

Enlist Corn Weed Control Systems, Two-Pass and One-Pass Compared to Commercial Standards.

Trial ID: 16-8A Location: Belleville Res. Center Trial Year: 2016
 Investigator: Karla L. Gage, Ph.D.

<p>Trial Status: F one-year/final Initiation Date: 6-1-16 Completion Date: 7-11-16</p>	Trial Location
<p>City: Belleville Country: USA State/Prov.: Illinois IL Postal Code: 62221</p>	

<p>Objectives: Demonstrate the use of Enlist Duo in one- and two-pass corn weed control systems.</p>

Contacts
<p>Study Director: Karla Gage, Ph.D. Title: Assistant Professor of Weed Science Organization: Southern Illinois University Carbondale Address: 1205 Lincoln Drive MC 4415 Phone No.: 618-453-7679 City+State/Prov: Carbondale, IL Postal Code: 62901 E-mail: kgage@siu.edu Country: USA</p>

Crop Description
<p>Crop 1: ZEAMD Zea mays indentata Dent corn Variety: MY13C99 BBCH Scale: BCOR Description: Enlist corn</p> <p style="text-align: right;">Planting Date: 6-1-16 Planting Method: SEEDED</p> <p>Planting Rate, Unit: 32000 S/A Depth, Unit: 1.5 IN Row Spacing, Unit: 30 IN</p>

Pest Description
<p>Pest 1 Type: W Code: PANDI Panicum dichotomiflorum Michx. Common Name: panicum, fall</p> <p>Pest 2 Type: W Code: ABUTH Abutilon theophrasti Medik. Common Name: velvetleaf</p> <p>Pest 3 Type: W Code: AMATA Amaranthus rudis Sauer Common Name: waterhemp, common</p> <p>Pest 4 Type: W Code: IPOHE Ipomoea hederacea (L.) Jacq. Common Name: morningglory, ivyleaf</p>

Site and Design						
<p>Treated Plot Width: 7.5 FT Total Plot Width: 10 FT Site Type: FIELD Treated Plot Length: 30 FT Total Plot Length: 30 FT Experimental Unit: 1 PLOT Tillage Type: REDTIL reduced-till Study Design: RACOB� Randomized Complete Block (RCB)</p> <p>Replications: 4 Untreated Arrangement: INCLUDED single control randomized in each block</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th>No.</th> <th>Previous Crop</th> <th>Year</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>GLXMA</td> <td>2015</td> </tr> </tbody> </table>	No.	Previous Crop	Year	1.	GLXMA	2015
No.	Previous Crop	Year				
1.	GLXMA	2015				

Maintenance				
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No.</th> <th>Maintenance Product Name</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>N 150 LB/A, P2O5 0 LB/A, K2O 0 LB/A</td> </tr> </tbody> </table>	No.	Maintenance Product Name	1.	N 150 LB/A, P2O5 0 LB/A, K2O 0 LB/A
No.	Maintenance Product Name			
1.	N 150 LB/A, P2O5 0 LB/A, K2O 0 LB/A			

Soil Description									
<p>Description Name: 08A_2013 % OM: 2.6 Texture: SIL silt loam pH: 6.5 Soil Name: Pierron CEC: 10</p>									
Additional Measured Elements									
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Element</th> <th>Quantity</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>P1</td> <td>65</td> <td>lb/A</td> </tr> <tr> <td>K</td> <td>315</td> <td>lb/A</td> </tr> </tbody> </table>	Element	Quantity	Unit	P1	65	lb/A	K	315	lb/A
Element	Quantity	Unit							
P1	65	lb/A							
K	315	lb/A							

Moisture and Weather Conditions
<p>Overall Moisture Conditions: NORMAL Closest Weather Station: ICN - Belleville IL Distance, Unit: 0.5 MI</p>

