

WEED CONTROL IN CORN WITH IGNITE, HUSKIE, LAUDIS RIMFIRE AND WOLVERINE, 2010

Trial ID: C2410 Protocol ID: C2410
Location: Campus, C-25 Study Director: Andy Chomas
Project ID: Investigator: Wesley Everman

General Trial Information

Study Director: Andy Chomas
Investigator: Wesley Everman

Personnel

Study Director: Andy Chomas
Investigator: Wesley Everman

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: DKC 46-61
BBCH Scale: BCOR **Planting Date:** May-6-10
Rate, Unit: 30000 S/A
Row Spacing, Unit: 30 IN

Pest Description

Pest 1 Type: W **Code:** ANGR
Common Name: annual grass

Pest 2 Type: W **Code:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Pest 3 Type: W **Code:** AMARE Amaranthus retroflexus
Common Name: Redroot pigweed

Pest 4 Type: W **Code:** AMBEL Ambrosia artemisiifolia
Common Name: Common ragweed

Pest 5 Type: W **Code:** ABUTH Abutilon theophrasti
Common Name: Velvetleaf

Site and Design

Plot Width, Unit: 10 FT **Site Type:** FIELD field
Plot Length, Unit: 30 FT
Plot Area, Unit: 300 FT2 **Tillage Type:** CONTIL conventional-till
Replications: 3 **Study Design:** RACOB� Randomized Complete Block (RCB)

Trial Initiation Comments:
Fall Chisel, Spring Field Cultivate X2

Soil Description

% OM: 2.8 **Texture:** L loam
pH: 5.8
Analyzed By:
300 lbs/A 46-0-0, 125 lbs/A 19-19-19 in Row

Application Description

A
Application Date: Jun-10-10
Time of Day: 10:00 am
Application Method: SPRAY
Application Timing: POST
Application Placement: BROADC
Air Temperature, Unit: 76 F
% Relative Humidity: 64
Wind Velocity, Unit: 2.5 MPH
Wind Direction: W
Soil Temperature, Unit: 70 F
Soil Moisture: 4
% Cloud Cover: 5

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Crop Stage At Each Application**A**

Crop 1 Code, BBCH Scale: ZEAMX BCOR
Stage Scale Used: BBCH
Stage Majority, Percent: V4
Stage Minimum, Percent: V4
Stage Maximum, Percent: V5
Height, Unit: 16 IN
Height Minimum, Maximum: 14 19

Pest Stage At Each Application**A**

Pest 1 Code, Type, Scale: ANGR W
Stage Majority, Percent: L5
Stage Minimum, Percent: L5
Stage Maximum, Percent: L6
Height, Unit: 10 IN
Height Minimum, Maximum: 7 10
Density, Unit: 3 FT2
Pest 2 Code, Type, Scale: CHEAL W
Stage Majority, Percent: L8
Stage Minimum, Percent: L6
Stage Maximum, Percent: L10
Height, Unit: 8 IN
Height Minimum, Maximum: 6 8
Density, Unit: 2 FT2
Pest 3 Code, Type, Scale: AMARE W
Stage Majority, Percent: L8
Stage Minimum, Percent: L6
Stage Maximum, Percent: L8
Height, Unit: 8 IN
Height Minimum, Maximum: 8 10
Density, Unit: 3 FT2
Pest 4 Code, Type, Scale: AMBEL W
Stage Majority, Percent: L6
Stage Minimum, Percent: L6
Stage Maximum, Percent: L8
Height, Unit: 10 IN
Height Minimum, Maximum: 4 10
Density, Unit: 14 FT2
Pest 5 Code, Type, Scale: ABUTH W
Stage Majority, Percent: L4
Stage Minimum, Percent: L2
Stage Maximum, Percent: L4
Height, Unit: 8 IN
Height Minimum, Maximum: 1 9
Density, Unit: 2 FT2

Application Equipment

Equipment Type: CUB
Operating Pressure, Unit: 30 PSI
Nozzle Type: FF
Nozzle Size: 8003
Nozzle Spacing, Unit: 20 IN
Boom Length, Unit: 100 IN
Boom Height, Unit: 29 IN
Ground Speed, Unit: 3.5 MPH
Carrier: WATER
Spray Volume, Unit: 20 gal/ac
Mix Size, Unit: 1 gallons

