	57 bc	60 cde	62 b
				0.5	% v/v	10 DBO	A				
3	MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	10 DBO	A	53 bc	55 bcd	63 bcd	62 b
				0.5	% v/v	10 DBO	A				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
4	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.125	lb ai/a	10 DBO	A	53 bc	55 bcd	63 bcd	62 b
				0.5	% v/v	10 DBO	A				
5	Velocity Velocity	80	SP	60	g ai/a	10 DBO	A	52 bcd	57 bc	65 bcd	65 b
				60	g ai/a	spring	D				
6	Velocity No spring treatment	80	SP	60	g ai/a	10 DBO	A	52 bcd	57 bc	65 bcd	65 b
7	MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	7 DBO	B	52 bcd	57 bc	62 b-e	63 b
				0.5	% v/v	7 DBO	B				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
8	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.06	lb ai/a	7 DBO	B	52 bcd	57 bc	62 b-e	63 b
				0.5	% v/v	7 DBO	B				
9	MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	7 DBO	B	47 cde	53 cde	62 b-e	62 b
				0.5	% v/v	7 DBO	B				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
10	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.125	lb ai/a	7 DBO	B	47 cde	53 cde	62 b-e	62 b
				0.5	% v/v	7 DBO	B				
11	TranXit + Nonionic surfactant	25	WG	0.032	lb ai/a	7 DBO	B	48 cde	52 cde	58 de	60 bc
				0.5	% v/v	7 DBO	B				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				

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Crop Code							LOLPE	LOLPE	LOLPE	LOLPE	
Part Rated							Density	Density	Density	Density	
Rating Data Type							0-100	0-100	0-100	0-100	
Rating Unit							11-25-2002	12-23-2002	1-22-2003	2-4-2003	
Rating Date							66 DA-A	94 DA-A	124 DA-A	137 DA-A	
Trt-Eval Interval											
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code				
12	TranXit + Nonionic surfactant No spring treatment	25	WG	0.032	lb ai/a 0.5 % v/v	7 DBO 7 DBO	B B	48 cde	52 cde	58 de	60 bc
13	MON 44951 + Nonionic surfactant MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a 0.5 % v/v	3 DBO 3 DBO	C C	45 de	48 de	55 ef	55 bc
		75	WG	0.02	lb ai/a 0.5 % v/v	spring spring	D D				
14	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.06	lb ai/a 0.5 % v/v	3 DBO 3 DBO	C C	45 de	48 de	55 ef	55 bc
15	MON 44951 + Nonionic surfactant MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a 0.5 % v/v	3 DBO 3 DBO	C C	43 e	47 e	48 f	58 bc
		75	WG	0.02	lb ai/a 0.5 % v/v	spring spring	D D				
16	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.125	lb ai/a 0.5 % v/v	3 DBO 3 DBO	C C	43 e	47 e	48 f	48 c
17	MON 44951 + Roundup Pro MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a 6.0 fl oz/a	3 DBO 3 DBO	C C	47 cde	55 bcd	67 bc	65 b
		3	SL								
		75	WG	0.02	lb ai/a 0.5 % v/v	spring spring	D D				
18	MON 44951 + Roundup Pro No spring treatment	75	WG	0.125	lb ai/a 6.0 fl oz/a	3 DBO 3 DBO	C C	47 cde	55 bcd	67 bc	65 b
		3	SL								
19	Roundup Pro MON 44951 + Nonionic surfactant	3	SL	6.0	fl oz/a	3 DBO	C	73 a	77 a	80 a	87 a
		75	WG	0.02	lb ai/a 0.5 % v/v	spring spring	D D				
20	Roundup Pro No spring treatment	3	SL	6.0	fl oz/a	3 DBO	C	73 a	77 a	80 a	87 a
21	Untreated Check MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a 0.5 % v/v	spring spring	D D	58 b	62 b	68 b	67 b
22	Untreated Check No spring treatment							58 b	62 b	68 b	67 b
LSD (P=.05)							6.9	5.9	6.3	11.0	
Standard Deviation							4.2	3.6	3.8	6.6	
CV							8.02	6.39	6.15	10.43	