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No.	Date	Amount	Unit	Type	Type Description	Interval	Unit	Min Temp	Max Temp	Temp Unit
1.	4-1-16					7	DAY	32	75	F
2.	4-6-16	0.49	IN	RAIN	rain	1	DAY			
3.	4-8-16					7	DAY	28	71	F
4.	4-10-16	0.97	IN	RAIN	rain	2	DAY			
5.	4-15-16					7	DAY	48	81	F
6.	4-20-16	0.45	IN	RAIN	rain	3	DAY			
7.	4-22-16					7	DAY	47	85	F
8.	4-26-16	1.74	IN	RAIN	rain	2	DAY			
9.	4-29-16					7	DAY	46	75	F
10.	4-29-16	1.94	IN	RAIN	rain	2	DAY			
11.	5-4-16	0.02	IN	RAIN	rain	1	DAY			
12.	5-6-16					7	DAY	44	87	F
13.	5-7-16	0.07	IN	RAIN	rain	1	DAY			
14.	5-9-16	2.12	IN	RAIN	rain	5	DAY			
15.	5-13-16					7	DAY	41	76	F
16.	5-16-16	1.06	IN	RAIN	rain	2	DAY			
17.	5-20-16					7	DAY	51	83	F
18.	5-20-16	0.06	IN	RAIN	rain	1	DAY			
19.	5-25-16	0.68	IN	RAIN	rain	3	DAY			
20.	5-27-16					7	DAY	62	88	F
21.	5-31-16	0.03	IN	RAIN	rain	2	DAY			
22.	6-3-16					7	DAY	55	89	F
23.	6-3-16	0.01	IN	RAIN	rain	1	DAY			
24.	6-4-16	0.72	IN	RAIN	rain	1	DAY			
25.	6-10-16					7	DAY	65	96	F
26.	6-13-16	0.03	IN	RAIN	rain	1	DAY			
27.	6-17-16					7	DAY	67	97	F
28.	6-21-16	0.01	IN	RAIN	rain	1	DAY			
29.	6-24-16					7	DAY	57	95	F
30.	6-25-16	0.02	IN	RAIN	rain	1	DAY			
31.	6-30-16	0.03	IN	RAIN	rain	1	DAY			
32.	7-1-16					7	DAY	60	91	F
33.	7-1-16	2.26	IN	RAIN	rain	4	DAY			
34.	7-6-16	0.32	IN	RAIN	rain	3	DAY			
35.	7-8-16					7	DAY	67	93	F
36.	7-13-16	0.49	IN	RAIN	rain	2	DAY			
37.	7-15-16					7	DAY	68	93	F
38.	7-17-16	0.02	IN	RAIN	rain	1	DAY			
39.	7-19-16	1.47	IN	RAIN	rain	2	DAY			
40.	7-25-16	0.1	IN	RAIN	rain	1	DAY			

Enlist Corn Weed Control Systems, Two-Pass and One-Pass Compared to Commercial Standards.

Trial ID: 16-8A Location: Belleville Res. Center Trial Year: 2016
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Application Description

	A	B	C
Application Date:	6-1-16	6-13-16	6-20-16
Appl. Start Time:	17:20	12:35	6:05
Appl. Stop Time:	17:30	12:50	6:15
Application Method:	Spray	Spray	Spray
Application Timing:	PRE	V2	V4
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	MCG	MCG	MCG
Air Temperature, Unit:	73 F	92 F	80 F
% Relative Humidity:	90	56	85
Wind Velocity, Unit:	3 MPH	5 MPH	2 MPH
Wind Direction:	SE	S	WSW
Dew Presence (Y/N):	N	N	Y
Soil Temperature, Unit:	73 F	79 F	80 F
Soil Moisture:	NORMAL	BELNOR	BELNOR
% Cloud Cover:	0	25	0
Next Moisture Occurred On:	6-4-16	6-30-16	6-30-16
Time to Next Moisture, Unit:	3 DAY	17 DAY	10 DAY

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD	ZEAMD	ZEAMD
Stage Scale Used:	DESC	DESC	DESC
Stage Majority, Percent:	NA	V3	V5
Stage Minimum, Percent:		V2	V4
Stage Maximum, Percent:		V3	V5
Height, Unit:		5 IN	10 IN
Height Minimum, Maximum:		3 5	8 10

Enlist Corn Weed Control Systems, Two-Pass and One-Pass Compared to Commercial Standards.