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Pest Code	ANGR	CHEAL	AMARE	AMBEL	ABUTH	ANGR	CHEAL
Crop Code	ZIAMX						
Rating Date	Jun-17-10	Jun-17-10	Jun-17-10	Jun-17-10	Jun-17-10	Jun-24-10	Jun-24-10
Rating Type	injury	control	control	control	control	control	control
Rating Unit	%	%	%	%	%	%	%
Trt-Eval Interval	7 DAPO	7 DAPO	7 DAPO	7 DAPO	7 DAPO	14 DAPO	14 DAPO

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	1	2	3	4	5	6	7	8
1	Ignite 280	2.34 L	100 DF	22 fl oz/a	2 lb/a	POST	0	100	100	100	100	93	98	99
1	Ammonium Sulfate					POST								
2	Ignite 280	2.34 L	100 DF	22 fl oz/a	3 lb/a	POST	0	100	99	100	99	87	97	98
2	Ammonium Sulfate					POST								
3	Ignite 280	2.34 L	100 L	22 fl oz/a	2 qt/100 gal	POST	0	100	100	100	100	83	98	97
3	Quest					POST								
3	CoRoN					POST								
4	Ignite 280	2.34 L	100 L	22 fl oz/a	3 pt/100 gal	POST	0	100	100	100	100	78	93	99
4	Quest					POST								
4	CoRoN					POST								
5	Huskie	2.14 L	100 DF	11 fl oz/a	0.5 lb/a	POST	0	47	91	84	100	90	42	100
5	Ammonium Sulfate					POST								
6	Huskie	2.14 L	100 DF	11 fl oz/a	1 lb/a	POST	0	7	92	84	99	88	27	98
6	Ammonium Sulfate					POST								
7	Huskie	2.14 L	100 L	11 fl oz/a	3 pt/100 gal	POST	0	22	92	85	98	90	37	95
7	Quest					POST								
7	CoRoN					POST								
8	Laudis	3.5 SC	100 DF	3 fl oz/a	1.5 lb/a	POST	0	70	82	62	48	52	55	83
8	Ammonium Sulfate					POST								
9	Laudis	3.5 SC	100 L	3 fl oz/a	3 pt/100 gal	POST	0	57	73	57	60	52	40	90
9	Quest					POST								
9	CoRoN					POST								
10	Rimfire	DG	100 DF	2 oz/a	1.5 lb/a	POST	43	43	62	77	30	33	60	60
10	Ammonium Sulfate					POST								
11	Rimfire	DG	100 DF	2 oz/a	3 lb/a	POST	42	50	60	73	40	33	65	52
11	Ammonium Sulfate					POST								
12	Rimfire	DG	100 L	2 oz/a	3 pt/100 gal	POST	43	53	55	83	54	32	57	50
12	Quest					POST								
12	CoRoN					POST								
13	Wolverine	L	100 DF	1.7 pt/a	0.5 lb/a	POST	85	93	92	75	100	93	98	100
13	Ammonium Sulfate					POST								
14	Wolverine	L	100 DF	1.7 pt/a	1 lb/a	POST	83	93	97	78	100	93	96	100
14	Ammonium Sulfate					POST								
15	Wolverine	L	100 L	1.7 pt/a	3 pt/100 gal	POST	82	93	95	77	100	93	95	100
15	Quest					POST								
15	CoRoN					POST								
16							0	0	0	0	0	0	0	0
LSD (P=.05)							4.2	23.2	17.3	12.0	14.3	10.8	21.2	11.9

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	ANGR	CHEAL	AMARE	AMBEL	ABUTH	ANGR	CHEAL
Crop Code	ZEAMX						
Rating Date	Jun-17-10	Jun-17-10	Jun-17-10	Jun-17-10	Jun-17-10	Jun-24-10	Jun-24-10
Rating Type	injury	control	control	control	control	control	control
Rating Unit	%	%	%	%	%	%	%
Trt-Eval Interval	7 DAPO	7 DAPO	7 DAPO	7 DAPO	7 DAPO	14 DAPO	14 DAPO

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	1	2	3	4	5	6	7	8
	Standard Deviation						2.5	13.9	10.4	7.2	8.6	6.4	12.7	7.1
	CV						10.6	21.66	12.85	9.34	11.2	9.46	19.18	8.66

