



# North Carolina State University

## APPLICATION PLACEMENT TECHNOLOGIES FOR PGR APPLICATIONS ON TALL FESCUE ROADSIDES

Trial ID: 04-D14  
 Location: US25 MADISON COUNTY

Study Dir.: TRAVIS GANNON  
 Investigator: Fred Yelverton

Crop Code								FESAR	FESAR	FESAR	FESAR		
Rating Data Type								VEGET HT	VEGET HT	SEEDHEAD HT	SEEDHEAD HT		
Rating Unit								INCH	INCH	INCH	INCH		
Rating Date								5-18-04	6-15-04	5-18-04	6-15-04		
Trt-Eval Interval								35 DA-A	63 DA-A	35 DA-A	63 DA-A		
ARM Action Codes													
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Product Unit	Product Rate	Product Unit	Grow Stg	Appl Code				
1	BROADCAST APPLICATION PLATEAU X-77	2 AS	L	2 oz/a		0.25 % v/v		APRIL 13 APRIL 13 A APRIL 13 A		7.0 a	9.3 a		
2	WEEDBUG PLATEAU X-77	2 AS	L	2 oz/a		0.25 % v/v		APRIL 13 APRIL 13 A APRIL 13 A		8.3 a	9.0 a	24.0 a	
3	BURCH WET BLADE PLATEAU	2 AS		2 oz/a				APRIL 13 APRIL 13 A		7.0 a	10.7 a	30.0 a	29.0 a
4	BURCH WET BLADE PLATEAU X-77	2 AS	L	2 oz/a		0.25 % v/v		APRIL 13 APRIL 13 A APRIL 13 A		7.0 a	10.7 a	17.0 a	28.0 a
5	BROADCAST APPLICATION PLATEAU X-77	2 AS	L	3 oz/a		0.25 % v/v		APRIL 13 APRIL 13 A APRIL 13 A		6.3 a	11.0 a		
6	WEEDBUG PLATEAU X-77	2 AS	L	3 oz/a		0.25 % v/v		APRIL 13 APRIL 13 A APRIL 13 A		5.3 a	7.3 a		
7	BURCH WET BLADE PLATEAU	2 AS		3 oz/a				APRIL 13 APRIL 13 A		4.0 a	8.7 a		
8	BURCH WET BLADE PLATEAU X-77	2 AS	L	3 oz/a		0.25 % v/v		APRIL 13 APRIL 13 A APRIL 13 A		5.7 a	10.3 a	18.0 a	
9	BROADCAST APPLICATION PLATEAU X-77	2 AS	L	0.5 oz/a		0.25 % v/v		APRIL 13 APRIL 13 A APRIL 13 A		7.7 a	11.7 a	28.0 a	25.0 a
10	WEEDBUG PLATEAU X-77	2 AS	L	0.5 oz/a		0.25 % v/v		APRIL 13 APRIL 13 A APRIL 13 A		5.3 a	8.0 a		
11	BURCH WET BLADE PLATEAU	2 AS		0.5 oz/a				APRIL 13 APRIL 13 A		7.3 a	8.7 a	22.7 a	24.3 a
12	BURCH WET BLADE PLATEAU X-77	2 AS	L	0.5 oz/a		0.25 % v/v		APRIL 13 APRIL 13 A APRIL 13 A		7.3 a	11.7 a	25.0 a	26.7 a
13	BROADCAST APPLICATION TELAR EMBARK X-77	75 DF	2 L	0.125 oz/a		0.5 pt/a		APRIL 13 APRIL 13 A APRIL 13 A		7.0 a	12.0 a		28.0 a
14	WEEDBUG TELAR EMBARK X-77	75 DF	2 L	0.125 oz/a		0.5 pt/a		APRIL 13 APRIL 13 A APRIL 13 A		7.3 a	12.0 a		
15	BURCH WET BLADE TELAR EMBARK	75 DF	2 L	0.125 oz/a		0.5 pt/a		APRIL 13 APRIL 13 A APRIL 13 A		7.3 a	10.3 a	23.7 a	32.0 a
16	BURCH WET BLADE TELAR EMBARK X-77	75 DF	2 L	0.125 oz/a		0.5 pt/a		APRIL 13 APRIL 13 A APRIL 13 A		7.7 a	10.7 a	23.3 a	27.3 a
17	MOWED NONTREATED							APRIL 13		10.3 a	11.0 a	27.3 a	30.0 a
18	NONTREATED									8.0 a	10.0 a	29.3 a	32.3 a
LSD (P=.05)								4.24	3.35	9.15	8.30		
Standard Deviation								2.54	2.01	5.14	4.66		
CV								36.33	19.76	21.07	16.5		
Grand Mean								7.0	10.17	24.39	28.27		
Bartlett's X2								28.721	13.408	4.67	5.576		
P(Bartlett's X2)								0.026*	0.643	0.70	0.695		
Friedman's X2								16.977	20.006	17.121	10.6		
P(Friedman's X2)								0.456	0.274	0.072	0.304		
Replicate F								7.585	23.800	0.913	1.188		
Replicate Prob(F)								0.0019	0.0001	0.4275	0.3383		
Treatment F								0.873	1.431	2.023	0.977		
Treatment Prob(F)								0.6065	0.1825	0.1237	0.5027		