## University of GA Coop Ext Service

Weed Code							LOLPE	LOLPE	LOLPE	LOLPE	
Crop Code											
Part Rated											
Rating Data Type							Density	Injury	Injury	Injury	
Rating Unit							0-100	0-100	0-100	0-100	
Rating Date							3-4-2003	3-11-2003	3-18-2003	3-31-2003	
Trt-Eval Interval							165 DA-A	172 DA-A	179 DA-A	192 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code				
1	MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	10 DBO	A	70 bc	25 c	45 a	0 a
				0.5	% v/v	10 DBO	A				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
2	MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	10 DBO	A	70 bc	0 e	0 c	0 a
				0.5	% v/v	10 DBO	A				
	No spring treatment										
3	MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	10 DBO	A	68 bc	27 bc	47 a	0 a
				0.5	% v/v	10 DBO	A				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
4	MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	10 DBO	A	68 bc	0 e	0 c	0 a
				0.5	% v/v	10 DBO	A				
	No spring treatment										
5	Velocity	80	SP	60	g ai/a	10 DBO	A	70 bc	13 d	20 b	0 a
	Velocity	80	SP	60	g ai/a	spring	D				
6	Velocity	80	SP	60	g ai/a	10 DBO	A	70 bc	0 e	0 c	0 a
	No spring treatment										
7	MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	7 DBO	B	70 bc	27 bc	43 a	0 a
				0.5	% v/v	7 DBO	B				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
8	MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	7 DBO	B	70 bc	0 e	0 c	0 a
				0.5	% v/v	7 DBO	B				
	No spring treatment										
9	MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	7 DBO	B	70 bc	28 abc	47 a	0 a
				0.5	% v/v	7 DBO	B				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
10	MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	7 DBO	B	70 bc	0 e	0 c	0 a
				0.5	% v/v	7 DBO	B				
	No spring treatment										
11	TranXit + Nonionic surfactant	25	WG	0.032	lb ai/a	7 DBO	B	65 bc	32 ab	47 a	0 a
				0.5	% v/v	7 DBO	B				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				

# University of GA Coop Ext Service

Weed Code							LOLPE	LOLPE	LOLPE	LOLPE	
Crop Code											
Part Rated											
Rating Data Type							Density	Injury	Injury	Injury	
Rating Unit							0-100	0-100	0-100	0-100	
Rating Date							3-4-2003	3-11-2003	3-18-2003	3-31-2003	
Trt-Eval Interval							165 DA-A	172 DA-A	179 DA-A	192 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code				
12	TranXit + Nonionic surfactant No spring treatment	25	WG	0.032	lb ai/a 0.5 % v/v	7 DBO 7 DBO	B B	65 bc	0 e	0 c	0 a
13	MON 44951 + Nonionic surfactant MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a 0.5 % v/v 0.02 lb ai/a 0.5 % v/v	3 DBO 3 DBO spring spring	C C D D	63 bc	28 abc	47 a	0 a
14	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.06	lb ai/a 0.5 % v/v	3 DBO 3 DBO	C C	63 bc	0 e	0 c	0 a
15	MON 44951 + Nonionic surfactant MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a 0.5 % v/v 0.02 lb ai/a 0.5 % v/v	3 DBO 3 DBO spring spring	C C D D	62 c	33 a	47 a	0 a
16	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.125	lb ai/a 0.5 % v/v	3 DBO 3 DBO	C C	62 c	0 e	0 c	0 a
17	MON 44951 + Roundup Pro MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a 6.0 fl oz/a 0.02 lb ai/a 0.5 % v/v	3 DBO 3 DBO spring spring	C C D D	70 bc	28 abc	45 a	0 a
18	MON 44951 + Roundup Pro No spring treatment	75	WG	0.125	lb ai/a 6.0 fl oz/a	3 DBO 3 DBO	C C	70 bc	0 e	0 c	0 a
19	Roundup Pro MON 44951 + Nonionic surfactant	3	SL	6.0	fl oz/a 0.02 lb ai/a 0.5 % v/v	3 DBO spring spring	C D D	83 a	17 d	42 a	0 a
20	Roundup Pro No spring treatment	3	SL	6.0	fl oz/a	3 DBO	C	83 a	0 e	0 c	0 a
21	Untreated Check MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a 0.5 % v/v	spring spring	D D	72 b	25 c	45 a	0 a
22	Untreated Check No spring treatment							9 72 b	10 0 e	11 0 c	12 0 a
LSD (P=.05)							7.4	4.9	5.3	0.0	
Standard Deviation							4.5	2.9	3.2	0.0	
CV							6.5	22.89	14.94	0.0	

