

# North Carolina State University

## POSTEMERGENCE MOUSEEAR CHICKWEED CONTROL ON FALLOW GROUND USING FLAZASULFURON VS LABELED SULFONYLUREA HERBICIDES

Trial ID: 04-T17

Study Director: L.S. WARREN

Location: OLD TURF FIELD LAB

Investigator: Fred Yelverton

### General Trial Information

**Study Director:** L.S. WARREN **Title:** RESEARCH ASSOCIATE  
**Affiliation:** NORTH CAROLINA STATE UNIVERSITY  
**Postal Code:** 27695 **E-mail:** leon\_warren@ncsu.edu  
**Investigator:** Fred Yelverton **Title:** PROFESSOR  
**Affiliation:** NORTH CAROLINA STATE UNIVERSITY  
**Postal Code:** 27695 **E-mail:** fred\_yelverton@ncsu.edu

### Trial Location

**City:** RALEIGH **Trial Status:** COMPLETED  
**State/Prov.:** NC  
**Postal Code:** 27606 **Initiation Date:** 3-17-04  
**Country:** USA  
**Directions:**

### Objectives:

TO EVALUATE FLAZASULFURON VS LABELED SULFONYLUREA HERBICIDES FOR POSTEMERGENCE MOUSEEAR CHICKWEED CONTROL ON FALLOW GROUND

### Conclusions:

### Cooperator/Landowner

**Cooperator:** BILL WHALEY **Country:** USA  
**Organization:** NORTH CAROLINA STATE UNIVERSITY **Phone No:** 982-4601  
**City:** RALEIGH  
**State/Prov:** NC  
**Postal Code:** 27606

### Crop Description

**Crop 1:** YBRAC Fallow **Fallow**  
**Variety:** NONE

### Pest Description

**Pest 1 Type:** W **Code:** CERVU **Cerastium vulgatum**  
**Common Name:** Chickweed, mouse-ear

### Site and Design

**Plot Width, Unit:** 3.33 FT **Site Type:** FALLOW  
**Plot Length, Unit:** 10 FT **Tillage Type:** NA  
**Replications:** 4 **Study Design:** Randomized Complete Block

### Trial Initiation Comments:

### Field Prep./Maintenance:

### Soil Description

**% OM:** 0.71 **Texture:** SANDY CLAY LOAM  
**pH:** 5.2  
**CEC:** 5.3 **Fert. Level:** GOOD

### Moisture Conditions

**Overall Moisture Conditions:** MAR 3.40"; APR 2.65"; MAY 3.46"

**Closest Weather Station:** REEDY CREEK FIELD LABORATORY **Distance:** 2 **Unit:** MI

# North Carolina State University

**POSTEMERGENCE MOUSEEAR CHICKWEED CONTROL ON FALLOW GROUND USING FLAZASULFURON  
VS LABELED SULFONYLUREA HERBICIDES**

Trial ID: 04-T17

Study Director: L.S. WARREN

Location: OLD TURF FIELD LAB

Investigator: Fred Yelverton

### Application Description

	A
Application Date:	3-17-04
Time of Day:	12 NOON
Application Method:	SPRAY
Application Timing:	POST
Application Placement:	BROFOL
Applied By:	L.S. WARREN
Air Temperature, Unit:	47 F
% Relative Humidity:	73
Wind Velocity, Unit:	2.7 MPH
Dew Presence (Y/N):	Y
Soil Temperature, Unit:	55 F
Soil Moisture:	WET
% Cloud Cover:	100

### Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	YBRAC

### Pest Stage At Each Application

	A
Pest 1 Code, Disc., Scale:	CERVU W
Stage Majority, Percent:	NOSEED 75
Diameter, Unit:	6.0 IN
Height, Unit:	4.0 IN
Height Minimum, Maximum:	1.5 6.0
Density, Unit:	1 FT2

### Application Equipment

	A
Appl. Equipment:	BACSPR
Operating Pressure:	28
Pressure Unit:	PSI
Nozzle Type:	FLAT FAN
Nozzle Size:	XR8002 VS
Nozzle Spacing, Unit:	10 IN
Band Width, Unit:	40 IN
Boom Length, Unit:	40 IN
Boom Height, Unit:	10 IN
Ground Speed, Unit:	3 MPH
Carrier:	WATER
Spray Volume:	32.5
Volume Unit:	GPA
Propellant:	COMCO2
Tank Mix (Y/N):	Y

