

North Carolina State University

Catsear Dandelion Control With Sulfonylurea Herbicides in Noncropland Areas

Trial ID: 05-D14
Protocol ID: Study Director: Travis Gannon
Location: Sandhills Station Investigator: Fred Yelverton

General Trial Information

Study Director: Travis Gannon **Title:** Research Associate
Affiliation: North Carolina State University
Postal Code: 27695 **E-mail:** travis_gannon@ncsu.edu
Investigator: Fred Yelverton **Title:** Professor
Affiliation: North Carolina State University
Postal Code: 27695 **E-mail:** fred_yelverton@ncsu.edu

Trial Location

City: Jackson Springs **Trial Status:** Completed
State/Prov.: NC
Postal Code: 27281 **Initiation Date:** 4-14-04
Country: USA
Directions:

Objectives:

Conclusions:

Cooperator/Landowner

Cooperator: Mark Thompson **Country:** USA
Organization: Sandhills Research Station **Phone No:** 910.974.4673
Address 1: 2148 Windblow Road
City: Jackson Springs
State/Prov: NC
Postal Code: 27281

Crop Description

Crop 1: N/A

Pest Description

Pest 1 Type: W **Code:** HRYRA **Hypochoeris radicata**
Common Name: Cat's-ear dandelion

Site and Design

Plot Width, Unit: 5 FT **Site Type:** Noncropland
Plot Length, Unit: 10 FT
Replications: 4 **Study Design:** Randomized Complete Block

Trial Initiation Comments:

Field Prep./Maintenance:

Soil Description

% OM: 0.76 **Texture:** Mineral
pH: 6.0
CEC: 3.7 **Fert. Level:** Poor

Moisture Conditions

Overall Moisture Conditions: APR-1.32"; MAY-2.44"; JUN-2.3"; JULY-2.2"

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Application Description

	A
Application Date:	4-14-04
Time of Day:	11-NOON
Application Method:	SPRAY
Application Timing:	APRIL 14
Application Placement:	FOLIAR
Applied By:	T GANNON
Air Temperature, Unit:	49.1 F
% Relative Humidity:	67
Wind Velocity, Unit:	2.3 MPH
Dew Presence (Y/N):	N
Soil Temperature, Unit:	51 F
Soil Moisture:	ADEQUATE
% Cloud Cover:	90

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	N/A

Pest Stage At Each Application

	A
Pest 1 Code, Disc., Scale:	HRYRA W
Stage Majority, Percent:	8 LEAF 40
Stage Minimum, Percent:	6 LEAF 20
Stage Maximum, Percent:	24LEAF 20
Diameter, Unit:	3 IN
Height, Unit:	2 IN
Height Minimum, Maximum:	1 3
Density, Unit:	6 FT2
Coverage, Unit:	35 %

Application Equipment

	A
Appl. Equipment:	CO2 SPRAY
Operating Pressure:	25
Pressure Unit:	PSI
Nozzle Type:	FLAT FAN
Nozzle Size:	VS8002XR
Nozzle Spacing, Unit:	10 INCH
Nozzles/Row:	4
Boom Length, Unit:	40 INCH
Boom Height, Unit:	10 INCH
Ground Speed, Unit:	3 MPH
Carrier:	WATER
Spray Volume:	32.5
Volume Unit:	GPA
Propellant:	COMP CO2

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Pest Code	Rating Date	Rating Data Type	Rating Unit	Days After First/Last Applic.	Trt-Eval Interval	HRYRA 5-17-04	HRYRA 6-9-04	HRYRA 7-8-04	HRYRA 8-3-04	HRYRA 4-25-05			
						CONTROL	CONTROL	CONTROL	CONTROL	CONTROL			
						%	%	%	%	%			
						33	56	85	111	376			
						33 DA-A	56 DA-A	85 DA-A	111 DA-A	376 DA-A			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate Unit	Growth Stage	Appl Code	1	2	3	4	5
1	Escort Dyne Amic	60 L	WG	0.5	OZ/A		APRIL 14 A	A	85.0 a	95.0 a	100.0 a	100.0 a	90.0 a
2	Escort Dyne Amic	60 L	WG	0.25	OZ/A		APRIL 14 A	A	78.8 ab	95.0 a	100.0 a	100.0 a	78.8 bc
3	Escort Dyne Amic	60 L	WG	0.125	OZ/A		APRIL 14 A	A	75.0 abc	95.0 a	97.5 a	100.0 a	45.0 d
4	Overdrive Escort Dyne Amic	70 L	WG	4	OZ/A		APRIL 14 A	A	65.0 cd	95.0 a	93.8 a	98.8 a	88.8 ab
5	Overdrive Escort Dyne Amic	70 L	WG	4	OZ/A		APRIL 14 A	A	66.3 bcd	92.5 a	90.0 a	92.5 a	28.8 e
6	Overdrive Escort Ammonium Sulfate X-77	70 L	WG	4	OZ/A		APRIL 14 A	A	56.3 d	95.0 a	97.5 a	98.8 a	76.3 c
7	Telar Dyne Amic	75 L	WG	0.5	OZ/A		APRIL 14 A	A	28.8 ef	47.5 bc	25.0 c	30.0 cd	5.0 f
8	Telar Dyne Amic	75 L	WG	0.25	OZ/A		APRIL 14 A	A	31.3 ef	33.8 cd	25.0 c	37.5 c	0.0 f
9	Telar Dyne Amic	75 L	WG	0.125	OZ/A		APRIL 14 A	A	21.3 fg	21.3 d	23.8 c	22.5 d	0.0 f
10	Overdrive Telar Dyne Amic	75 L	WG	4	OZ/A		APRIL 14 A	A	23.8 fg	36.3 bcd	26.3 c	25.0 d	0.0 f
11	Overdrive Telar Dyne Amic	75 L	WG	0.125	OZ/A		APRIL 14 A	A	26.3 efg	40.0 bc	30.0 c	28.8 cd	0.0 f
12	Overdrive Dyne Amic	70 L	WG	4	OZ/A		APRIL 14 A	A	13.8 g	52.5 b	28.8 c	30.0 cd	0.0 f
13	Overdrive Dyne Amic	70 L	WG	6	OZ/A		APRIL 14 A	A	38.8 e	81.3 a	71.3 b	73.8 b	26.3 e
14	Nontreated								0.0 h	0.0 e	0.0 d	0.0 e	0.0 f
LSD (P=.05)						13.64	16.70	12.79	9.08	11.15			
Standard Deviation						9.55	11.68	8.95	6.35	7.80			
CV						21.91	18.59	15.49	10.62	24.9			
Grand Mean						43.57	62.86	57.77	59.82	31.34			
Bartlett's X2						12.217	14.485	15.687	16.722	9.83			
P(Bartlett's X2)						0.348	0.043*	0.109	0.033*	0.198			
Replicate F						0.483	0.427	1.120	0.635	1.200			
Replicate Prob(F)						0.6959	0.7346	0.3527	0.5973	0.3225			
Treatment F						31.894	32.644	71.004	141.586	89.993			
Treatment Prob(F)						0.0001	0.0001	0.0001	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.

Trial Comments