## University of GA Coop Ext Service

Weed Code							LOLPE	POAAN	POAAN	POAAN	
Crop Code											
Part Rated											
Rating Data Type							Injury	Control	Control	Control	
Rating Unit							0-100	0-100	0-100	0-100	
Rating Date							4-16-2003	3-4-2003	3-11-2003	3-18-2003	
Trt-Eval Interval							208 DA-A	165 DA-A	172 DA-A	179 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code				
1	MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	10 DBO	A	0 a	60 b	83 abc	78 abc
				0.5	% v/v	10 DBO	A				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
2	MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	10 DBO	A	0 a	60 b	52 b-f	50 cd
				0.5	% v/v	10 DBO	A				
	No spring treatment										
3	MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	10 DBO	A	0 a	50 b	67 a-e	72 a-d
				0.5	% v/v	10 DBO	A				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
4	MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	10 DBO	A	0 a	50 b	32 f	40 d
				0.5	% v/v	10 DBO	A				
	No spring treatment										
5	Velocity	80	SP	60	g ai/a	10 DBO	A	0 a	33 b	78 a-d	82 abc
	Velocity	80	SP	60	g ai/a	spring	D				
6	Velocity	80	SP	60	g ai/a	10 DBO	A	0 a	33 b	37 ef	50 cd
	No spring treatment										
7	MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	7 DBO	B	0 a	53 b	77 a-d	75 abc
				0.5	% v/v	7 DBO	B				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
8	MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	7 DBO	B	0 a	53 b	48 c-f	63 a-d
				0.5	% v/v	7 DBO	B				
	No spring treatment										
9	MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	7 DBO	B	0 a	53 b	82 abc	75 abc
				0.5	% v/v	7 DBO	B				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				
10	MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	7 DBO	B	0 a	53 b	63 a-f	57 a-d
				0.5	% v/v	7 DBO	B				
	No spring treatment										
11	TranXit + Nonionic surfactant	25	WG	0.032	lb ai/a	7 DBO	B	0 a	50 b	78 a-d	78 abc
				0.5	% v/v	7 DBO	B				
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D				
				0.5	% v/v	spring	D				