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## APPLICATION PLACEMENT TECHNOLOGIES FOR PGR APPLICATIONS ON TALL FESCUE ROADSIDES

Trial ID: 04-D14  
Location: US25 MADISON COUNTY

Study Dir.: TRAVIS GANNON  
Investigator: Fred Yelverton

Crop Code	FESAR VEGET HT	FESAR VEGET HT	FESAR SEEDHEAD HT	FESAR SEEDHEAD HT
Rating Data Type	INCH	INCH	INCH	INCH
Rating Unit	5-18-04	6-15-04	5-18-04	6-15-04
Rating Date	35 DA-A	63 DA-A	35 DA-A	63 DA-A
Trt-Eval Interval				
ARM Action Codes				

Means followed by same letter do not significantly differ (P=.05, LSD)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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## APPLICATION PLACEMENT TECHNOLOGIES FOR PGR APPLICATIONS ON TALL FESCUE ROADSIDES

Trial ID: 04-D14  
Location: US25 MADISON COUNTY

Study Dir.: TRAVIS GANNON  
Investigator: Fred Yelverton

Crop Code								FESAR	FESAR	TURF	TURF	FESAR	
Rating Data Type								PHYTO	PHYTO	QUALITY	QUALITY	SEEDHEAD	
Rating Unit								%	%	1-9	1-9	#/4.3FT2	
Rating Date								5-18-04	6-15-04	5-18-04	6-15-04	5-18-04	
Trt-Eval Interval								35 DA-A	63 DA-A	35 DA-A	63 DA-A	35 DA-A	
ARM Action Codes													
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Product Rate	Product Rate	Grow Unit Stg	Appl Code					
1	BROADCAST APPLICATION PLATEAU X-77	2 AS	L	2 oz/a 0.25 % v/v			APRIL 13 APRIL 13 A APRIL 13 A		13.3 ab	0.0 a	4.8 c-g	4.5 bcd	0.0 d
2	WEEDBUG PLATEAU X-77	2 AS	L	2 oz/a 0.25 % v/v			APRIL 13 APRIL 13 A APRIL 13 A		5.0 bcd	0.0 a	4.8 c-g	5.5 ab	0.3 d
3	BURCH WET BLADE PLATEAU	2 AS		2 oz/a			APRIL 13 APRIL 13 A		0.0 d	0.0 a	5.3 a-d	4.3 cde	6.3 bcd
4	BURCH WET BLADE PLATEAU X-77	2 AS	L	2 oz/a 0.25 % v/v			APRIL 13 APRIL 13 A APRIL 13 A		6.7 bcd	0.0 a	4.7 d-g	4.8 bc	0.7 d
5	BROADCAST APPLICATION PLATEAU X-77	2 AS	L	3 oz/a 0.25 % v/v			APRIL 13 APRIL 13 A APRIL 13 A		0.0 d	0.0 a	6.0 ab	6.0 a	0.0 d
6	WEEDBUG PLATEAU X-77	2 AS	L	3 oz/a 0.25 % v/v			APRIL 13 APRIL 13 A APRIL 13 A		5.0 bcd	0.0 a	6.0 ab	5.0 abc	0.0 d
7	BURCH WET BLADE PLATEAU	2 AS		3 oz/a			APRIL 13 APRIL 13 A		10.0 abc	0.0 a	5.7 a-d	4.8 bc	0.0 d
