

North Carolina State University

Tolerance of Perennial Ryegrass Varieties to MON 44940

Trial ID: 00-T131

Study Dir.: Jason Hinton and Travis Gannon

Location: NCSU Turf Field Lab Investigator: Fred Yelverton

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	CO2 Spray	CO2 Spray	CO2 Spray
Operating Pressure:	36 PSI	36 PSI	36 PSI
Nozzle Type:	Flat Fan	Flat Fan	Flat Fan
Nozzle Size:	8002 XR	8002 XR	8002 XR
Nozzle Spacing, Unit:	10 Inch	10 Inch	10 Inch
Boom Height, Unit:	10 Inch	10 Inch	10 Inch
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH
Carrier:	Water	Water	Water
Spray Volume, Unit:	32.5 GPA	32.5 GPA	32.5 GPA
Propellant:	Compr.CO2	Compr.CO2	Compr.CO2

North Carolina State University

Tolerance of Perennial Ryegrass Varieties to MON 44940

Trial ID: 00-T131

Study Dir.: Jason Hinton and Travis Gannon

Location: NCSU Turf Field Lab Investigator: Fred Yelverton

Crop Code						LOLPE	LOLPE	LOLPE	LOLPE	
Rating Data Type						COVER	COVER	COVER	QUALITY	
Rating Unit						%	%	%	1-9	
Rating Date						12-08-00	01-25-01	03-16-01	12-08-00	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Grow Stg	Appl Code				
1	Formula One Perennial Rye MON 44940	2.5	EC	0.01 LB A/A	4 WAO	A	45.0	40.0	80.0	6.750
2	Formula One Perennial Rye MON 44940	2.5	EC	0.01 LB A/A	4 WAO	A	35.0	25.0	65.0	5.000
	MON 44940	2.5	EC	0.01 LB A/A	8 WAO	B				
3	Formula One Perennial Rye Prograss	1.5	EC	1.0 LB A/A	8 WAO	B	45.0	35.0	70.0	6.750
	Prograss	1.5	EC	1.0 LB A/A	11 WAO	C				
4	Formula One Perennial Rye Nontreated						45.0	40.0	70.0	6.750
5	Charger Perennial Rye MON 44940	2.5	EC	0.01 LB A/A	4 WAO	A	20.0	25.0	65.0	5.000
6	Charger Perennial Rye MON 44940	2.5	EC	0.01 LB A/A	4 WAO	A	15.0	15.0	50.0	4.000
	MON 44940	2.5	EC	0.01 LB A/A	8 WAO	B				
7	Charger Perennial Rye Prograss	1.5	EC	1.0 LB A/A	8 WAO	B	20.0	20.0	60.0	5.000
	Prograss	1.5	EC	1.0 LB A/A	11 WAO	C				
8	Charger Perennial Rye Nontreated						20.0	25.0	60.0	5.000
9	Charger II Perennial Rye MON 44940	2.5	EC	0.01 LB A/A	4 WAO	A	40.0	35.0	75.0	6.500
10	Charger II Perennial Rye MON 44940	2.5	EC	0.01 LB A/A	4 WAO	A	40.0	25.0	75.0	6.000
	MON 44940	2.5	EC	0.01 LB A/A	8 WAO	B				
11	Charger II Perennial Rye Prograss	1.5	EC	1.0 LB A/A	8 WAO	B	45.0	35.0	75.0	6.750
	Prograss	1.5	EC	1.0 LB A/A	11 WAO	C				
12	Charger II Perennial Rye Nontreated						40.0	40.0	75.0	6.750
13	Catalina Perennial Rye MON 44940	2.5	EC	0.01 LB A/A	4 WAO	A	40.0	35.0	70.0	6.250