## University of GA Coop Ext Service

Weed Code							LOLPE	POAAN	POAAN	POAAN	
Crop Code											
Part Rated											
Rating Data Type							Injury	Control	Control	Control	
Rating Unit							0-100	0-100	0-100	0-100	
Rating Date							4-16-2003	3-4-2003	3-11-2003	3-18-2003	
Trt-Eval Interval							208 DA-A	165 DA-A	172 DA-A	179 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	13	14	15	16
12	TranXit + Nonionic surfactant No spring treatment	25	WG	0.032	lb ai/a 0.5 % v/v	7 DBO 7 DBO	B B	0 a	50 b	50 b-f	40 d
13	MON 44951 + Nonionic surfactant MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a 0.5 % v/v	3 DBO 3 DBO	C C	0 a	50 b	78 a-d	65 a-d
14	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.06	lb ai/a 0.5 % v/v	3 DBO 3 DBO	C C	0 a	50 b	53 b-f	42 d
15	MON 44951 + Nonionic surfactant MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a 0.5 % v/v	3 DBO 3 DBO	C C	0 a	63 ab	85 ab	80 abc
16	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.125	lb ai/a 0.5 % v/v	3 DBO 3 DBO	C C	0 a	63 ab	68 a-e	65 a-d
17	MON 44951 + Roundup Pro MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a 6.0 fl oz/a	3 DBO 3 DBO	C C	0 a	90 a	93 a	83 ab
18	MON 44951 + Roundup Pro No spring treatment	75	WG	0.125	lb ai/a 6.0 fl oz/a	3 DBO 3 DBO	C C	0 a	90 a	90 a	85 a
19	Roundup Pro MON 44951 + Nonionic surfactant	3	SL	6.0	fl oz/a	3 DBO	C	0 a	57 b	72 a-d	72 a-d
20	Roundup Pro No spring treatment	3	SL	6.0	fl oz/a	3 DBO	C	0 a	57 b	30 f	52 bcd
21	Untreated Check MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a 0.5 % v/v	spring spring	D D	0 a	0 c	43 def	55 a-d
22	Untreated Check No spring treatment							0 a	0 c	0 g	0 e
LSD (P=.05)								0.0	26.5	29.6	26.8
Standard Deviation								0.0	16.0	17.9	16.2
CV								0.0	31.52	28.99	26.3

## University of GA Coop Ext Service

Weed Code							POAAN	POAAN	POAAN	POAAN	
Crop Code											
Part Rated									Seedhd	Seedhd	
Rating Data Type							Control	Control	Suppressn	Suppressn	
Rating Unit							0-100	0-100	0-100	0-100	
Rating Date							3-31-2003	4-16-2003	3-11-2003	3-18-2003	
Trt-Eval Interval							192 DA-A	208 DA-A	172 DA-A	179 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Grow Unit	Stg	Appl Code				
1	MON 44951 + Nonionic surfactant	75	WG	0.06 lb ai/a 0.5 % v/v	10 DBO	A	A	78 abc	50 a-e	83 a	93 a
	MON 44951 + Nonionic surfactant	75	WG	0.02 lb ai/a 0.5 % v/v	spring	D	D				
2	MON 44951 + Nonionic surfactant	75	WG	0.06 lb ai/a 0.5 % v/v	10 DBO	A	A	52 a-d	50 a-e	0 b	45 def
	No spring treatment										
3	MON 44951 + Nonionic surfactant	75	WG	0.125 lb ai/a 0.5 % v/v	10 DBO	A	A	75 abc	53 a-d	77 a	87 abc
	MON 44951 + Nonionic surfactant	75	WG	0.02 lb ai/a 0.5 % v/v	spring	D	D				
4	MON 44951 + Nonionic surfactant	75	WG	0.125 lb ai/a 0.5 % v/v	10 DBO	A	A	35 cde	20 de	0 b	30 efg
	No spring treatment										
5	Velocity	80	SP	60 g ai/a	10 DBO	A	A	75 abc	50 a-e	90 a	92 a
	Velocity	80	SP	60 g ai/a	spring	D	D				
6	Velocity	80	SP	60 g ai/a	10 DBO	A	A	43 a-d	50 a-e	0 b	40 def
	No spring treatment										
7	MON 44951 + Nonionic surfactant	75	WG	0.06 lb ai/a 0.5 % v/v	7 DBO	B	B	65 a-d	30 b-e	82 a	88 ab
	MON 44951 + Nonionic surfactant	75	WG	0.02 lb ai/a 0.5 % v/v	spring	D	D				
8	MON 44951 + Nonionic surfactant	75	WG	0.06 lb ai/a 0.5 % v/v	7 DBO	B	B	48 a-d	47 a-e	0 b	53 cde
	No spring treatment										
9	MON 44951 + Nonionic surfactant	75	WG	0.125 lb ai/a 0.5 % v/v	7 DBO	B	B	70 a-d	33 a-e	87 a	87 abc
	MON 44951 + Nonionic surfactant	75	WG	0.02 lb ai/a 0.5 % v/v	spring	D	D				
10	MON 44951 + Nonionic surfactant	75	WG	0.125 lb ai/a 0.5 % v/v	7 DBO	B	B	62 a-d	53 a-d	0 b	53 cde
	No spring treatment										
11	TranXit + Nonionic surfactant	25	WG	0.032 lb ai/a 0.5 % v/v	7 DBO	B	B	67 a-d	43 a-e	87 a	88 ab
	MON 44951 + Nonionic surfactant	75	WG	0.02 lb ai/a 0.5 % v/v	spring	D	D				

