

LSU Northeast Research Station

Susceptibility of winter weeds to selective POST herbicides used in corn.

Trial ID: SJ07B008 Protocol ID: SJ07B008
 Location: Study Director:
 Investigator: Bill Williams

General Trial Information

Investigator: Bill Williams

Crop Description

Crop 1: NA

Pest Description

Pest 1 Type: W **Code:** OEOLA *Oenothera laciniata*
Common Name: Cutleaf eveningprimrose

Pest 2 Type: W **Code:** ERICA *Erigeron canadensis*
Common Name: Canada horseweed

Pest 3 Type: W **Code:** COPDI *Coronopus didymus*
Common Name: Swinncress

Site and Design

Plot Width, Unit: 6.67 FT **Site Type:** FIELD
Plot Length, Unit: 15 FT **Tillage Type:** CONVENTIONAL-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Soil Description

Description Name: Garden cut
% Sand: 34 **% OM:** 0.6 **Texture:** Silt loam
% Silt: 54 **pH:** 5.3 **Soil Name:** Commerce Silt loam
% Clay: 12 **CEC:** 6.3 **Fert. Level:** EXCELLENT

Moisture and Weather Conditions

Overall Moisture Conditions: Dry
Closest Weather Station: Northeast Research Station

	Date	Amount	Unit
1.	21/Feb/07	0.01	IN
2.	24/Feb/07	0.65	IN
3.	25/Feb/07	0.01	IN
4.	1/Mar/07	1.17	IN
5.	27/Mar/07	0.01	IN
6.	31/Mar/07	0.63	IN
7.	1/Apr/07	0.01	IN
8.	2/Apr/07	0.01	IN
9.	3/Apr/07	0.09	IN
10.	4/Apr/07	0.19	IN
11.	7/Apr/07	0.14	IN
12.	8/Apr/07	0.1	IN
13.	10/Apr/07	1.01	IN
14.	14/Apr/07	0.39	IN
15.	18/Apr/07	0.11	IN

16.25/Apr/07 1.37 IN
 17.26/Apr/07 0.41 IN
 18.2/May/07 0.04 IN
 19.3/May/07 1.24 IN
 20.15/May/07 0.02 IN
 21.16/May/07 0.01 IN
 22.17/May/07 0.01 IN
 23.3/Jun/07 0.02 IN
 24.16/Jun/07 0.01 IN
 25.18/Jun/07 0.02 IN
 26.19/Jun/07 0.4 IN
 27.2/Jul/07 0.3 IN
 28.3/Jul/07 0.06 IN
 29.4/Jul/07 1.14 IN
 30.5/Jul/07 0.31 IN
 31.6/Jul/07 0.27 IN
 32.7/Jul/07 1.39 IN
 33.9/Jul/07 0.36 IN
 34.10/Jul/07 0.01 IN
 35.11/Jul/07 0.27 IN
 36.13/Jul/07 0.3 IN
 37.14/Jul/07 1.96 IN
 38.15/Jul/07 2.8 IN
 39.17/Jul/07 1.56 IN
 40.20/Jul/07 0.93 IN
 41.21/Jul/07 0.1 IN
 42.22/Jul/07 0.01 IN
 43.30/Jul/07 2.35 IN

Application Description

A

Application Date: 29/Mar/07
Application Method: SPRAY
Application Timing: V1
Application Placement: BROFOL
Air Temperature, Unit: 85 F
% Relative Humidity: 38
Wind Velocity, Unit: 6 MPH
Wind Direction: W
Soil Temperature, Unit: 79 F
% Cloud Cover: 30

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: NA

Pest Stage At Each Application

A

Pest 1 Code, Disc., Scale: OEOLA W
Height, Unit: 7 IN
Pest 2 Code, Disc., Scale: ERICA W
Height, Unit: 7 IN
Pest 3 Code, Disc., Scale: COPDI W
Height, Unit: 4 IN

Application Equipment

A

Appl. Equipment: Backpack
Operating Pressure, Unit: 31 psi
Nozzle Type: Greenleaf
Nozzle Size: 11002
Nozzle Spacing, Unit: 20 in
Nozzles/Row: 2

Ground Speed, Unit: 2.8 mph
Carrier: water
Spray Volume, Unit: 15 GAL/AC
Propellant: CO2

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Trial ID: SJ07B008

Protocol ID: SJ07B008

Location:

Study Director:

Investigator: Bill Williams

Pest Type												
Pest Code		OEOLA OEOLA OEOLA COPDI COPDI COPDI ERICA										
Rating Date		3/Apr/07 12/Apr/07 26/Apr/07 3/Apr/07 12/Apr/07 26/Apr/07 3/Apr/07										
Trt-Eval Interval		5 DA-A 14 DA-A 28 DA-A 5 DA-A 14 DA-A 28 DA-A 5 DA-A										
Trt No.	Treatment Name	Rate	Unit	Growth Stage	1	2	3	4	5	6	7	
1	Atrazine	2	PT/A	V1	0	d83	ab30	d 30	b 90	a92	a0	d
	COC	1.0	% V/V	V1								
2	Accent	0.35	OZ WT/A	V1	30	c 57	d 83	ab53	ab70	a 88	a0	d
	Atrazine	1	PT/A	V1								
	COC	1.0	% V/V	V1								
3	Permit	0.75	OZ WT/A	V1	0	d87	a 53	c 30	b 92	a92	a0	d
	Atrazine	1	PT/A	V1								
	COC	1.0	% V/V	V1								
4	Exceed	1	OZ WT/A	V1	30	c 63	c 87	a 43	ab72	a92	a30	c
	Atrazine	1	PT/A	V1								
	COC	1.0	% V/V	V1								
5	Beacon	0.75	OZ WT/A	V1	57	b73	b 33	d 63	a 90	a92	a30	c
	Atrazine	1	PT/A	V1								
	COC	1.0	% V/V	V1								
6	Steadfast	0.75	OZ WT/A	V1	30	c 88	a 85	ab53	ab92	a 88	a57	b
	Atrazine	1	PT/A	V1								
	COC	1.0	% V/V	V1								
7	Distinct	4	OZ WT/A	V1	53	b83	ab53	c 67	a 83	a93	a77	a
	Atrazine	1	PT/A	V1								
	NIS	0.25	% V/V	V1								
8	Callisto	2.0	OZ/A	V1	63	a 83	ab77	b 67	a 92	a93	a73	a
	Atrazine	1	PT/A	V1								
	COC	1.0	% V/V	V1								
9	Impact	0.75	OZ/A	V1	30	c 83	ab0	e 50	ab92	a92	a30	c
	Atrazine	1	PT/A	V1								
	COC	1	% V/V	V1								
10	Resolve	1	OZ/A	V1	30	c 53	d 0	e 30	b 30	b93	a30	c
	Atrazine	1	PT/A	V1								
	COC	1	% V/V	V1								
LSD (P=.10)					4.4	6.5	6.8	18.6	22.9	3.7	4.4	
Standard Deviation					3.1	4.6	4.8	13.1	16.2	2.6	3.1	
CV					9.6	6.1	9.61	26.94	20.2	2.84	9.5	
Grand Mean					32.33	75.5	50.17	48.67	80.17	91.5	32.67	
Bartlett's X2					0.0	0.281	0.059	15.886	27.102	6.855	0.0	

P(Bartlett's X2)	.	1.00	1.00	0.007*	0.001*	0.652	1.00
Replicate F	1.385	7.900	0.681	0.310	0.823	18.123	1.385
Replicate Prob(F)	0.2758	0.0034	0.5185	0.7370	0.4548	0.0001	0.2758
Treatment F	142.346	24.109	144.737	3.845	4.355	1.493	256.000
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0073	0.0039	0.2239	0.0001

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Pest Type

Pest Code

Rating Date

Trt-Eval Interval

OEOLA	OEOLA	OEOLA	COPDI	COPDI	COPDI	ERICA
3/Apr/07	12/Apr/07	26/Apr/07	3/Apr/07	12/Apr/07	26/Apr/07	3/Apr/07
5 DA-A	14 DA-A	28 DA-A	5 DA-A	14 DA-A	28 DA-A	5 DA-A

Trt Treatment

Rate

Growth

No.Name

RateUnit

Stage

1

2

3

4

5

6

7

Means followed by same letter do not significantly differ (P=.10, Student-Newman-Keuls)

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

LSU Northeast Research Station

Pest Type			
Pest Code		ERICA	ERICA
Rating Date		12/Apr/07	26/Apr/07
Trt-Eval Interval		14 DA-A	28 DA-A

Trt	Treatment	Rate	Growth			
No.	Name	Rate Unit	Stage	8	9	
1	Atrazine	2 PT/A	V1	43	c 30	d
	COC	1.0 % V/V	V1			
2	Accent	0.35 OZ WT/A	V1	77	a 33	d
	Atrazine	1 PT/A	V1			
	COC	1.0 % V/V	V1			
3	Permit	0.75 OZ WT/A	V1	30	d 47	c
	Atrazine	1 PT/A	V1			
	COC	1.0 % V/V	V1			
4	Exceed	1 OZ WT/A	V1	67	b 65	b
	Atrazine	1 PT/A	V1			
	COC	1.0 % V/V	V1			
5	Beacon	0.75 OZ WT/A	V1	30	d 88	a
	Atrazine	1 PT/A	V1			
	COC	1.0 % V/V	V1			
6	Steadfast	0.75 OZ WT/A	V1	63	b 88	a
	Atrazine	1 PT/A	V1			
	COC	1.0 % V/V	V1			
7	Distinct	4 OZ WT/A	V1	60	b 88	a
	Atrazine	1 PT/A	V1			
	NIS	0.25 % V/V	V1			
8	Callisto	2.0 OZ/A	V1	30	d 67	b
	Atrazine	1 PT/A	V1			
	COC	1.0 % V/V	V1			
9	Impact	0.75 OZ/A	V1	43	c 0	e
	Atrazine	1 PT/A	V1			
	COC	1 % V/V	V1			
10	Resolve	1 OZ/A	V1	30	d 63	b
	Atrazine	1 PT/A	V1			
	COC	1 % V/V	V1			
LSD (P=.10)				5.7	9.2	
Standard Deviation				4.0	6.5	
CV				8.43	11.41	
Grand Mean				47.33	57.0	
Bartlett's X2				0.0	0.731	
P(Bartlett's X2)				1.00	0.998	
Replicate F				1.465	0.059	
Replicate Prob(F)				0.2573	0.9428	
Treatment F				60.372	61.348	
Treatment Prob(F)				0.0001	0.0001	

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Pest Type		
Pest Code	ERICA	ERICA
Rating Date	12/Apr/07	26/Apr/07
Trt-Eval Interval	14 DA-A	28 DA-A

Trt	Treatment	Rate	Growth
No.	Name	Rate Unit	Stage
			8
			9

Means followed by same letter do not significantly differ ($P=0.10$, Student-Newman-Keuls)

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