8	BURCH WET BLADE PLATEAU X-77	2 AS	L	3 oz/a 0.25 % v/v			APRIL 13 APRIL 13 A APRIL 13 A		1.7 cd	0.0 a	6.2 a	5.5 ab	0.3 d
9	BROADCAST APPLICATION PLATEAU X-77	2 AS	L	0.5 oz/a 0.25 % v/v			APRIL 13 APRIL 13 A APRIL 13 A		5.0 bcd	0.0 a	5.0 b-f	5.0 abc	2.3 cd
10	WEEDBUG PLATEAU X-77	2 AS	L	0.5 oz/a 0.25 % v/v			APRIL 13 APRIL 13 A APRIL 13 A		16.7 a	0.0 a	5.2 a-e	5.2 abc	0.0 d
11	BURCH WET BLADE PLATEAU	2 AS		0.5 oz/a			APRIL 13 APRIL 13 A		3.3 cd	0.0 a	4.0 fgh	4.3 cde	2.0 cd
12	BURCH WET BLADE PLATEAU X-77	2 AS	L	0.5 oz/a 0.25 % v/v			APRIL 13 APRIL 13 A APRIL 13 A		1.7 cd	0.0 a	3.8 gh	4.3 cde	11.0 bc
13	BROADCAST APPLICATION TELAR EMBARK X-77	75 DF 2 L		0.125 oz/a 0.5 pt/a 0.25 % v/v			APRIL 13 APRIL 13 A APRIL 13 A APRIL 13 A		1.7 cd	0.0 a	5.0 b-f	5.3 abc	0.0 d
14	WEEDBUG TELAR EMBARK X-77	75 DF 2 L		0.125 oz/a 0.5 pt/a 0.25 % v/v			APRIL 13 APRIL 13 A APRIL 13 A APRIL 13 A		1.7 cd	0.0 a	5.8 abc	5.9 a	0.0 d
15	BURCH WET BLADE TELAR EMBARK	75 DF 2 L		0.125 oz/a 0.5 pt/a			APRIL 13 APRIL 13 A APRIL 13 A		0.0 d	0.0 a	3.8 gh	5.2 abc	14.7 ab
16	BURCH WET BLADE TELAR EMBARK X-77	75 DF 2 L		0.125 oz/a 0.5 pt/a 0.25 % v/v			APRIL 13 APRIL 13 A APRIL 13 A APRIL 13 A		1.7 cd	0.0 a	4.2 e-h	5.3 abc	4.7 cd
17	MOWED NONTREATED						APRIL 13		0.0 d	0.0 a	3.5 h	3.5 de	23.3 a
18	NONTREATED								0.0 d	0.0 a	3.3 h	3.3 e	21.7 a
LSD (P=.05)								9.53	0.00	1.07	1.08	9.62	
Standard Deviation								5.71	0.00	0.64	0.65	5.77	
CV								140.26	0.0	13.21	13.28	118.86	
Grand Mean								4.07	0.0	4.84	4.88	4.85	
Bartlett's X2								13.45	0.0	16.592	8.948	34.989	
P(Bartlett's X2)								0.337	.	0.219	0.916	0.001*	
Friedman's X2								17.789	0.0	35.789	28.667	33.485	
P(Friedman's X2)								0.402	1.00	0.005	0.038	0.01	
Replicate F								2.141	0.000	1.947	3.156	2.274	
Replicate Prob(F)								0.1331	1.0000	0.1583	0.0553	0.1183	
Treatment F								2.168	0.000	5.955	3.794	5.297	
Treatment Prob(F)								0.0268	1.0000	0.0001	0.0005	0.0001	







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Study Dir.: TRAVIS GANNON  
 Investigator: Fred Yelverton

