

EVALUATION OF FOUNDATION PROGRAMS, 2010

Trial ID: C0910 Protocol ID: C0910  
 Location: Campus 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:** P37Y14  
**BBCH Scale:** BCOR **Planting Date:** May-4-10  
**Rate, Unit:** 30000 S/A  
**Row Spacing, Unit:** 30 IN  
**Harvested Width, Unit:** 5 FT **Harvested Length, Unit:** 35 FT

**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:** 35 FT  
**Plot Area, Unit:** 350 FT2 **Tillage Type:** CONTIL conventional-till  
**Replications:** 4 **Study Design:** RACOB� Randomized Complete Block (RCB)

**Trial Initiation Comments:**  
 Fall Chisel, Spring Field Cultivate X2

**Soil Description**

**% OM:** 3.8 **Texture:** L loam  
**pH:** 6.0  
**Analyzed By:**  
 300 lbs/A 46-0-0, 125 lbs/A 19-19-19 in Row

**Application Description**

	<b>A</b>	<b>B</b>
<b>Application Date:</b>	May-4-10	Jun-10-10
<b>Time of Day:</b>	8:00 pm	9:30 am
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	POST
<b>Application Placement:</b>	BROADC	BROADC
<b>Air Temperature, Unit:</b>	77 F	70 F
<b>% Relative Humidity:</b>	31	58
<b>Wind Velocity, Unit:</b>	7.5 MPH	3.5 MPH
<b>Wind Direction:</b>	SW	S
<b>Soil Temperature, Unit:</b>	65 F	63 F
<b>Soil Moisture:</b>	4	3
<b>% Cloud Cover:</b>	10	3

**Crop Stage At Each Application**

	<b>A</b>	<b>B</b>
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>		BBCH
<b>Stage Majority, Percent:</b>		V5
<b>Height, Unit:</b>		16 IN
<b>Height Minimum, Maximum:</b>		15 17

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**Pest Stage At Each Application**

	<b>A</b>		<b>B</b>	
<b>Pest 1 Code, Type, Scale:</b>	ANGR	W	ANGR	W
<b>Stage Majority, Percent:</b>			L4	
<b>Stage Minimum, Percent:</b>			L3	
<b>Stage Maximum, Percent:</b>			L6	
<b>Height, Unit:</b>			4	IN
<b>Height Minimum, Maximum:</b>			3	6
<b>Pest 2 Code, Type, Scale:</b>	CHEAL	W	CHEAL	W
<b>Stage Majority, Percent:</b>			L8	
<b>Stage Minimum, Percent:</b>			L4	
<b>Stage Maximum, Percent:</b>			L9	
<b>Height, Unit:</b>			3	IN
<b>Height Minimum, Maximum:</b>			1	4
<b>Pest 3 Code, Type, Scale:</b>	AMARE	W	AMARE	W
<b>Stage Majority, Percent:</b>			L7	
<b>Stage Minimum, Percent:</b>			L6	
<b>Stage Maximum, Percent:</b>			L8	
<b>Height, Unit:</b>			5	IN
<b>Height Minimum, Maximum:</b>			5	7
<b>Pest 4 Code, Type, Scale:</b>	AMBEL	W	AMBEL	W
<b>Stage Majority, Percent:</b>			L6	
<b>Stage Minimum, Percent:</b>			L4	
<b>Stage Maximum, Percent:</b>			L8	
<b>Height, Unit:</b>			4	IN
<b>Height Minimum, Maximum:</b>			1	6
<b>Pest 5 Code, Type, Scale:</b>	ABUTH	W	ABUTH	W
<b>Stage Majority, Percent:</b>			L4	
<b>Stage Minimum, Percent:</b>			L4	
<b>Stage Maximum, Percent:</b>			L5	
<b>Height, Unit:</b>			2	IN
<b>Height Minimum, Maximum:</b>			1	5

**Application Equipment**

			<b>B</b>	
<b>Equipment Type:</b>	CUB		CUB	
<b>Operating Pressure, Unit:</b>	30	PSI	30	PSI
<b>Nozzle Type:</b>	FF		FF	
<b>Nozzle Size:</b>	8003		8003	
<b>Nozzle Spacing, Unit:</b>	20	IN	20	IN
<b>Boom Length, Unit:</b>	100	IN	100	IN
<b>Boom Height, Unit:</b>	18	IN	24	IN
<b>Ground Speed, Unit:</b>	3.5	MPH	3.5	MPH
<b>Carrier:</b>	WATER		WATER	
<b>Spray Volume, Unit:</b>	20	gal/ac	20	gal/ac
<b>Mix Size, Unit:</b>	1	gallons	1	gallons

