

WEED CONTROL IN NO-TILL CORN WITH VALOR, 2010

Trial ID: C2010 Protocol ID: C2010
 Location: Campus, C-27 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
BBCH Scale: BCOR **Planting Date:** May-24-10
Rate, Unit: 30000 S/A
Row Spacing, Unit: 30 IN

Pest Description

Pest 1 Type: W **Code:** ANGR *Setaria* sp.

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

Pest 3 Type: W **Code:** AMBEL *Ambrosia artemisiifolia*
Common Name: Common ragweed

Pest 4 Type: W **Code:** TAROF *Taraxacum officinale*
Common Name: Common dandelion

Pest 5 Type: W **Code:** SONAR *Sonchus arvensis*
Common Name: Perennial sowthistle

Site and Design

Plot Width, Unit: 10 FT **Site Type:** FIELD field
Plot Length, Unit: 30 FT
Plot Area, Unit: 300 FT2 **Tillage Type:** NOTILL no-till
Replications: 3 **Study Design:** RACOB� Randomized Complete Block (RCB)

Soil Description

% OM: 2.5 **Texture:** L loam
pH: 6.5
Analyzed By:
 300 lbs/A 46-0-0, Polymer-coated Urea

Application Description

	A	B
Application Date:	May-6-10	Jun-17-10
Time of Day:	11:40 am	11:00 am
Application Method:	SPRAY	SPRAY
Application Timing:	EPP	POST
Application Placement:	BROADC	BROADC
Air Temperature, Unit:	60 F	79 F
% Relative Humidity:	53	71
Wind Velocity, Unit:	7.5 MPH	1.5 MPH
Wind Direction:	W	S
Soil Temperature, Unit:	43 F	65 F
Soil Moisture:	4	4
% Cloud Cover:	70	50

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		V5
Stage Minimum, Percent:		V4
Stage Maximum, Percent:		V5
Height, Unit:		12 IN
Height Minimum, Maximum:		7 12

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Pest Stage At Each Application

	A		B	
Pest 1 Code, Type, Scale:	ANGR	W	ANGR	W
Stage Majority, Percent:	L2		L4	
Stage Minimum, Percent:	L1		L3	
Stage Maximum, Percent:	L3		L4	
Height, Unit:	0.5	IN	4	IN
Height Minimum, Maximum:	0.25	1	2	5
Density, Unit:	20	FT2		
Pest 2 Code, Type, Scale:	CHEAL	W	CHEAL	W
Stage Majority, Percent:	L2		L8	
Stage Minimum, Percent:	COT		L7	
Stage Maximum, Percent:	L2		L10	
Height, Unit:	0.5	IN	11	IN
Height Minimum, Maximum:	0.25	0.5	11	15
Density, Unit:	1	FT2		
Pest 3 Code, Type, Scale:	AMBEL	W	AMBEL	W
Stage Majority, Percent:	L2		L6	
Stage Minimum, Percent:	COT		L2	
Stage Maximum, Percent:	L3		L6	
Height, Unit:	1	IN	2	IN
Height Minimum, Maximum:	0.25	1	0.5	6
Density, Unit:	1	FT2		
Pest 4 Code, Type, Scale:	TAROF	W	TAROF	W
Stage Majority, Percent:	FLOWER		FLOWER	
Stage Minimum, Percent:	COT		ROSETT	
Stage Maximum, Percent:	FLOWER		FLOWER	
Diameter, Unit:			8	IN
Height, Unit:	4	IN	2	IN
Height Minimum, Maximum:	0.5	7	2	6
Density, Unit:	1	FT2		
Pest 5 Code, Type, Scale:	SONAR	W	SONAR	W
Stage Majority, Percent:	ROSETT			
Height, Unit:	3	IN		
Height Minimum, Maximum:	0.5	5		
Density, Unit:	1	FT2		

Application Equipment

	B	
Equipment Type:	BKPK	BKPK
Operating Pressure, Unit:	30	32
	PSI	PSI
Nozzle Type:	FF	FF
Nozzle Size:	80015VS	8002
Nozzle Spacing, Unit:	20	20
	IN	IN
Boom Length, Unit:	100	100
	IN	IN
Boom Height, Unit:	18	26
	IN	IN
Ground Speed, Unit:	2.35	3
	MPH	MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	15	15
	gal/ac	gal/ac
Mix Size, Unit:	2	2
	liters	liters