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Pest Code	AMARE	AMBEL	ABUTH	ANGR	CHEAL	AMARE	AMBEL	ABUTH
Crop Code								
Rating Date	Jun-24-10	Jun-24-10	Jun-24-10	Jun-30-10	Jun-30-10	Jun-30-10	Jun-30-10	Jun-30-10
Rating Type	control	control	control	control	control	control	control	control
Rating Unit	%	%	%	%	%	%	%	%
Trt-Eval Interval	14 DAPO	14 DAPO	14 DAPO	20 DAPO	20 DAPO	20 DAPO	20 DAPO	20 DAPO

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	9	10	11	12	13	14	15	16
1	Ignite 280	2.34 L	100 DF	22 fl oz/a	2 lb/a	POST	100	98	87	98	97	98	93	85
1	Ammonium Sulfate					POST								
2	Ignite 280	2.34 L	100 DF	22 fl oz/a	3 lb/a	POST	97	95	80	98	91	100	93	82
2	Ammonium Sulfate					POST								
3	Ignite 280	2.34 L	100 L	22 fl oz/a	2 qt/100 gal	POST	100	98	73	98	98	100	92	72
3	Quest					POST								
3	CoRoN				1 gal/a	POST								
4	Ignite 280	2.34 L	100 L	22 fl oz/a	3 pt/100 gal	POST	100	97	69	98	95	99	90	65
4	Quest					POST								
4	CoRoN				0.5 gal/a	POST								
5	Huskie	2.14 L	100 DF	11 fl oz/a	0.5 lb/a	POST	87	99	98	50	98	85	100	100
5	Ammonium Sulfate					POST								
6	Huskie	2.14 L	100 DF	11 fl oz/a	1 lb/a	POST	73	100	100	13	100	84	100	100
6	Ammonium Sulfate					POST								
7	Huskie	2.14 L	100 L	11 fl oz/a	3 pt/100 gal	POST	78	100	97	13	97	85	100	100
7	Quest					POST								
7	CoRoN				0.5 gal/a	POST								
8	Laudis	3.5 SC	100 DF	3 fl oz/a	1.5 lb/a	POST	62	73	77	52	73	55	81	70
8	Ammonium Sulfate					POST								
9	Laudis	3.5 SC	100 L	3 fl oz/a	3 pt/100 gal	POST	67	82	75	13	80	68	92	88
9	Quest					POST								
9	CoRoN				0.5 gal/a	POST								
10	Rimfire		DG	2 oz/a		POST	80	50	40	52	62	70	40	47
10	Ammonium Sulfate		100 DF	1.5 lb/a		POST								
11	Rimfire		DG	2 oz/a		POST	77	50	40	58	62	63	37	37
11	Ammonium Sulfate		100 DF	3 lb/a		POST								
12	Rimfire		DG	2 oz/a		POST	82	50	40	62	50	65	40	37
12	Quest		100 L	3 pt/100 gal		POST								
12	CoRoN		100 L	0.5 gal/a		POST								
13	Wolverine		L	1.7 pt/a		POST	87	100	100	99	97	73	95	100
13	Ammonium Sulfate		100 DF	0.5 lb/a		POST								
14	Wolverine		L	1.7 pt/a		POST	83	95	100	98	98	75	98	100
14	Ammonium Sulfate		100 DF	1 lb/a		POST								
15	Wolverine		L	1.7 pt/a		POST	84	99	100	98	91	78	97	100
15	Quest		100 L	3 pt/100 gal		POST								
15	CoRoN		100 L	0.5 gal/a		POST								
16							0	0	0	0	0	0	0	0
LSD (P=.05)							11.4	4.3	10.3	18.8	14.0	14.3	10.2	9.5

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Pest Code	AMARE	AMBEL	ABUTH	ANGR	CHEAL	AMARE	AMBEL	ABUTH	
Crop Code									
Rating Date	Jun-24-10	Jun-24-10	Jun-24-10	Jun-30-10	Jun-30-10	Jun-30-10	Jun-30-10	Jun-30-10	Jun-30-10
Rating Type	control	control	control	control	control	control	control	control	control
Rating Unit	%	%	%	%	%	%	%	%	%
Trt-Eval Interval	14 DAPO	14 DAPO	14 DAPO	20 DAPO	20 DAPO	20 DAPO	20 DAPO	20 DAPO	20 DAPO

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	9	10	11	12	13	14	15	16
	Standard Deviation						6.9	2.6	6.1	11.3	8.4	8.6	6.1	5.7
	CV						8.74	3.2	8.36	18.06	10.44	11.45	7.84	7.71