North Carolina State University

Tolerance of Perennial Ryegrass Varieties to MON 44940

Trial ID: 00-T131

Study Dir.: Jason Hinton and Travis Gannon

Location: NCSU Turf Field Lab Investigator: Fred Yelverton

Crop Code						LOLPE	LOLPE	LOLPE	LOLPE	
Rating Data Type						COVER	COVER	COVER	QUALITY	
Rating Unit						%	%	%	1-9	
Rating Date						12-08-00	01-25-01	03-16-01	12-08-00	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Grow Stg	Appl Code				
14	Catalina Perennial Rye MON 44940 MON 44940	2.5 EC 2.5 EC		0.01 LB A/A 0.01 LB A/A	4 WAO 8 WAO	A B	35.0	20.0	55.0	5.500
15	Catalina Perennial Rye Prograss Prograss	1.5 EC 1.5 EC		1.0 LB A/A 1.0 LB A/A	8 WAO 11 WAO	B C	45.0	30.0	70.0	6.500
16	Catalina Perennial Rye Nontreated						45.0	35.0	70.0	6.500
17	Brightstar2 Perennial Rye MON 44940	2.5 EC		0.01 LB A/A	4 WAO	A	45.0	35.0	70.0	6.500
18	Brightstar2 Perennial Rye MON 44940 MON 44940	2.5 EC 2.5 EC		0.01 LB A/A 0.01 LB A/A	4 WAO 8 WAO	A B	40.0	25.0	60.0	6.000
19	Brightstar2 Perennial Rye Prograss Prograss	1.5 EC 1.5 EC		1.0 LB A/A 1.0 LB A/A	8 WAO 11 WAO	B C	45.0	35.0	75.0	7.000
20	Brightstar2 Perennial Rye Nontreated						45.0	40.0	70.0	7.000
21	Manhattan 3 Perennial Rye MON 44940	2.5 EC		0.01 LB A/A	4 WAO	A	45.0	40.0	70.0	6.500
22	Manhattan 3 Perennial Rye MON 44940 MON 44940	2.5 EC 2.5 EC		0.01 LB A/A 0.01 LB A/A	4 WAO 8 WAO	A B	40.0	30.0	70.0	5.750
23	Manhattan 3 Perennial Rye Prograss Prograss	1.5 EC 1.5 EC		1.0 LB A/A 1.0 LB A/A	8 WAO 11 WAO	B C	45.0	35.0	70.0	6.750
24	Manhattan 3 Perennial Rye Nontreated						45.0	40.0	70.0	6.750
25	Citation 3 Perennial Rye MON 44940	2.5 EC		0.01 LB A/A	4 WAO	A	45.0	40.0	70.0	6.500
26	Citation 3 Perennial Rye MON 44940 MON 44940	2.5 EC 2.5 EC		0.01 LB A/A 0.01 LB A/A	4 WAO 8 WAO	A B	40.0	30.0	70.0	5.500

North Carolina State University

Tolerance of Perennial Ryegrass Varieties to MON 44940

Trial ID: 00-T131

Study Dir.: Jason Hinton and Travis Gannon

Location: NCSU Turf Field Lab Investigator: Fred Yelverton

Crop Code						LOLPE	LOLPE	LOLPE	LOLPE	
Rating Data Type						COVER	COVER	COVER	QUALITY	
Rating Unit						%	%	%	1-9	
Rating Date						12-08-00	01-25-01	03-16-01	12-08-00	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Grow Stg	Appl Code				
27	Citation 3 Perennial Rye Prograss Prograss	1.5 EC 1.5 EC		1.0 LB A/A 1.0 LB A/A	8 WAO 11 WAO	B C	45.0	35.0	70.0	6.500
28	Citation 3 Perennial Rye Nontreated						45.0	40.0	70.0	6.500
29	Chaparral Perennial Rye MON 44940	2.5 EC		0.01 LB A/A	4 WAO	A	40.0	35.0	65.0	6.000
30	Chaparral Perennial Rye MON 44940 MON 44940	2.5 EC 2.5 EC		0.01 LB A/A 0.01 LB A/A	4 WAO 8 WAO	A B	30.0	25.0	60.0	4.750
31	Chaparral Perennial Rye Prograss Prograss	1.5 EC 1.5 EC		1.0 LB A/A 1.0 LB A/A	8 WAO 11 WAO	B C	35.0	25.0	60.0	5.750
32	Chaparral Perennial Rye Nontreated						35.0	30.0	60.0	6.000
LSD (P=.05)							.	.	.	.
Standard Deviation							.	.	.	.
CV							.	.	.	.
Bartlett's X2							.	.	.	.
P(Bartlett's X2)							.	.	.	.

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)
Mean separations are based on the complete error term.