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Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	PANDI W	PANDI W	PANDI W
Stage Majority, Percent:	NA	3	NA
Stage Minimum, Percent:		2	
Stage Maximum, Percent:		3	
Height, Unit:		1.5 IN	
Height Minimum, Maximum:		0.125 3	
Density, Unit:		3 FT2	
Pest 2 Code, Type, Scale:	ABUTH W	ABUTH W	ABUTH W
Stage Majority, Percent:	NA	1	2
Stage Minimum, Percent:		COTY	COTY
Stage Maximum, Percent:		2	2
Height, Unit:		0.5 IN	0.5 IN
Height Minimum, Maximum:		0.125 0.75	0.25 0.5
Density, Unit:		1 FT2	0.1 FT2
Pest 3 Code, Type, Scale:	AMATA W	AMATA W	AMATA W
Stage Majority, Percent:	NA	1	NA
Stage Minimum, Percent:		COTY	
Stage Maximum, Percent:		2	
Height, Unit:		0.25 IN	
Height Minimum, Maximum:		0.125 0.5	
Density, Unit:		4 FT2	
Pest 4 Code, Type, Scale:	IPOHE W	IPOHE W	IPOHE W
Stage Majority, Percent:	NA	COTY	2
Stage Minimum, Percent:		COTY	1
Stage Maximum, Percent:		1	2
Height, Unit:		0.5 IN	1 IN
Height Minimum, Maximum:		0.25 0.75	0.5 1
Density, Unit:		0.02 FT2	0.1 FT2

Application Equipment

	A	B	C
Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer
Equipment Type:	BACSPR	BACSPR	BACSPR
Operation Pressure, Unit:	30 PSI	30 PSI	30 PSI
Nozzle Type:	XR	TTI	TTI
Nozzle Size:	8002	11002	11002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