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	
Pest Code	ANGR	CHEAL	AMBEL	TAROF	ERICA	ZEAMX		ANGR	CHEAL
Rating Date	May-24-10	May-24-10	May-24-10	May-24-10	May-24-10	May-24-10	Jun-17-10	Jun-17-10	Jun-17-10
Rating Type	control	control	control	control	control	control	injury	control	control
Rating Unit	%	%	%	%	%	%	%	%	%
Trt-Eval Interval	AT PLANT	AT PLANT	AT PLANT	AT PLANT	AT PLANT	AT PLANT	AT POST	AT POST	AT POST

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Growth Stage	1	2	3	4	5	6	7	8
1	Non-Treated					0	0	0	0	0	0	0	0
2	Roundup PowerMAX	4.5 L		22 fl oz/a	EPP	97	100	100	92	100	0	40	100
	2 Ammonium Sulfate	100 DF		2.5 lb/a	EPP								
	2 Roundup PowerMAX	4.5 L		22 fl oz/a	POST								
	2 Ammonium Sulfate	100 DF		2.5 lb/a	POST								
3	Roundup PowerMAX	4.5 L		22 fl oz/a	EPP	99	99	99	97	100	0	67	98
	3 V-10233	76 WG		3 oz/a	EPP								
	3 Ammonium Sulfate	100 DF		2.5 lb/a	EPP								
	3 Roundup PowerMAX	4.5 L		22 fl oz/a	POST								
	3 Atrazine	4 L		1 pt/a	POST								
	3 Ammonium Sulfate	100 DF		2.5 lb/a	POST								
4	Roundup PowerMAX	4.5 L		22 fl oz/a	EPP	100	100	100	98	100	0	50	100
	4 Valor SX	51 WG		2 oz/a	EPP								
	4 Ammonium Sulfate	100 DF		2.5 lb/a	EPP								
	4 Roundup PowerMAX	4.5 L		22 fl oz/a	POST								
	4 Atrazine	4 L		1 qt/a	POST								
	4 Ammonium Sulfate	100 DF		2.5 lb/a	POST								
5	Roundup PowerMAX	4.5 L		22 fl oz/a	EPP	100	100	100	100	100	0	63	100
	5 V-10233	76 WG		3 oz/a	EPP								
	5 Ammonium Sulfate	100 DF		2.5 lb/a	EPP								
	5 Roundup PowerMAX	4.5 L		22 fl oz/a	POST								
	5 Ammonium Sulfate	100 DF		2.5 lb/a	POST								
6	Roundup PowerMAX	4.5 L		22 fl oz/a	EPP	100	100	100	100	100	0	43	100
	6 Integrity	5.6 L		13 fl oz/a	EPP								
	6 Ammonium Sulfate	100 DF		2.5 lb/a	EPP								
	6 Roundup PowerMAX	4.5 L		22 fl oz/a	POST								
	6 Ammonium Sulfate	100 DF		2.5 lb/a	POST								
	LSD (P=.05)					2.7	0.9	0.9	7.6	0.0	0.0	30.4	2.1
	Standard Deviation					1.5	0.5	0.5	4.2	0.0	0.0	16.7	1.2
	CV					1.79	0.57	0.57	5.15	0.0	0.0	38.11	1.42

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBEL	ABUTH	TAROF	ZEAMX	ANGR	CHEAL	AMBEL	ABUTH	
Rating Date	Jun-17-10	Jun-17-10	Jun-17-10	Jun-22-10	Jun-22-10	Jun-22-10	Jun-22-10	Jun-22-10	Jun-22-10
Rating Type	control	control	control	injury	control	control	control	control	control
Rating Unit	%	%	%	%	%	%	%	%	%
Trt-Eval Interval	AT POST	AT POST	AT POST	29 DAPlant	29 DAPlant	29 DAPlant	29 DAPlant	29 DAPlant	29 DAPlant