Crop Code								FESAR	FESAR	FESAR		
Rating Data Type								SEEDHEAD	SEEDHEAD	AVG SEEDHD		
Rating Unit								#/4.3FT2	#/4.3FT2	#/4.3FT2		
Rating Date								6-15-04	6-15-04	6-15-04		
Trt-Eval Interval								63 DA-A	63 DA-A	63 DA-A		
ARM Action Codes										T2		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Product Unit	Product Rate	Product Unit	Grow Stg	Appl Code			
1	BROADCAST APPLICATION PLATEAU X-77	2 AS	L	2 oz/a 0.25 % v/v				APRIL 13 APRIL 13 A APRIL 13 A		0.0 c	0.0 c	0.0 c
2	WEEDBUG PLATEAU X-77	2 AS	L	2 oz/a 0.25 % v/v				APRIL 13 APRIL 13 A APRIL 13 A		0.0 c	0.0 c	0.0 c
3	BURCH WET BLADE PLATEAU	2 AS		2 oz/a				APRIL 13 APRIL 13 A		2.0 c	0.0 c	2.4 c
4	BURCH WET BLADE PLATEAU X-77	2 AS	L	2 oz/a 0.25 % v/v				APRIL 13 APRIL 13 A APRIL 13 A		1.3 c	0.0 c	0.8 c
5	BROADCAST APPLICATION PLATEAU X-77	2 AS	L	3 oz/a 0.25 % v/v				APRIL 13 APRIL 13 A APRIL 13 A		0.0 c	0.0 c	0.0 c
6	WEEDBUG PLATEAU X-77	2 AS	L	3 oz/a 0.25 % v/v				APRIL 13 APRIL 13 A APRIL 13 A		0.0 c	0.0 c	0.0 c
7	BURCH WET BLADE PLATEAU	2 AS		3 oz/a				APRIL 13 APRIL 13 A		0.0 c	0.0 c	0.0 c
8	BURCH WET BLADE PLATEAU X-77	2 AS	L	3 oz/a 0.25 % v/v				APRIL 13 APRIL 13 A APRIL 13 A		0.0 c	0.0 c	0.0 c
9	BROADCAST APPLICATION PLATEAU X-77	2 AS	L	0.5 oz/a 0.25 % v/v				APRIL 13 APRIL 13 A APRIL 13 A		0.0 c	0.7 c	0.3 c
10	WEEDBUG PLATEAU X-77	2 AS	L	0.5 oz/a 0.25 % v/v				APRIL 13 APRIL 13 A APRIL 13 A		0.0 c	0.0 c	0.0 c
11	BURCH WET BLADE PLATEAU	2 AS		0.5 oz/a				APRIL 13 APRIL 13 A		2.0 c	0.3 c	2.8 c
12	BURCH WET BLADE PLATEAU X-77	2 AS	L	0.5 oz/a 0.25 % v/v				APRIL 13 APRIL 13 A APRIL 13 A		3.0 c	1.3 c	2.8 c
13	BROADCAST APPLICATION TELAR EMBARK X-77	75 DF 2 L		0.125 oz/a 0.5 pt/a 0.25 % v/v				APRIL 13 APRIL 13 A APRIL 13 A APRIL 13 A		0.0 c	0.0 c	0.8 c
14	WEEDBUG TELAR EMBARK X-77	75 DF 2 L		0.125 oz/a 0.5 pt/a 0.25 % v/v				APRIL 13 APRIL 13 A APRIL 13 A APRIL 13 A		0.0 c	0.0 c	0.0 c
15	BURCH WET BLADE TELAR EMBARK	75 DF 2 L		0.125 oz/a 0.5 pt/a				APRIL 13 APRIL 13 A APRIL 13 A		4.7 c	2.3 c	2.8 c
16	BURCH WET BLADE TELAR EMBARK X-77	75 DF 2 L		0.125 oz/a 0.5 pt/a 0.25 % v/v				APRIL 13 APRIL 13 A APRIL 13 A APRIL 13 A		2.3 c	4.3 c	4.1 c
17	MOWED NONTREATED							APRIL 13		14.7 b	12.3 b	14.2 b
18	NONTREATED									23.0 a	22.0 a	23.7 a
LSD (P=.05)								7.43	4.37	5.73		
Standard Deviation								4.45	2.62	3.44		
CV								151.25	108.91	113.17		
Grand Mean								2.94	2.41	3.04		
Bartlett's X2								16.78	11.343	30.352		
P(Bartlett's X2)								0.019*	0.078	0.001*		
Friedman's X2								19.813	19.409	34.263		
P(Friedman's X2)								0.284	0.306	0.008		
Replicate F								1.067	1.183	1.243		
Replicate Prob(F)								0.3552	0.3188	0.3013		
Treatment F								5.642	14.332	9.615		
Treatment Prob(F)								0.0001	0.0001	0.0001		