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Pest Code							ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD
Crop Code							6-20-16	6-27-16	6-27-16	7-5-16	7-5-16	7-11-16
Rating Date							Injury	Injury	Injury	Injury	Injury	Injury
Rating Type							Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit							7 DA-B	7 DA-C	14 DA-B	15 DA-C	22 DA-B	21 DA-C
Rating Timing												
Trt-Eval Interval												
Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	SURESTART II DURANGO DMA AMS - LIQUID	4.16	SE	1.3 lb ai/a	2.5 pt/a	2.5 pt/a	PRE	A		0 a		0 a
		4	SL	1 lb ae/a	2 pt/a		V4	C				
		100	SL	2.5 % v/v	2.5 % v/v		V4	C				
2	SURESTART II ENLIST DUO AMS - LIQUID	4.16	SE	1.3 lb ai/a	2.5 pt/a	2.5 pt/a	PRE	A		0 a		0 a
		3.34	SL	1.46 lb ae/a	3.5 pt/a		V4	C				
		100	SL	2.5 % v/v	2.5 % v/v		V4	C				
3	SURESTART II ENLIST DUO AMS - LIQUID	4.16	SE	1.3 lb ai/a	2.5 pt/a	4.67 pt/a	PRE	A		0 a		0 a
		3.34	SL	1.95 lb ae/a	4.67 pt/a		V4	C				
		100	SL	2.5 % v/v	2.5 % v/v		V4	C				
4	HARNESX XTRA 5.6L ROUNDUP POWERMAX AMS - LIQUID	5.6	EC	3.5 lb ai/a	2.5 qt/a	28.4 fl oz/a	PRE	A		0 a		0 a
		4.5	SL	1 lb ae/a	2.5 qt/a		V4	C				
		100	SL	2.5 % v/v	2.5 % v/v		V4	C				
5	NONTREATED								0	0	0	0
6	SURESTART II DURANGO DMA AMS - LIQUID	4.16	SE	1.04 lb ai/a	2 pt/a	2 pt/a	V2	B	0 a		0 a	
		4	SL	1 lb ae/a	2 pt/a		V2	B				
		100	SL	2.5 % v/v	2.5 % v/v		V2	B				
7	SURESTART II ENLIST DUO AMS - LIQUID	4.16	SE	1.04 lb ai/a	2 pt/a	3.5 pt/a	V2	B	0 a		0 a	
		3.34	SL	1.46 lb ae/a	3.5 pt/a		V2	B				
		100	SL	2.5 % v/v	2.5 % v/v		V2	B				
8	SURESTART II ENLIST DUO AMS - LIQUID	4.16	SE	1.04 lb ai/a	2 pt/a	4.67 pt/a	V2	B	0 a		0 a	
		3.34	SL	1.95 lb ae/a	4.67 pt/a		V2	B				
		100	SL	2.5 % v/v	2.5 % v/v		V2	B				
9	HALEX GT PREFERENCE AMS - LIQUID	4.389	CS	1.98 lb ai/a	3.6 pt/a	0.25 % v/v	V2	B	0 a		0 a	
		100	SL	0.25 % v/v	0.25 % v/v		V2	B				
		100	SL	2.5 % v/v	2.5 % v/v		V2	B				
LSD P=.05								
Standard Deviation									0.0	0.0	0.0	0.0
CV									0.0	0.0	0.0	0.0
Replicate F									0.000	0.000	0.000	0.000
Replicate Prob(F)									1.0000	1.0000	1.0000	1.0000
Treatment F									0.000	0.000	0.000	0.000
Treatment Prob(F)									1.0000	1.0000	1.0000	1.0000

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Could not calculate LSD (% mean diff) for columns 5,10,11,21,16,26,22 because error mean square = 0.