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Growth Stage	9	10	11	12	13	14	15	16
1	Non-Treated					0	0	0	0	0	0	0	0
2	Roundup PowerMAX	4.5 L		22 fl oz/a	EPP	68	53	87	0	91	100	93	95
2	Ammonium Sulfate	100 DF		2.5 lb/a	EPP								
2	Roundup PowerMAX	4.5 L		22 fl oz/a	POST								
2	Ammonium Sulfate	100 DF		2.5 lb/a	POST								
3	Roundup PowerMAX	4.5 L		22 fl oz/a	EPP	98	70	87	0	93	100	99	97
3	V-10233	76 WG		3 oz/a	EPP								
3	Ammonium Sulfate	100 DF		2.5 lb/a	EPP								
3	Roundup PowerMAX	4.5 L		22 fl oz/a	POST								
3	Atrazine	4 L		1 pt/a	POST								
3	Ammonium Sulfate	100 DF		2.5 lb/a	POST								
4	Roundup PowerMAX	4.5 L		22 fl oz/a	EPP	90	88	73	0	92	100	100	98
4	Valor SX	51 WG		2 oz/a	EPP								
4	Ammonium Sulfate	100 DF		2.5 lb/a	EPP								
4	Roundup PowerMAX	4.5 L		22 fl oz/a	POST								
4	Atrazine	4 L		1 qt/a	POST								
4	Ammonium Sulfate	100 DF		2.5 lb/a	POST								
5	Roundup PowerMAX	4.5 L		22 fl oz/a	EPP	93	88	90	0	98	100	100	100
5	V-10233	76 WG		3 oz/a	EPP								
5	Ammonium Sulfate	100 DF		2.5 lb/a	EPP								
5	Roundup PowerMAX	4.5 L		22 fl oz/a	POST								
5	Ammonium Sulfate	100 DF		2.5 lb/a	POST								
6	Roundup PowerMAX	4.5 L		22 fl oz/a	EPP	97	98	90	0	92	100	100	100
6	Integrity	5.6 L		13 fl oz/a	EPP								
6	Ammonium Sulfate	100 DF		2.5 lb/a	EPP								
6	Roundup PowerMAX	4.5 L		22 fl oz/a	POST								
6	Ammonium Sulfate	100 DF		2.5 lb/a	POST								
	LSD (P=.05)					29.3	51.6	26.0	0.0	9.5	0.4	5.9	8.1
	Standard Deviation					16.1	28.4	14.3	0.0	5.2	0.2	3.2	4.5
	CV					21.65	42.71	20.12	0.0	6.72	0.28	3.93	5.48

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Pest Code	TAROF	ZEAMX	ANGR	CHEAL	AMBEL	ABUTH	TAROF
Crop Code							
Rating Date	Jun-22-10	Jul-6-10	Jul-6-10	Jul-6-10	Jul-6-10	Jul-6-10	Jul-6-10
Rating Type	control	injury	control	control	control	control	control
Rating Unit	%	%	%	%	%	%	%
Trt-Eval Interval	29 DAPlant	43 DAPlant	43 DAPlant	43 DAPlant	43 DAPlant	43 DAPlant	43 DAPlant

