

COMPARISON OF TWO PASS SYSTEMS IN CORN, 2010

Trial ID: C0510 Protocol ID: C0510
 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

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: 3 **Study Design:** RACOB� Randomized Complete Block (RCB)

Trial Initiation Comments:
 Fall Chisel, Spring Field Cultivate X2

Soil Description

% OM: 3.7 **Texture:** L loam
pH: 6.7
Analyzed By:
 300 lb/A 46-0-0, 125 lb/A 19-19-19 in Row

Application Description

	A	B
Application Date:	May-4-10	Jun-4-10
Time of Day:	8:10 pm	9:00 am
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	POST
Application Placement:	BROADC	BROADC
Air Temperature, Unit:	77 F	70 F
% Relative Humidity:	31	80
Wind Velocity, Unit:	7.5 MPH	2.5 MPH
Wind Direction:	SW	SW
Soil Temperature, Unit:	65 F	70 F
Soil Moisture:	4	2
% Cloud Cover:	10	100

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		V4
Height, Unit:		10 IN
Height Minimum, Maximum:		9 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	
Height, Unit:			0.25	IN
Pest 2 Code, Type, Scale:	CHEAL	W	CHEAL	W
Stage Majority, Percent:			L6	
Stage Minimum, Percent:			L3	
Stage Maximum, Percent:			L8	
Height, Unit:			1	IN
Height Minimum, Maximum:			0.5	2
Pest 3 Code, Type, Scale:	AMARE	W	AMARE	W
Stage Majority, Percent:			L2	
Height, Unit:			0.25	IN
Height Minimum, Maximum:			0.25	5
Pest 4 Code, Type, Scale:	AMBEL	W	AMBEL	W
Stage Majority, Percent:			L4	
Stage Minimum, Percent:			L4	
Stage Maximum, Percent:			L6	
Height, Unit:			1.5	IN
Height Minimum, Maximum:			1	2
Pest 5 Code, Type, Scale:	ABUTH	W	ABUTH	W
Stage Majority, Percent:			L2	
Stage Minimum, Percent:			L1	
Stage Maximum, Percent:			L3	
Height, Unit:			2	IN
Height Minimum, Maximum:			0.5	2.5

Application Equipment

	A		B	
Equipment Type:	CUB		CUB	
Operating Pressure, Unit:	30	PSI	30	PSI
Nozzle Type:	FF		FF	
Nozzle Size:	8003		8003	
Nozzle Spacing, Unit:	20	IN	20	IN
Boom Length, Unit:	100	IN	100	IN
Boom Height, Unit:	18	IN	22	IN
Ground Speed, Unit:	3.5	MPH	3.5	MPH
Carrier:	WATER		WATER	
Spray Volume, Unit:	20	gal/ac	20	gal/ac
Mix Size, Unit:	1	gallons	1	gallons

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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	AMARE	AMBEL	ABUTH	ANGR	CHEAL	
Crop Code	ZEAMX							
Rating Date	Jun-4-10	Jun-4-10	Jun-4-10	Jun-4-10	Jun-4-10	Jun-4-10	Jul-2-10	Jul-2-10
Rating Type	injury	control	control	control	control	control	control	control
Rating Unit	%	%	%	%	%	%	%	%
Trt-Eval Interval	AT POST	AT POST	AT POST	AT POST	AT POST	AT POST	28 DAPO	28 DAPO

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	1	2	3	4	5	6	7	8
1	Non-Treated						0	32	23	33	23	27	0	0
2	Lumax	3.94	SE	2	qt/a	PRE	0	99	100	100	93	94	99	98
	2 Touchdown Total	4.17	L	24	fl oz/a	POST								
	2 Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST								
3	Lexar	3.7	L	2.25	qt/a	PRE	0	65	67	67	63	66	96	98
	3 Touchdown Total	4.17	L	24	fl oz/a	POST								
	3 Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST								
4	Integrity	5.6	L	13	fl oz/a	PRE	0	96	73	100	62	95	98	84
	4 Touchdown Total	4.17	L	24	fl oz/a	POST								
	4 Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST								
5	SureStart	4.18	SE	1.75	pt/a	PRE	0	98	100	100	60	87	98	98
	5 Durango DMA	4	L	25	fl oz/a	POST								
	5 Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST								
6	Bicep II Magnum	5.5	L	1.3	qt/a	PRE	0	96	100	100	67	53	100	100
	6 Halex GT	4.39	L	3.6	pt/a	POST								
	6 N-Pak AMS	100	L	2.5	% v/v	POST								
	6 Activator 90	100	L	0.25	% v/v	POST								
7	Bicep II Magnum	5.5	L	1.3	qt/a	PRE	0	98	98	100	63	57	98	86
	7 Touchdown Total	4.17	L	24	fl oz/a	POST								
	7 Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST								
8							0	0	0	0	0	0	0	0
	LSD (P=.05)						0.0	52.2	47.8	54.0	47.4	49.6	4.7	7.3
	Standard Deviation						0.0	29.8	27.3	30.9	27.1	28.3	2.7	4.2
	CV						0.0	40.79	38.85	41.15	50.26	47.34	3.61	5.94