## University of GA Coop Ext Service

							POAAN	POAAN	POAAN	POAAN	
							Control	Control	Seedhd	Seedhd	
							0-100	0-100	Suppressn	Suppressn	
							3-31-2003	4-16-2003	0-100	0-100	
							192 DA-A	208 DA-A	172 DA-A	179 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Grow Unit	Appl Stg Code					
12	TranXit + Nonionic surfactant No spring treatment	25	WG	0.032 0.5	lb ai/a % v/v	7 DBO 7 DBO	B B	30 de	42 a-e	0 b	17 fg
13	MON 44951 + Nonionic surfactant MON 44951 + Nonionic surfactant	75	WG	0.06 0.5 0.02 0.5	lb ai/a % v/v lb ai/a % v/v	3 DBO 3 DBO spring spring	C C D D	67 a-d	47 a-e	88 a	80 abc
14	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.06 0.5	lb ai/a % v/v	3 DBO 3 DBO	C C	37 b-e	30 b-e	0 b	17 fg
15	MON 44951 + Nonionic surfactant MON 44951 + Nonionic surfactant	75	WG	0.125 0.5 0.02 0.5	lb ai/a % v/v lb ai/a % v/v	3 DBO 3 DBO spring spring	C C D D	62 a-d	43 a-e	95 a	93 a
16	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.125 0.5	lb ai/a % v/v	3 DBO 3 DBO	C C	50 a-d	53 a-d	0 b	57 b-e
17	MON 44951 + Roundup Pro MON 44951 + Nonionic surfactant	75	WG	0.125 6.0 0.02 0.5	lb ai/a fl oz/a lb ai/a % v/v	3 DBO 3 DBO spring spring	C C D D	82 a	73 abc	63 a	90 ab
18	MON 44951 + Roundup Pro No spring treatment	75	WG	0.125 6.0	lb ai/a fl oz/a	3 DBO 3 DBO	C C	80 ab	80 ab	32 b	82 abc
19	Roundup Pro MON 44951 + Nonionic surfactant	3	SL	6.0	fl oz/a	3 DBO	C	72 a-d	57 a-d	68 a	80 abc
20	Roundup Pro No spring treatment	3	SL	6.0	fl oz/a	3 DBO	C	70 a-d	82 a	0 b	28 efg
21	Untreated Check MON 44951 + Nonionic surfactant	75	WG	0.02 0.5	lb ai/a % v/v	spring spring	D D	43 a-d	23 cde	67 a	70 a-d
22	Untreated Check No spring treatment							0 e	0 e	0 b	0 g
LSD (P=.05)							36.1	41.9	29.5	29.0	
Standard Deviation							21.9	25.4	17.9	17.6	
CV							38.17	55.25	42.82	28.2	