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Growth Stage	17	18	19	20	21	22	23	24
1	Non-Treated					0	0	0	0	0	0	0	0
2	Roundup PowerMAX	4.5 L		22 fl oz/a	EPP	91	0	99	100	97	100	100	92
	2 Ammonium Sulfate	100 DF		2.5 lb/a	EPP								
	2 Roundup PowerMAX	4.5 L		22 fl oz/a	POST								
	2 Ammonium Sulfate	100 DF		2.5 lb/a	POST								
3	Roundup PowerMAX	4.5 L		22 fl oz/a	EPP	92	0	99	100	100	100	97	93
	3 V-10233	76 WG		3 oz/a	EPP								
	3 Ammonium Sulfate	100 DF		2.5 lb/a	EPP								
	3 Roundup PowerMAX	4.5 L		22 fl oz/a	POST								
	3 Atrazine	4 L		1 pt/a	POST								
	3 Ammonium Sulfate	100 DF		2.5 lb/a	POST								
4	Roundup PowerMAX	4.5 L		22 fl oz/a	EPP	87	0	100	100	100	100	99	93
	4 Valor SX	51 WG		2 oz/a	EPP								
	4 Ammonium Sulfate	100 DF		2.5 lb/a	EPP								
	4 Roundup PowerMAX	4.5 L		22 fl oz/a	POST								
	4 Atrazine	4 L		1 qt/a	POST								
	4 Ammonium Sulfate	100 DF		2.5 lb/a	POST								
5	Roundup PowerMAX	4.5 L		22 fl oz/a	EPP	85	0	99	100	99	98	97	83
	5 V-10233	76 WG		3 oz/a	EPP								
	5 Ammonium Sulfate	100 DF		2.5 lb/a	EPP								
	5 Roundup PowerMAX	4.5 L		22 fl oz/a	POST								
	5 Ammonium Sulfate	100 DF		2.5 lb/a	POST								
6	Roundup PowerMAX	4.5 L		22 fl oz/a	EPP	93	0	98	100	97	100	100	88
	6 Integrity	5.6 L		13 fl oz/a	EPP								
	6 Ammonium Sulfate	100 DF		2.5 lb/a	EPP								
	6 Roundup PowerMAX	4.5 L		22 fl oz/a	POST								
	6 Ammonium Sulfate	100 DF		2.5 lb/a	POST								
	LSD (P=.05)					16.8	0.0	2.6	0.0	5.2	2.1	6.4	8.6
	Standard Deviation					9.3	0.0	1.4	0.0	2.9	1.2	3.5	4.7
	CV					12.43	0.0	1.74	0.0	3.49	1.42	4.26	6.32

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	CHEAL	AMBEL	ABUTH	TAROF
Crop Code				
Rating Date	Jul-20-10	Jul-20-10	Jul-20-10	Jul-20-10
Rating Type	control	control	control	control
Rating Unit	%	%	%	%
Trt-Eval Interval	57 DAPlant	57 DAPlant	57 DAPlant	57 DAPlant

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	25	26	27	28	29
1	Non-Treated						0	0	0	0	
2	Roundup PowerMAX	4.5 L		22 fl oz/a		EPP	93	95	100	100	
2	Ammonium Sulfate	100 DF		2.5 lb/a		EPP					
2	Roundup PowerMAX	4.5 L		22 fl oz/a		POST					
2	Ammonium Sulfate	100 DF		2.5 lb/a		POST					
3	Roundup PowerMAX	4.5 L		22 fl oz/a		EPP	100	100	100	100	
3	V-10233	76 WG		3 oz/a		EPP					
3	Ammonium Sulfate	100 DF		2.5 lb/a		EPP					
3	Roundup PowerMAX	4.5 L		22 fl oz/a		POST					
3	Atrazine	4 L		1 pt/a		POST					
3	Ammonium Sulfate	100 DF		2.5 lb/a		POST					
4	Roundup PowerMAX	4.5 L		22 fl oz/a		EPP	100	100	100	100	
4	Valor SX	51 WG		2 oz/a		EPP					
4	Ammonium Sulfate	100 DF		2.5 lb/a		EPP					
4	Roundup PowerMAX	4.5 L		22 fl oz/a		POST					
4	Atrazine	4 L		1 qt/a		POST					
4	Ammonium Sulfate	100 DF		2.5 lb/a		POST					
5	Roundup PowerMAX	4.5 L		22 fl oz/a		EPP	97	93	97	100	
5	V-10233	76 WG		3 oz/a		EPP					
5	Ammonium Sulfate	100 DF		2.5 lb/a		EPP					
5	Roundup PowerMAX	4.5 L		22 fl oz/a		POST					
5	Ammonium Sulfate	100 DF		2.5 lb/a		POST					
6	Roundup PowerMAX	4.5 L		22 fl oz/a		EPP	98	97	97	100	
6	Integrity	5.6 L		13 fl oz/a		EPP					
6	Ammonium Sulfate	100 DF		2.5 lb/a		EPP					
6	Roundup PowerMAX	4.5 L		22 fl oz/a		POST					
6	Ammonium Sulfate	100 DF		2.5 lb/a		POST					
	LSD (P=.05)						5.4	7.6	6.4	0.0	.
	Standard Deviation						3.0	4.2	3.5	0.0	.
	CV						3.66	5.18	4.25	0.0	.