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Pest Code	AMARE	AMBEL	ABUTH	ANGR	CHEAL	AMARE	AMBEL
Crop Code							
Rating Date	Jul-2-10	Jul-2-10	Jul-2-10	Aug-17-10	Aug-17-10	Aug-17-10	Aug-17-10
Rating Type	control	control	control	control	control	control	control
Rating Unit	%	%	%	%	%	%	%
Trt-Eval Interval	28 DAPO	28 DAPO	28 DAPO	74 DAPO	74 DAPO	74 DAPO	74 DAPO

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	9	10	11	12	13	14	15
1	Non-Treated						0	0	0	0	0	0	0
2	Lumax	3.94	SE	2	qt/a	PRE	100	84	100	95	92	98	78
	2 Touchdown Total	4.17	L	24	fl oz/a	POST							
	2 Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST							
3	Lexar	3.7	L	2.25	qt/a	PRE	93	83	100	90	90	93	75
	3 Touchdown Total	4.17	L	24	fl oz/a	POST							
	3 Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST							
4	Integrity	5.6	L	13	fl oz/a	PRE	100	83	98	93	77	98	72
	4 Touchdown Total	4.17	L	24	fl oz/a	POST							
	4 Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST							
5	SureStart	4.18	SE	1.75	pt/a	PRE	100	85	100	95	88	100	85
	5 Durango DMA	4	L	25	fl oz/a	POST							
	5 Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST							
6	Bicep II Magnum	5.5	L	1.3	qt/a	PRE	100	98	100	97	97	100	90
	6 Halex GT	4.39	L	3.6	pt/a	POST							
	6 N-Pak AMS	100	L	2.5	% v/v	POST							
	6 Activator 90	100	L	0.25	% v/v	POST							
7	Bicep II Magnum	5.5	L	1.3	qt/a	PRE	99	82	98	93	73	95	77
	7 Touchdown Total	4.17	L	24	fl oz/a	POST							
	7 Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST							
8							0	0	0	0	0	0	0
	LSD (P=.05)						7.2	6.5	2.9	7.9	10.7	6.2	11.6
	Standard Deviation						4.1	3.7	1.6	4.5	6.1	3.5	6.6
	CV						5.58	5.75	2.19	6.41	9.43	4.83	11.08

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	ABUTH	ANGR	CHEAL	AMSARE	AMBEL
Crop Code					
Rating Date	Aug-17-10	Sep-20-10	Sep-20-10	Sep-20-10	Sep-20-10
Rating Type	control	control	control	control	control
Rating Unit	%	%	%	%	%
Trt-Eval Interval	74 DAPO	HARVEST	HARVEST	HARVEST	HARVEST

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	16	17	18	19	20	21	22	23
1	Non-Treated						0	0.0	0.0	0.0	0.0	0.0	0.0	
2	Lumax	3.94	SE	2	qt/a	PRE	100	97.7	90.0	100.0	86.7	100.0		
2	Touchdown Total	4.17	L	24	fl oz/a	POST								
2	Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST								
3	Lexar	3.7	L	2.25	qt/a	PRE	100	98.7	93.3	96.7	90.0	100.0		
3	Touchdown Total	4.17	L	24	fl oz/a	POST								
3	Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST								
4	Integrity	5.6	L	13	fl oz/a	PRE	97	95.0	85.0	98.3	80.0	100.0		
4	Touchdown Total	4.17	L	24	fl oz/a	POST								
4	Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST								
5	SureStart	4.18	SE	1.75	pt/a	PRE	100	96.0	91.7	98.3	88.3	100.0		
5	Durango DMA	4	L	25	fl oz/a	POST								
5	Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST								
6	Bicep II Magnum	5.5	L	1.3	qt/a	PRE	100	100.0	98.3	100.0	98.3	100.0		
6	Halex GT	4.39	L	3.6	pt/a	POST								
6	N-Pak AMS	100	L	2.5	% v/v	POST								
6	Activator 90	100	L	0.25	% v/v	POST								
7	Bicep II Magnum	5.5	L	1.3	qt/a	PRE	95	94.3	76.7	88.3	90.0	533.3		
7	Touchdown Total	4.17	L	24	fl oz/a	POST								
7	Ammonium Sulfate	100	DF	8.5	lb/100 gal	POST								
8							0	0.0	0.0	0.0	0.0	0.0		
	LSD (P=.05)						4.4	4.51	8.08	4.43	8.33	464.75	.	.
	Standard Deviation						2.5	2.58	4.61	2.53	4.76	265.36	.	.
	CV						3.42	3.54	6.9	3.48	7.13	205.44	.	.