

North Carolina State University

Tolerance of Common Bermudagrass to Flazasulfuron

Trial ID: 02-T14 Study Dir.: Jason Hinton
 Location: NCSU Turf Field Lab Investigator: Fred Yelverton

GENERAL TRIAL INFORMATION

Study Director: Jason Hinton **Title:** Research Technician
Affiliation: North Carolina State University
Postal Code: 27695
Investigator: Fred Yelverton **Title:** Professor
Affiliation: North Carolina State University
Postal Code: 27695

TRIAL LOCATION

City: Raleigh **Trial Status:** Complete
State/Prov.: NC
Postal Code: 27695 **Initiation Date:** 03-25-02
Country: USA

Conducted Under GLP (Y/N): N **Conducted Under GEP (Y/N):** N

Crop 1: CYNDA Bermudagrass **Variety:** Common

SITE AND DESIGN

Plot Width, Unit: 5 FT **Plot Length, Unit:** 10 FT **Reps:** 4
Study Design: RANDOMIZED COMPLETE BLOCK

APPLICATION DESCRIPTION

	A	B	C
Application Date:	03-25-02	04-09-02	05-20-02
Time of Day:	5:00 PM	4:00 PM	3:30 PM
Application Method:	Spray	Spray	Spray
Application Timing:	Prior	Greenup	E.Post
Applic. Placement:	Foliar	Foliar	Foliar
Air Temp., Unit:	78.8 F	78.2 F	63.2 F
% Relative Humidity:	40	45	29
Wind Velocity, Unit:	3.3 MPH	5.1 MPH	2.1 MPH
Dew Presence (Y/N):	N	N	N
Water Hardness:	N/A	N/A	N/A
Soil Temp., Unit:	65 F	66 F	74 F
Soil Moisture:	Good	Good	Good
% Cloud Cover:	35	90	25

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	CYNDA Greenup	CYNDA Greenup	CYNDA Greenup
Stage Scale:	10%	40%-60%	100%
Height, Unit:	0.75 Inch	0.75 Inch	0.75 Inch

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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

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Crop Code								CYND	CYND	CYND	
Rating Data Type								GREENUP	COVER	QUALITY	
Rating Unit								%	%	1-9	
Rating Date								04-09-02	04-19-02	04-09-02	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code			
1	Flazasulfuron X-77	25	DG L	1.5 OZ/A 0.25 % V/V			Prior Prior	A A	48.8 ab	72.5 a	6.750 ab
2	Flazasulfuron X-77	25	DG L	1.5 OZ/A 0.25 % V/V			Greenup Greenup	B B	47.5 ab	73.8 a	6.750 ab
3	Flazasulfuron X-77	25	DG L	1.5 OZ/A 0.25 % V/V			E. Post E. Post	C C	46.3 ab	72.5 a	6.625 ab
4	Flazasulfuron X-77	25	DG L	2.25 OZ/A 0.25 % V/V			Prior Prior	A A	46.3 ab	67.5 ab	6.563 ab
5	Flazasulfuron X-77	25	DG L	2.25 OZ/A 0.25 % V/V			Greenup Greenup	B B	48.8 ab	68.8 ab	6.750 ab
6	Flazasulfuron X-77	25	DG L	2.25 OZ/A 0.25 % V/V			E. Post E. Post	C C	51.3 ab	75.0 a	6.938 a
7	Flazasulfuron X-77	25	DG L	3.0 OZ/A 0.25 % V/V			Prior Prior	A A	50.0 ab	72.5 a	6.625 ab
8	Flazasulfuron X-77	25	DG L	3.0 OZ/A 0.25 % V/V			Greenup Greenup	B B	48.8 ab	72.5 a	6.750 ab
9	Flazasulfuron X-77	25	DG L	3.0 OZ/A 0.25 % V/V			E. Post E. Post	C C	50.0 ab	73.8 a	6.750 ab
10	Roundup Pro	4	L	1.0 PT/A			Prior	A	18.8 d	57.5 c	3.375 d
11	Trimec Classic	3.32	L	3.5 PT/A			Prior	A	45.0 b	68.8 ab	6.375 b
12	Trimec Classic	3.32	L	3.5 PT/A			Greenup	B	46.3 ab	70.0 ab	6.625 ab
13	Trimec Classic	3.32	L	3.5 PT/A			E. Post	C	50.0 ab	75.0 a	7.000 a
14	Confront	3	L	1.0 PT/A			Prior	A	37.5 c	61.3 bc	5.188 c
15	Confront	3	L	1.0 PT/A			Greenup	B	50.0 ab	55.0 c	6.750 ab
16	Confront	3	L	1.0 PT/A			E. Post	C	46.3 ab	76.3 a	6.625 ab
17	Millenium Ultra	3.75	L	2.5 PT/A			Prior	A	51.3 ab	75.0 a	6.875 ab
18	Millenium Ultra	3.75	L	2.5 PT/A			Greenup	B	52.5 a	73.8 a	7.000 a
19	Millenium Ultra	3.75	L	2.5 PT/A			E. Post	C	48.8 ab	73.8 a	6.875 ab