North Carolina State University

Tolerance of Perennial Ryegrass Varieties to MON 44940

Trial ID: 00-T131

Study Dir.: Jason Hinton and Travis Gannon

Location: NCSU Turf Field Lab Investigator: Fred Yelverton

Crop Code						LOLPE	LOLPE
Rating Data Type						QUALITY	QUALITY
Rating Unit						1-9	1-9
Rating Date						01-25-01	03-16-01
Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Grow Stg	Appl Code	
1	Formula One Perennial Rye MON 44940	2.5	EC	0.01 LB A/A	4 WAO	A	6.000 7.000
2	Formula One Perennial Rye MON 44940 MON 44940	2.5	EC	0.01 LB A/A	4 WAO	A	3.000 6.500
		2.5	EC	0.01 LB A/A	8 WAO	B	
3	Formula One Perennial Rye Prograss Prograss	1.5	EC	1.0 LB A/A	8 WAO	B	5.000 7.000
		1.5	EC	1.0 LB A/A	11 WAO	C	
4	Formula One Perennial Rye Nontreated						5.500 7.000
5	Charger Perennial Rye MON 44940	2.5	EC	0.01 LB A/A	4 WAO	A	5.000 7.000
6	Charger Perennial Rye MON 44940 MON 44940	2.5	EC	0.01 LB A/A	4 WAO	A	3.000 6.500
		2.5	EC	0.01 LB A/A	8 WAO	B	
7	Charger Perennial Rye Prograss Prograss	1.5	EC	1.0 LB A/A	8 WAO	B	4.500 7.000
		1.5	EC	1.0 LB A/A	11 WAO	C	
8	Charger Perennial Rye Nontreated						5.000 7.000
9	Charger II Perennial Rye MON 44940	2.5	EC	0.01 LB A/A	4 WAO	A	4.000 7.000
10	Charger II Perennial Rye MON 44940 MON 44940	2.5	EC	0.01 LB A/A	4 WAO	A	3.000 7.000
		2.5	EC	0.01 LB A/A	8 WAO	B	
11	Charger II Perennial Rye Prograss Prograss	1.5	EC	1.0 LB A/A	8 WAO	B	4.750 7.000
		1.5	EC	1.0 LB A/A	11 WAO	C	
12	Charger II Perennial Rye Nontreated						5.500 7.000
13	Catalina Perennial Rye MON 44940	2.5	EC	0.01 LB A/A	4 WAO	A	4.000 7.000

North Carolina State University

Tolerance of Perennial Ryegrass Varieties to MON 44940

Trial ID: 00-T131

Study Dir.: Jason Hinton and Travis Gannon

Location: NCSU Turf Field Lab Investigator: Fred Yelverton

Crop Code						LOLPE	LOLPE
Rating Data Type						QUALITY	QUALITY
Rating Unit						1-9	1-9
Rating Date						01-25-01	03-16-01
Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Grow Stg	Appl Code	
14	Catalina Perennial Rye MON 44940	2.5 EC		0.01 LB A/A	4 WAO	A	2.500
	MON 44940	2.5 EC		0.01 LB A/A	8 WAO	B	6.250
15	Catalina Perennial Rye Prograss	1.5 EC		1.0 LB A/A	8 WAO	B	4.000
	Prograss	1.5 EC		1.0 LB A/A	11 WAO	C	7.000
16	Catalina Perennial Rye Nontreated						4.500
17	Brightstar2 Perennial Rye MON 44940	2.5 EC		0.01 LB A/A	4 WAO	A	4.500
18	Brightstar2 Perennial Rye MON 44940	2.5 EC		0.01 LB A/A	4 WAO	A	3.250
	MON 44940	2.5 EC		0.01 LB A/A	8 WAO	B	7.000
19	Brightstar2 Perennial Rye Prograss	1.5 EC		1.0 LB A/A	8 WAO	B	4.500
	Prograss	1.5 EC		1.0 LB A/A	11 WAO	C	7.000
20	Brightstar2 Perennial Rye Nontreated						5.000
21	Manhattan 3 Perennial Rye MON 44940	2.5 EC		0.01 LB A/A	4 WAO	A	4.250
22	Manhattan 3 Perennial Rye MON 44940	2.5 EC		0.01 LB A/A	4 WAO	A	3.500
	MON 44940	2.5 EC		0.01 LB A/A	8 WAO	B	7.000
23	Manhattan 3 Perennial Rye Prograss	1.5 EC		1.0 LB A/A	8 WAO	B	4.500
	Prograss	1.5 EC		1.0 LB A/A	11 WAO	C	7.000
24	Manhattan 3 Perennial Rye Nontreated						5.000
25	Citation 3 Perennial Rye MON 44940	2.5 EC		0.01 LB A/A	4 WAO	A	4.500
26	Citation 3 Perennial Rye MON 44940	2.5 EC		0.01 LB A/A	4 WAO	A	3.500
	MON 44940	2.5 EC		0.01 LB A/A	8 WAO	B	7.000