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Pest Code		PANDI	PANDI	PANDI	PANDI	PANDI							
Crop Code		6-20-16	6-27-16	7-5-16	7-5-16	7-11-16							
Rating Date		Control	Control	Control	Control	Control							
Rating Type		Percent	Percent	Percent	Percent	Percent							
Rating Unit		0 DA-C	14 DA-B	15 DA-C	22 DA-B	21 DA-C							
Rating Timing													
Trt-Eval Interval													
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
1	SURESTART II DURANGO DMA AMS - LIQUID	4.16	SE	1.3 lb ai/a	2.5 pt/a	2.5 pt/a	PRE	A	99 a		99 a		99 a
		4	SL	1 lb ae/a	2 pt/a		V4	C					
		100	SL	2.5 % v/v	2.5 % v/v		V4	C					
2	SURESTART II ENLIST DUO AMS - LIQUID	4.16	SE	1.3 lb ai/a	2.5 pt/a	2.5 pt/a	PRE	A	98 a		99 a		99 a
		3.34	SL	1.46 lb ae/a	3.5 pt/a		V4	C					
		100	SL	2.5 % v/v	2.5 % v/v		V4	C					
3	SURESTART II ENLIST DUO AMS - LIQUID	4.16	SE	1.3 lb ai/a	2.5 pt/a	4.67 pt/a	PRE	A	99 a		99 a		99 a
		3.34	SL	1.95 lb ae/a	4.67 pt/a		V4	C					
		100	SL	2.5 % v/v	2.5 % v/v		V4	C					
4	HARNESS XTRA 5.6L ROUNDUP POWERMAX AMS - LIQUID	5.6	EC	3.5 lb ai/a	2.5 qt/a	28.4 fl oz/a	PRE	A	99 a		99 a		99 a
		4.5	SL	1 lb ae/a	2.5 qt/a		V4	C					
		100	SL	2.5 % v/v	2.5 % v/v		V4	C					
5	NONTREATED								0	0	0	0	0
6	SURESTART II DURANGO DMA AMS - LIQUID	4.16	SE	1.04 lb ai/a	2 pt/a	2 pt/a	V2	B		96 a		95 a	
		4	SL	1 lb ae/a	2 pt/a		V2	B					
		100	SL	2.5 % v/v	2.5 % v/v		V2	B					
7	SURESTART II ENLIST DUO AMS - LIQUID	4.16	SE	1.04 lb ai/a	2 pt/a	3.5 pt/a	V2	B		96 a		95 a	
		3.34	SL	1.46 lb ae/a	3.5 pt/a		V2	B					
		100	SL	2.5 % v/v	2.5 % v/v		V2	B					
8	SURESTART II ENLIST DUO AMS - LIQUID	4.16	SE	1.04 lb ai/a	2 pt/a	4.67 pt/a	V2	B		99 a		98 a	
		3.34	SL	1.95 lb ae/a	4.67 pt/a		V2	B					
		100	SL	2.5 % v/v	2.5 % v/v		V2	B					
9	HALEX GT PREFERENCE AMS - LIQUID	4.389	CS	1.98 lb ai/a	3.6 pt/a	0.25 % v/v	V2	B		94 a		89 b	
		100	SL	0.25 % v/v	0.25 % v/v		V2	B					
		100	SL	2.5 % v/v	2.5 % v/v		V2	B					
LSD P=.05		0.7							0.7	5.5	.	4.4	0.4
Standard Deviation		0.4							0.4	3.4	0.0	2.8	0.3
CV		0.45							0.45	3.56	0.0	2.92	0.25
Replicate F		1.286							1.286	0.408	0.000	1.287	1.000
Replicate Prob(F)		0.3373							0.3373	0.7510	1.0000	0.3371	0.4363
Treatment F		2.143							2.143	1.453	0.000	8.339	1.000
Treatment Prob(F)		0.1649							0.1649	0.2912	1.0000	0.0058	0.4363

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Pest Code							ABUTH	ABUTH	ABUTH	ABUTH	ABUTH	
Crop Code							6-20-16	6-27-16	7-5-16	7-5-16	7-11-16	
Rating Date							Control	Control	Control	Control	Control	
Rating Type							Percent	Percent	Percent	Percent	Percent	
Rating Unit												
Rating Timing												
Trt-Eval Interval							0 DA-C	14 DA-B	15 DA-C	22 DA-B	21 DA-C	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	SURESTART II DURANGO DMA AMS - LIQUID	4.16 4 100	SE SL SL	1.3 1 2.5	lb ai/a lb ae/a % v/v	2.5 2 2.5	pt/a pt/a % v/v	PRE V4 V4	A C C	96 a	95 a	95 a
2	SURESTART II ENLIST DUO AMS - LIQUID	4.16 3.34 100	SE SL SL	1.3 1.46 2.5	lb ai/a lb ae/a % v/v	2.5 3.5 2.5	pt/a pt/a % v/v	PRE V4 V4	A C C	98 a	99 a	98 a
3	SURESTART II ENLIST DUO AMS - LIQUID	4.16 3.34 100	SE SL SL	1.3 1.95 2.5	lb ai/a lb ae/a % v/v	2.5 4.67 2.5	pt/a pt/a % v/v	PRE V4 V4	A C C	99 a	99 a	99 a
4	HARNESX XTRA 5.6L ROUNDUP POWERMAX AMS - LIQUID	5.6 4.5 100	EC SL SL	3.5 1 2.5	lb ai/a lb ae/a % v/v	2.5 28.4 2.5	qt/a fl oz/a % v/v	PRE V4 V4	A C C	95 a	97 a	96 a
5	NONTREATED									0	0	0
6	SURESTART II DURANGO DMA AMS - LIQUID	4.16 4 100	SE SL SL	1.04 1 2.5	lb ai/a lb ae/a % v/v	2 2 2.5	pt/a pt/a % v/v	V2 V2 V2	B B B	94 a	95 a	
7	SURESTART II ENLIST DUO AMS - LIQUID	4.16 3.34 100	SE SL SL	1.04 1.46 2.5	lb ai/a lb ae/a % v/v	2 3.5 2.5	pt/a pt/a % v/v	V2 V2 V2	B B B	95 a	92 a	
8	SURESTART II ENLIST DUO AMS - LIQUID	4.16 3.34 100	SE SL SL	1.04 1.95 2.5	lb ai/a lb ae/a % v/v	2 4.67 2.5	pt/a pt/a % v/v	V2 V2 V2	B B B	92 a	94 a	
9	HALEX GT PREFERENCE AMS - LIQUID	4.389 100 100	CS SL SL	1.98 0.25 2.5	lb ai/a % v/v % v/v	3.6 0.25 2.5	pt/a % v/v % v/v	V2 V2 V2	B B B	94 a	94 a	
LSD P=.05							5.1	8.7	4.6	5.0	4.5	
Standard Deviation							3.2	5.5	2.9	3.1	2.8	
CV							3.29	5.83	2.99	3.36	2.9	
Replicate F							2.332	1.444	1.599	0.411	1.542	
Replicate Prob(F)							0.1424	0.2935	0.2571	0.7494	0.2697	
Treatment F							0.842	0.340	1.914	0.629	1.965	
Treatment Prob(F)							0.5047	0.7970	0.1978	0.6141	0.1899	