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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				ZEAMX	ZEAMX			
Rating Date				May-25-10	Jun-10-10	Jun-10-10	Jun-10-10	Jun-10-10
Rating Type				injury	injury	control	control	control
Rating Unit				%	%	%	%	%
Trt-Eval Interval				21 DAPRE	AT POST	AT POST	AT POST	AT POST

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	1	2	3	4	5	6	7
1	Integrity	5.6 L		13 fl oz/a		PRE	0	0	98	81	100	70	73
1	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST							
1	Ammonium Sulfate	100 DF		2 % w/w		POST							
2	Integrity	5.6 L		16 fl oz/a		PRE	1	0	97	92	100	73	83
2	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST							
2	Ammonium Sulfate	100 DF		2 % w/w		POST							
3	Harness Xtra 5.6	5.6 L		1.5 qt/a		PRE	3	0	96	100	100	80	71
3	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST							
3	Ammonium Sulfate	100 DF		2 % w/w		POST							
4	Guardsman Max	5 L		1 qt/a		PRE	1	0	97	99	100	76	69
4	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST							
4	Ammonium Sulfate	100 DF		2 % w/w		POST							
5	Harness Xtra 6L	6 L		1.2 qt/a		PRE	1	0	98	100	100	90	86
5	Sharpen	2.9 L		2 fl oz/a		PRE							
5	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST							
5	Ammonium Sulfate	100 DF		2 % w/w		POST							
6	Harness Xtra 6L	6 L		1.2 qt/a		PRE	0	0	96	100	100	89	88
6	Sharpen	2.9 L		3 fl oz/a		PRE							
6	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST							
6	Ammonium Sulfate	100 DF		2 % w/w		POST							
7	Harness	7 L		0.75 qt/a		PRE	3	0	96	97	100	77	86
7	Sharpen	2.9 L		2 fl oz/a		PRE							
7	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST							
7	Ammonium Sulfate	100 DF		2 % w/w		POST							
8	Harness	7 L		0.75 qt/a		PRE	0	0	97	99	100	78	90
8	Sharpen	2.9 L		3 fl oz/a		PRE							
8	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST							
8	Ammonium Sulfate	100 DF		2 % w/w		POST							
9	Lumax	3.94 SE		3 qt/a		PRE	0	0	99	100	100	100	100
9	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST							
9	Ammonium Sulfate	100 DF		2 % w/w		POST							
10	Non-Treated						0	0	0	0	0	0	0
	LSD (P=.05)						2.4	0.0	5.1	4.9	0.7	3.7	6.9
	Standard Deviation						1.7	0.0	3.5	3.4	0.5	2.5	4.8
	CV						189.68	0.0	4.03	3.87	0.51	3.46	6.38

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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	AMARE						
Rating Date	Jul-1-10	Jul-1-10	Jul-1-10	Jul-1-10	Jul-1-10	Jul-20-10	Jul-20-10	Jul-20-10						
Rating Type	control	control	control	control	control	control	control	control						
Rating Unit	%	%	%	%	%	%	%	%						
Trt-Eval Interval	21 DAPO	21 DAPO	21 DAPO	21 DAPO	21 DAPO	40 DAPO	40 DAPO	40 DAPO						

Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Growth Stage	8	9	10	11	12	13	14	15
1	Integrity	5.6 L		13 fl oz/a	PRE	99	93	100	98	100	100	88	99
1	Roundup PowerMAX	4.5 L		0.75 lb ae/a	POST								
1	Ammonium Sulfate	100 DF		2 % w/w	POST								
2	Integrity	5.6 L		16 fl oz/a	PRE	100	97	100	96	100	100	89	100
2	Roundup PowerMAX	4.5 L		0.75 lb ae/a	POST								
2	Ammonium Sulfate	100 DF		2 % w/w	POST								
3	Harness Xtra 5.6	5.6 L		1.5 qt/a	PRE	100	96	100	95	100	100	89	100
3	Roundup PowerMAX	4.5 L		0.75 lb ae/a	POST								
3	Ammonium Sulfate	100 DF		2 % w/w	POST								
4	Guardsman Max	5 L		1 qt/a	PRE	100	95	99	97	100	100	86	99
4	Roundup PowerMAX	4.5 L		0.75 lb ae/a	POST								
4	Ammonium Sulfate	100 DF		2 % w/w	POST								
5	Harness Xtra 6L	6 L		1.2 qt/a	PRE	100	96	100	96	100	100	90	100
5	Sharpen	2.9 L		2 fl oz/a	PRE								
5	Roundup PowerMAX	4.5 L		0.75 lb ae/a	POST								
5	Ammonium Sulfate	100 DF		2 % w/w	POST								
6	Harness Xtra 6L	6 L		1.2 qt/a	PRE	100	98	100	98	100	100	91	100
6	Sharpen	2.9 L		3 fl oz/a	PRE								
6	Roundup PowerMAX	4.5 L		0.75 lb ae/a	POST								
6	Ammonium Sulfate	100 DF		2 % w/w	POST								
7	Harness	7 L		0.75 qt/a	PRE	100	99	100	95	100	98	95	100
7	Sharpen	2.9 L		2 fl oz/a	PRE								
7	Roundup PowerMAX	4.5 L		0.75 lb ae/a	POST								
7	Ammonium Sulfate	100 DF		2 % w/w	POST								
8	Harness	7 L		0.75 qt/a	PRE	100	97	100	98	100	98	93	99
8	Sharpen	2.9 L		3 fl oz/a	PRE								
8	Roundup PowerMAX	4.5 L		0.75 lb ae/a	POST								
8	Ammonium Sulfate	100 DF		2 % w/w	POST								
9	Lumax	3.94 SE		3 qt/a	PRE	100	100	100	98	100	100	100	100
9	Roundup PowerMAX	4.5 L		0.75 lb ae/a	POST								
9	Ammonium Sulfate	100 DF		2 % w/w	POST								
10	Non-Treated					0	0	0	0	0	0	0	0
	LSD (P=.05)					1.2	3.8	0.9	2.7	0.5	1.7	4.9	2.0
	Standard Deviation					0.8	2.6	0.6	1.8	0.3	1.2	3.4	1.4
	CV					0.93	2.98	0.67	2.1	0.36	1.31	4.13	1.54

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Pest Type	W Weed	W Weed	
Pest Code	AMBEL	ABUTH	
Crop Code			ZEAMX
Rating Date	Jul-20-10	Jul-20-10	Oct-6-10
Rating Type	control	control	yield
Rating Unit	%	%	bu/ac
Trt-Eval Interval	40 DAPO	40 DAPO	HARVEST

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	16	17	18	22
1	Integrity	5.6 L		13 fl oz/a		PRE	94	100	222	
1	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST				
1	Ammonium Sulfate	100 DF		2 % w/w		POST				
2	Integrity	5.6 L		16 fl oz/a		PRE	90	100	221	
2	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST				
2	Ammonium Sulfate	100 DF		2 % w/w		POST				
3	Harness Xtra 5.6	5.6 L		1.5 qt/a		PRE	93	100	218	
3	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST				
3	Ammonium Sulfate	100 DF		2 % w/w		POST				
4	Guardsman Max	5 L		1 qt/a		PRE	91	100	222	
4	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST				
4	Ammonium Sulfate	100 DF		2 % w/w		POST				
5	Harness Xtra 6L	6 L		1.2 qt/a		PRE	95	100	221	
5	Sharpen	2.9 L		2 fl oz/a		PRE				
5	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST				
5	Ammonium Sulfate	100 DF		2 % w/w		POST				
6	Harness Xtra 6L	6 L		1.2 qt/a		PRE	93	100	219	
6	Sharpen	2.9 L		3 fl oz/a		PRE				
6	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST				
6	Ammonium Sulfate	100 DF		2 % w/w		POST				
7	Harness	7 L		0.75 qt/a		PRE	92	100	219	
7	Sharpen	2.9 L		2 fl oz/a		PRE				
7	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST				
7	Ammonium Sulfate	100 DF		2 % w/w		POST				
8	Harness	7 L		0.75 qt/a		PRE	95	100	225	
8	Sharpen	2.9 L		3 fl oz/a		PRE				
8	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST				
8	Ammonium Sulfate	100 DF		2 % w/w		POST				
9	Lumax	3.94 SE		3 qt/a		PRE	98	100	222	
9	Roundup PowerMAX	4.5 L		0.75 lb ae/a		POST				
9	Ammonium Sulfate	100 DF		2 % w/w		POST				
10	Non-Treated						0	0	76	
	LSD (P=.05)						7.4	0.0	16.4	.
	Standard Deviation						5.1	0.0	11.3	.
	CV						6.03	0.0	5.45	.