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Crop Code		CYNDAGR GREENUP	CYNDAGR COVER	CYNDAGR QUALITY					
Rating Data Type		%	%	1-9					
Rating Unit		04-09-02	04-19-02	04-09-02					
Rating Date									
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Product Rate	Product Rate	Grow Unit	Stg	Appl Code
20	Nontreated								
				50.0	ab	72.5	a	6.750	ab
LSD (P=.05)									
Standard Deviation									
CV									
Bartlett's X2									
P(Bartlett's X2)									
Replicate F									
Replicate Prob(F)									
Treatment F									
Treatment Prob(F)									

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

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Crop Code								CYNDA	CYNDA	CYNDA		
Rating Data Type								QUALITY	QUALITY	QUALITY		
Rating Unit								1-9	1-9	1-9		
Rating Date								04-19-02	05-08-02	06-03-02		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Product Rate	Product Unit	Grow Stg	Appl Code			
1	Flazasulfuron X-77	25	DG L	1.5	OZ/A 0.25 % V/V			Prior Prior	A A	6.688 ab	7.000 a	7.000 a
2	Flazasulfuron X-77	25	DG L	1.5	OZ/A 0.25 % V/V			Greenup Greenup	B B	7.000 a	6.875 ab	7.000 a
3	Flazasulfuron X-77	25	DG L	1.5	OZ/A 0.25 % V/V			E. Post E. Post	C C	7.000 a	6.938 ab	6.875 ab
4	Flazasulfuron X-77	25	DG L	2.25	OZ/A 0.25 % V/V			Prior Prior	A A	6.438 bc	6.438 cd	6.875 ab
5	Flazasulfuron X-77	25	DG L	2.25	OZ/A 0.25 % V/V			Greenup Greenup	B B	6.500 abc	6.375 d	6.875 ab
6	Flazasulfuron X-77	25	DG L	2.25	OZ/A 0.25 % V/V			E. Post E. Post	C C	7.000 a	6.875 ab	6.875 ab
7	Flazasulfuron X-77	25	DG L	3.0	OZ/A 0.25 % V/V			Prior Prior	A A	6.875 ab	6.813 abc	6.875 ab
8	Flazasulfuron X-77	25	DG L	3.0	OZ/A 0.25 % V/V			Greenup Greenup	B B	6.750 ab	6.563 bcd	6.875 ab
9	Flazasulfuron X-77	25	DG L	3.0	OZ/A 0.25 % V/V			E. Post E. Post	C C	7.000 a	7.000 a	6.813 ab
10	Roundup Pro	4	L	1.0	PT/A			Prior	A	5.750 d	6.875 ab	7.000 a
11	Trimec Classic	3.32	L	3.5	PT/A			Prior	A	6.875 ab	6.750 a-d	7.000 a
12	Trimec Classic	3.32	L	3.5	PT/A			Greenup	B	6.563 ab	7.000 a	7.000 a
13	Trimec Classic	3.32	L	3.5	PT/A			E. Post	C	7.000 a	7.000 a	6.813 ab
14	Confront	3	L	1.0	PT/A			Prior	A	6.000 cd	6.750 a-d	6.875 ab
15	Confront	3	L	1.0	PT/A			Greenup	B	4.750 e	6.750 a-d	7.000 a
16	Confront	3	L	1.0	PT/A			E. Post	C	7.000 a	6.875 ab	6.625 b
17	Millenium Ultra	3.75	L	2.5	PT/A			Prior	A	7.000 a	7.000 a	6.813 ab
18	Millenium Ultra	3.75	L	2.5	PT/A			Greenup	B	7.000 a	6.875 ab	6.938 a
19	Millenium Ultra	3.75	L	2.5	PT/A			E. Post	C	6.875 ab	6.750 a-d	6.750 ab

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Crop Code							CYNDA	CYNDA	CYNDA
Rating Data Type							QUALITY	QUALITY	QUALITY
Rating Unit							1-9	1-9	1-9
Rating Date							04-19-02	05-08-02	06-03-02
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Product Rate	Product Unit	Grow Stg	Appl Code	
20	Nontreated								
							7.000 a	7.000 a	7.000 a
LSD (P=.05)							0.5132	0.4152	0.2761
Standard Deviation							0.3629	0.2936	0.1952
CV							5.45	4.3	2.83
Bartlett's X2							17.985	11.958	3.83
P(Bartlett's X2)							0.055	0.531	0.986
Replicate F							3.660	1.064	1.230
Replicate Prob(F)							0.0175	0.3718	0.3071
Treatment F							9.884	1.595	1.083
Treatment Prob(F)							0.0001	0.0892	0.3911

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

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Trial Comments