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Crop Code							6-20-16	6-27-16	7-5-16	7-5-16	7-11-16		
Rating Date							Control	Control	Control	Control	Control		
Rating Type							Percent	Percent	Percent	Percent	Percent		
Rating Unit							0 DA-C	14 DA-B	15 DA-C	22 DA-B	21 DA-C		
Rating Timing													
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Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
1	SURESTART II DURANGO DMA AMS - LIQUID	4.16 4 100	SE SL SL	1.3 lb ai/a 1 lb ae/a 2.5 % v/v	2.5 pt/a 2 pt/a 2.5 % v/v		PRE V4 V4	A C C	99 a		99 a		
2	SURESTART II ENLIST DUO AMS - LIQUID	4.16 3.34 100	SE SL SL	1.3 lb ai/a 1.46 lb ae/a 2.5 % v/v	2.5 pt/a 3.5 pt/a 2.5 % v/v		PRE V4 V4	A C C	99 a		99 a		
3	SURESTART II ENLIST DUO AMS - LIQUID	4.16 3.34 100	SE SL SL	1.3 lb ai/a 1.95 lb ae/a 2.5 % v/v	2.5 pt/a 4.67 pt/a 2.5 % v/v		PRE V4 V4	A C C	99 a		99 a		
4	HARNESS XTRA 5.6L ROUNDUP POWERMAX AMS - LIQUID	5.6 4.5 100	EC SL SL	3.5 lb ai/a 1 lb ae/a 2.5 % v/v	2.5 qt/a 28.4 fl oz/a 2.5 % v/v		PRE V4 V4	A C C	99 a		99 a		
5	NONTREATED								0	0	0		
6	SURESTART II DURANGO DMA AMS - LIQUID	4.16 4 100	SE SL SL	1.04 lb ai/a 1 lb ae/a 2.5 % v/v	2 pt/a 2 pt/a 2.5 % v/v		V2 V2 V2	B B B		95 ab	93 b		
7	SURESTART II ENLIST DUO AMS - LIQUID	4.16 3.34 100	SE SL SL	1.04 lb ai/a 1.46 lb ae/a 2.5 % v/v	2 pt/a 3.5 pt/a 2.5 % v/v		V2 V2 V2	B B B		99 a	95 ab		
8	SURESTART II ENLIST DUO AMS - LIQUID	4.16 3.34 100	SE SL SL	1.04 lb ai/a 1.95 lb ae/a 2.5 % v/v	2 pt/a 4.67 pt/a 2.5 % v/v		V2 V2 V2	B B B		99 a	98 a		
9	HALEX GT PREFERENCE AMS - LIQUID	4.389 100 100	CS SL SL	1.98 lb ai/a 0.25 % v/v 2.5 % v/v	3.6 pt/a 0.25 % v/v 2.5 % v/v		V2 V2 V2	B B B		91 b	86 c		
LSD P=.05									0.5	5.2	0.9	4.1	0.7
Standard Deviation									0.3	3.2	0.6	2.5	0.4
CV									0.29	3.38	0.59	2.75	0.41
Replicate F									3.000	1.612	1.653	2.103	2.000
Replicate Prob(F)									0.0877	0.2542	0.2455	0.1702	0.1846
Treatment F									1.000	5.122	0.673	16.590	1.000
Treatment Prob(F)									0.4363	0.0244	0.5896	0.0005	0.4363