# North Carolina State University

## POSTEMERGENCE MOUSEEAR CHICKWEED CONTROL ON FALLOW GROUND USING FLAZASULFURON VS LABELED SULFONYLUREA HERBICIDES

Trial ID: 04-T17

Study Director: L.S. WARREN

Location: OLD TURF FIELD LAB

Investigator: Fred Yelverton

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	CERVU	CERVU	CERVU	CERVU	CERVU
Rating Date	3-24-04	4-1-04	4-7-04	4-14-04	4-21-04
Rating Data Type	INJURY	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Assessed By	L.S. WARREN	L.S. WARREN	L.S. WARREN	L.S. WARREN	L.S. WARREN
Days After Last Applic.	7	15	21	28	35
Trt-Eval Interval	7 DA-A	15 DA-A	21 DA-A	28 DA-A	35 DA-A
ARM Action Codes	P	P	P	P	P
Trt Treatment No. Name	Form Conc	Form Rate	Other Rate	Growth Unit	Appl Code
1 FLAZASULFURON X-77 SPREADER	25 WG L	0.5 oz wt/a 0.25 % v/v		MAR 17 A MAR 17 A	
				1.3 bc	25.0 a
				68.8 ab	100.0 a
2 FLAZASULFURON X-77 SPREADER	25 WG L	1.0 oz wt/a 0.25 % v/v		MAR 17 A MAR 17 A	
				1.3 bc	23.8 a
				66.3 b	99.5 a
3 FLAZASULFURON X-77 SPREADER	25 WG L	1.5 oz wt/a 0.25 % v/v		MAR 17 A MAR 17 A	
				3.8 ab	37.5 a
				84.8 a	100.0 a
4 FLAZASULFURON X-77 SPREADER	25 WG L	3.0 oz wt/a 0.25 % v/v		MAR 17 A MAR 17 A	
				5.0 a	23.8 a
				75.0 ab	100.0 a
5 MANOR X-77 SPREADER	60 WG L	0.5 oz wt/a 0.25 % v/v		MAR 17 A MAR 17 A	
				0.0 c	21.3 a
				75.0 ab	97.5 a
6 MONUMENT 75WG X-77 SPREADER	75 WG L	0.33 oz wt/a 0.25 % v/v		MAR 17 A MAR 17 A	
				2.5 abc	30.0 a
				62.5 b	98.8 a
7 REVOLVER	0.19 SC	17.6 fl oz/a		MAR 17 A	
				5.0 a	23.8 a
				43.8 c	85.0 b
8 TRANXIT GTA X-77 SPREADER	25 WG L	1.0 oz wt/a 0.25 % v/v		MAR 17 A MAR 17 A	
				1.3 bc	35.0 a
				66.3 b	95.0 a
9 CHECK				0.0 c	0.0 b
				0.0 d	0.0 c
LSD (P=.05)				3.29	18.16
Standard Deviation				2.26	12.44
CV				101.55	50.91
Grand Mean				2.22	24.44
Bartlett's X2				1.281	18.66
P(Bartlett's X2)				0.937	0.009*
Friedman's X2				10.9	13.433
P(Friedman's X2)				0.207	0.098
Replicate F				1.818	2.978
Replicate Prob(F)				0.1708	0.0516
Treatment F				3.000	2.978
Treatment Prob(F)				0.0176	0.0182
				6.197	17.555
				0.0029	0.0001
				2.379	157.067
				0.0948	0.0001
				1.209	69.781
				0.3278	0.0001

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.