## University of GA Coop Ext Service

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	
	Weed Code							POAAN
	Crop Code							Seedhd
	Part Rated							Suppressn
	Rating Data Type							0-100
	Rating Unit							3-18-2003
	Rating Date							179 DA-A
	Trt-Eval Interval							
1	MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	10 DBO	A	80 a
				0.5	% v/v	10 DBO	A	
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D	
				0.5	% v/v	spring	D	
2	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.06	lb ai/a	10 DBO	A	52 a-e
				0.5	% v/v	10 DBO	A	
3	MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	10 DBO	A	77 ab
				0.5	% v/v	10 DBO	A	
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D	
				0.5	% v/v	spring	D	
4	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.125	lb ai/a	10 DBO	A	17 ef
				0.5	% v/v	10 DBO	A	
5	Velocity	80	SP	60	g ai/a	10 DBO	A	75 ab
	Velocity	80	SP	60	g ai/a	spring	D	
6	Velocity No spring treatment	80	SP	60	g ai/a	10 DBO	A	27 def
7	MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a	7 DBO	B	70 a-d
				0.5	% v/v	7 DBO	B	
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D	
				0.5	% v/v	spring	D	
8	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.06	lb ai/a	7 DBO	B	47 a-e
				0.5	% v/v	7 DBO	B	
9	MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	7 DBO	B	63 a-d
				0.5	% v/v	7 DBO	B	
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D	
				0.5	% v/v	spring	D	
10	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.125	lb ai/a	7 DBO	B	53 a-e
				0.5	% v/v	7 DBO	B	
11	TranXit + Nonionic surfactant	25	WG	0.032	lb ai/a	7 DBO	B	72 abc
				0.5	% v/v	7 DBO	B	
	MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a	spring	D	
				0.5	% v/v	spring	D	

## University of GA Coop Ext Service

Weed Code								POAAN
Crop Code								Seedhd
Part Rated								Suppressn
Rating Data Type								0-100
Rating Unit								3-18-2003
Rating Date								179 DA-A
Trt-Eval Interval								
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	
12	TranXit + Nonionic surfactant No spring treatment	25	WG	0.032	lb ai/a 0.5 % v/v	7 DBO 7 DBO	B B	27 def
13	MON 44951 + Nonionic surfactant MON 44951 + Nonionic surfactant	75	WG	0.06	lb ai/a 0.5 % v/v	3 DBO 3 DBO	C C	67 a-d
		75	WG	0.02	lb ai/a 0.5 % v/v	spring spring	D D	
14	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.06	lb ai/a 0.5 % v/v	3 DBO 3 DBO	C C	30 c-f
15	MON 44951 + Nonionic surfactant MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a 0.5 % v/v	3 DBO 3 DBO	C C	60 a-e
		75	WG	0.02	lb ai/a 0.5 % v/v	spring spring	D D	
16	MON 44951 + Nonionic surfactant No spring treatment	75	WG	0.125	lb ai/a 0.5 % v/v	3 DBO 3 DBO	C C	37 a-f
17	MON 44951 + Roundup Pro MON 44951 + Nonionic surfactant	75	WG	0.125	lb ai/a	3 DBO	C	78 ab
		3	SL	6.0	fl oz/a	3 DBO	C	
		75	WG	0.02	lb ai/a	spring	D	
				0.5	% v/v	spring	D	
18	MON 44951 + Roundup Pro No spring treatment	75	WG	0.125	lb ai/a	3 DBO	C	78 ab
		3	SL	6.0	fl oz/a	3 DBO	C	
19	Roundup Pro MON 44951 + Nonionic surfactant	3	SL	6.0	fl oz/a	3 DBO	C	70 a-d
		75	WG	0.02	lb ai/a	spring	D	
				0.5	% v/v	spring	D	
20	Roundup Pro No spring treatment	3	SL	6.0	fl oz/a	3 DBO	C	62 a-d
21	Untreated Check MON 44951 + Nonionic surfactant	75	WG	0.02	lb ai/a 0.5 % v/v	spring spring	D D	33 b-f
22	Untreated Check No spring treatment							0 f
LSD (P=.05)								37.4
Standard Deviation								22.7
CV								42.51