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Could not calculate LSD (% mean diff) for columns 5,10,11,21,16,26,22 because error mean square = 0.

Enlist Corn Weed Control Systems, Two-Pass and One-Pass Compared to Commercial Standards.

Trial ID: 16-8A Location: Belleville Res. Center Trial Year: 2016
Investigator: Karla L. Gage, Ph.D.

Pest Code								IP0HE	IP0HE	IP0HE	IP0HE	IP0HE	
Crop Code								6-20-16	6-27-16	7-5-16	7-5-16	7-11-16	
Rating Date								Control	Control	Control	Control	Control	
Rating Type								Percent	Percent	Percent	Percent	Percent	
Rating Unit													
Rating Timing													
Trt-Eval Interval								0 DA-C	14 DA-B	15 DA-C	22 DA-B	21 DA-C	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	SURESTART II DURANGO DMA AMS - LIQUID	4.16 4 100	SE SL SL	1.3 1 2.5	lb ai/a lb ae/a % v/v	2.5 2 2.5	pt/a pt/a % v/v	PRE V4 V4	A C C	97 a		97 b	95 c
2	SURESTART II ENLIST DUO AMS - LIQUID	4.16 3.34 100	SE SL SL	1.3 1.46 2.5	lb ai/a lb ae/a % v/v	2.5 3.5 2.5	pt/a pt/a % v/v	PRE V4 V4	A C C	98 a		99 a	99 a
3	SURESTART II ENLIST DUO AMS - LIQUID	4.16 3.34 100	SE SL SL	1.3 1.95 2.5	lb ai/a lb ae/a % v/v	2.5 4.67 2.5	pt/a pt/a % v/v	PRE V4 V4	A C C	97 a		99 a	99 a
4	HARNESS XTRA 5.6L ROUNDUP POWERMAX AMS - LIQUID	5.6 4.5 100	EC SL SL	3.5 1 2.5	lb ai/a lb ae/a % v/v	2.5 28.4 2.5	qt/a fl oz/a % v/v	PRE V4 V4	A C C	98 a		97 b	98 b
5	NONTREATED									0	0	0	0
6	SURESTART II DURANGO DMA AMS - LIQUID	4.16 4 100	SE SL SL	1.04 1 2.5	lb ai/a lb ae/a % v/v	2 2 2.5	pt/a pt/a % v/v	V2 V2 V2	B B B		99 a		97 a
7	SURESTART II ENLIST DUO AMS - LIQUID	4.16 3.34 100	SE SL SL	1.04 1.46 2.5	lb ai/a lb ae/a % v/v	2 3.5 2.5	pt/a pt/a % v/v	V2 V2 V2	B B B		97 a		97 a
8	SURESTART II ENLIST DUO AMS - LIQUID	4.16 3.34 100	SE SL SL	1.04 1.95 2.5	lb ai/a lb ae/a % v/v	2 4.67 2.5	pt/a pt/a % v/v	V2 V2 V2	B B B		97 a		98 a
9	HALEX GT PREFERENCE AMS - LIQUID	4.389 100 100	CS SL SL	1.98 0.25 2.5	lb ai/a % v/v % v/v	3.6 0.25 2.5	pt/a % v/v % v/v	V2 V2 V2	B B B		97 a		96 a
LSD P=.05								2.8	5.9	1.3	2.3	0.4	
Standard Deviation								1.8	3.7	0.8	1.4	0.3	
CV								1.83	3.77	0.83	1.48	0.26	
Replicate F								0.000	1.330	1.750	0.192	1.000	
Replicate Prob(F)								1.0000	0.3242	0.2264	0.8993	0.4363	
Treatment F								0.789	0.438	6.250	0.515	217.000	
Treatment Prob(F)								0.5296	0.7311	0.0140	0.6820	0.0001	