# North Carolina State University

## POSTEMERGENCE MOUSEEAR CHICKWEED CONTROL ON FALLOW GROUND USING FLAZASULFURON VS LABELED SULFONYLUREA HERBICIDES

Trial ID: 04-T17

Study Director: L.S. WARREN

Location: OLD TURF FIELD LAB

Investigator: Fred Yelverton

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	STEME	STEME	STEME	STEME	FACSS
Rating Date	4-1-04	4-7-04	4-14-04	4-21-04	4-14-04
Rating Data Type	INJURY	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Assessed By	L.S. WARREN	L.S. WARREN	L.S. WARREN	L.S. WARREN	L.S. WARREN
Days After Last Applic.	15	21	28	35	28
Trt-Eval Interval	15 DA-A	21 DA-A	28 DA-A	35 DA-A	28 DA-A
ARM Action Codes	P	P	P	P	P
Trt Treatment	Form	Form	Rate	Other	Growth
No. Name	Conc	Type	Rate	Rate	Unit
			Unit	Unit	Code
1 FLAZASULFURON	25 WG		0.5 oz wt/a		MAR 17 A
X-77 SPREADER	L		0.25 % v/v		MAR 17 A
				28.8 cde	88.8 b
2 FLAZASULFURON	25 WG		1.0 oz wt/a		MAR 17 A
X-77 SPREADER	L		0.25 % v/v		MAR 17 A
				33.8 cd	93.5 ab
3 FLAZASULFURON	25 WG		1.5 oz wt/a		MAR 17 A
X-77 SPREADER	L		0.25 % v/v		MAR 17 A
				68.8 ab	98.0 a
4 FLAZASULFURON	25 WG		3.0 oz wt/a		MAR 17 A
X-77 SPREADER	L		0.25 % v/v		MAR 17 A
				43.3 bc	97.7 a
5 MANOR	60 WG		0.5 oz wt/a		MAR 17 A
X-77 SPREADER	L		0.25 % v/v		MAR 17 A
				67.5 ab	94.8 ab
6 MONUMENT 75WG	75 WG		0.33 oz wt/a		MAR 17 A
X-77 SPREADER	L		0.25 % v/v		MAR 17 A
				60.0 abc	98.0 a
7 REVOLVER	0.19 SC		17.6 fl oz/a		MAR 17 A
				10.0 de	15.0 c
8 TRANXIT GTA	25 WG		1.0 oz wt/a		MAR 17 A
X-77 SPREADER	L		0.25 % v/v		MAR 17 A
				76.3 a	94.8 ab
9 CHECK				0.0 e	0.0 d
LSD (P=.05)				32.52	6.10
Standard Deviation				22.17	4.16
CV				51.38	5.5
Grand Mean				43.15	75.6
Bartlett's X2				9.134	12.762
P(Bartlett's X2)				0.243	0.078
Friedman's X2				23.883	24.05
P(Friedman's X2)				0.002	0.002
Replicate F				1.663	4.070
Replicate Prob(F)				0.2041	0.0193
Treatment F				5.985	349.800
Treatment Prob(F)				0.0004	0.0001
					6.01
					4.10
					4.68
					87.5
					14.957
					4.14
					0.001*
					0.042*
					16.533
					17.417
					0.035
					0.026
					0.294
					0.753
					1.196
					0.5325
					0.3345
					258.795
					133.030
					0.0001
					0.0001

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.

# North Carolina State University

## POSTEMERGENCE MOUSEEAR CHICKWEED CONTROL ON FALLOW GROUND USING FLAZASULFURON VS LABELED SULFONYLUREA HERBICIDES

Trial ID: 04-T17

Study Director: L.S. WARREN

Location: OLD TURF FIELD LAB

Investigator: Fred Yelverton

				W Weed	W Weed	W Weed
				FACSS	VERAR	VERAR
				4-21-04	4-14-04	4-21-04
				CONTROL	CONTROL	CONTROL
				PERCENT	PERCENT	PERCENT
				L.S. WARREN	L.S. WARREN	L.S. WARREN
				35	28	35
				35 DA-A	28 DA-A	35 DA-A
				P	P	P
Trt	Treatment	Form	Rate	Other	Growth	Appl
No.	Name	Conc	Type	Rate	Unit	Stage
1	FLAZASULFURON	25 WG	0.5 oz wt/a		MAR 17 A	
	X-77 SPREADER	L	0.25 % v/v		MAR 17 A	
						0.0 b
2	FLAZASULFURON	25 WG	1.0 oz wt/a		MAR 17 A	
	X-77 SPREADER	L	0.25 % v/v		MAR 17 A	
						0.0 b
3	FLAZASULFURON	25 WG	1.5 oz wt/a		MAR 17 A	
	X-77 SPREADER	L	0.25 % v/v		MAR 17 A	
						0.0 b
4	FLAZASULFURON	25 WG	3.0 oz wt/a		MAR 17 A	
	X-77 SPREADER	L	0.25 % v/v		MAR 17 A	
						0.0 b
5	MANOR	60 WG	0.5 oz wt/a		MAR 17 A	
	X-77 SPREADER	L	0.25 % v/v		MAR 17 A	
						100.0 a
6	MONUMENT 75WG	75 WG	0.33 oz wt/a		MAR 17 A	
	X-77 SPREADER	L	0.25 % v/v		MAR 17 A	
						0.0 b
7	REVOLVER	0.19 SC	17.6 fl oz/a		MAR 17 A	
						0.0 b
8	TRANXIT GTA	25 WG	1.0 oz wt/a		MAR 17 A	
	X-77 SPREADER	L	0.25 % v/v		MAR 17 A	
						0.0 b
9	CHECK					
						0.0 b
						0.0 c
						0.0 b
						13.73
						9.41
						85.76
						10.97
						6.051
						0.417
						18.567
						0.017
						0.000
						0.5995
						4.655
						0.0016
						1.000
						0.4098
						6241.001
						0.0001

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.

Trial Comments

03-24-04: CERVU INJURY SYMPTOMS CONSISTED OF VERY SLIGHT LEAF DISCOLORATION