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	ANGR	CHEAL	AMARE	AMBEL	ABUTH
Crop Code					
Rating Date	Jul-8-10	Jul-8-10	Jul-8-10	Jul-8-10	Jul-8-10
Rating Type	control	control	control	control	control
Rating Unit	%	%	%	%	%
Trt-Eval Interval	28 DAPO	28 DAPO	28 DAPO	28 DAPO	28 DAPO

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	17	18	19	20	21
1	Ignite 280	2.34 L	L	22 fl oz/a	oz/a	POST	92	97	99	92	78
1	Ammonium Sulfate	100 DF	DF	2 lb/a	lb/a	POST					
2	Ignite 280	2.34 L	L	22 fl oz/a	oz/a	POST	95	86	100	88	88
2	Ammonium Sulfate	100 DF	DF	3 lb/a	lb/a	POST					
3	Ignite 280	2.34 L	L	22 fl oz/a	oz/a	POST	97	92	95	93	63
3	Quest	100 L	L	2 qt/100 gal	gal	POST					
3	CoRoN	100 L	L	1 gal/a	gal/a	POST					
4	Ignite 280	2.34 L	L	22 fl oz/a	oz/a	POST	95	93	100	90	60
4	Quest	100 L	L	3 pt/100 gal	gal	POST					
4	CoRoN	100 L	L	0.5 gal/a	gal/a	POST					
5	Huskie	2.14 L	L	11 fl oz/a	oz/a	POST	7	100	87	100	100
5	Ammonium Sulfate	100 DF	DF	0.5 lb/a	lb/a	POST					
6	Huskie	2.14 L	L	11 fl oz/a	oz/a	POST	0	100	100	100	100
6	Ammonium Sulfate	100 DF	DF	1 lb/a	lb/a	POST					
7	Huskie	2.14 L	L	11 fl oz/a	oz/a	POST	0	100	93	100	100
7	Quest	100 L	L	3 pt/100 gal	gal	POST					
7	CoRoN	100 L	L	0.5 gal/a	gal/a	POST					
8	Laudis	3.5 SC	SC	3 fl oz/a	oz/a	POST	17	63	47	85	67
8	Ammonium Sulfate	100 DF	DF	1.5 lb/a	lb/a	POST					
9	Laudis	3.5 SC	SC	3 fl oz/a	oz/a	POST	0	90	63	100	92
9	Quest	100 L	L	3 pt/100 gal	gal	POST					
9	CoRoN	100 L	L	0.5 gal/a	gal/a	POST					
10	Rimfire	DG	DG	2 oz/a	oz/a	POST	40	63	77	30	27
10	Ammonium Sulfate	100 DF	DF	1.5 lb/a	lb/a	POST					
11	Rimfire	DG	DG	2 oz/a	oz/a	POST	40	43	93	37	40
11	Ammonium Sulfate	100 DF	DF	3 lb/a	lb/a	POST					
12	Rimfire	DG	DG	2 oz/a	oz/a	POST	43	43	83	40	37
12	Quest	100 L	L	3 pt/100 gal	gal	POST					
12	CoRoN	100 L	L	0.5 gal/a	gal/a	POST					
13	Wolverine	L	L	1.7 pt/a	pt/a	POST	92	90	67	93	97
13	Ammonium Sulfate	100 DF	DF	0.5 lb/a	lb/a	POST					
14	Wolverine	L	L	1.7 pt/a	pt/a	POST	95	95	59	92	97
14	Ammonium Sulfate	100 DF	DF	1 lb/a	lb/a	POST					
15	Wolverine	L	L	1.7 pt/a	pt/a	POST	93	89	50	88	100
15	Quest	100 L	L	3 pt/100 gal	gal	POST					
15	CoRoN	100 L	L	0.5 gal/a	gal/a	POST					
16							0	0	0	0	0
LSD (P=.05)							12.7	16.9	25.3	12.0	19.4

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Pest Code	ANGR	CHEAL	AMARE	AMBEL	ABUTH					
Crop Code										
Rating Date	Jul-8-10	Jul-8-10	Jul-8-10	Jul-8-10	Jul-8-10					
Rating Type	control	control	control	control	control					
Rating Unit	%	%	%	%	%					
Trt-Eval Interval	28 DAPO	28 DAPO	28 DAPO	28 DAPO	28 DAPO					

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	17	18	19	20	21
	Standard Deviation						7.6	10.1	15.1	7.2	11.6
	CV						15.14	13.0	19.94	9.35	16.24