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
Could not calculate LSD (% mean diff) for columns 5,10,11,21,16,26,22 because error mean square = 0.

Trial Comments

1. Protocol: Dow (E002). Field Day Tour.
2. Ratings:
Report planting within 2 days.
CI at 7 and 14 DA-B for treatments 6-9; and 7 and 14 DA-C for treatments 1-4.
CI as overall, growth inhibition, chlorosis, necrosis, and leaning.
WC at 14 and 21 DA-B for treatments 6-9.
WC at 0, 14, and 21 DA-C for treatments 1-4.
Record ratings for B and C in separate columns.
Rate before spray application C.
3. No yield. crop destruct before tassel.
4. POST application C is corn stage V4 but can be sooner, before weeds exceed 4-6 inch.
5. At POST application B record weed height, leaves and density from each nontreated plot.
At POST application C record weed height, leaves and density from each plot of treatment 1.
6. Maintain at least a 10 ft bare ground or mowed grass border around all plots and cropped borders.
7. Rainfall following the PRE application A was 0.73 inch over 2 days beginning 3 days later.
Rainfall following the V2 application B was 2.61 inch over 9 days beginning 17 days later.
Rainfall following the V4 application C was 2.61 inch over 9 days beginning 10 days later.
8. Lack of complete weed control following the V2 or V4 applications is new emergence.
There was no crop injury observed that could be attributed to herbicide treatment,
there was some slight stand reduction due to environmental conditions.
9. Weed height, stage and density at applications B and C in selected plots as follows;

Application	Plot	Weed	Height (inch)	Stage (leaves)	Density (sqft)
B	105	PANDI	1.5	3	3
		ABUTH	1	2	2
		AMATA	0.25	1	4
		IPOHE	0.5	1	0.02
B	208	PANDI	1.5	3	4
		ABUTH	1	2	2
		AMATA	0.25	1	4
		IPOHE	0.5	1	0.02
B	303	PANDI	1.5	3	4
		ABUTH	1	2	5
		AMATA	0.25	1	5
		IPOHE	0.5	1	1
B	406	PANDI	1.5	3	1
		ABUTH	1	2	1
		AMATA	0.25	1	8
		IPOHE	0.5	1	0.02
C	101	ABUTH	0.5	2	0.01
		IPOHE	1	2	0.1
C	209	ABUTH	0.5	2	0.1
		IPOHE	1	2	0.01

Enlist Corn Weed Control Systems, Two-Pass and One-Pass Compared to Commercial Standards.

Trial ID: 16-8A Location: Belleville Res. Center Trial Year: 2016
Investigator: Karla L. Gage, Ph.D.

C	305	ABUTH	0.5	2	0.1
		IPOHE	1	2	0.1
C	403	ABUTH	0.5	2	0.1
		IPOHE	1	2	0.1

10. Not harvested, crop destruct.