

Southern Illinois University

Surestart Combinations Applied Early Postemergence in Corn.

Trial ID: 13-DSO-H001 Location: De Soto, IL Trial Year: 2013
Investigator: Bryan Young

Trial Status: F one-year/final Initiation Date: 5-20-13 Completion Date: 7-12-13	
City: De Soto Country: USA State/Prov.: Illinois IL Postal Code: 62924	Trial Location

Objectives:
Evaluate crop tolerance and efficacy of Surestart plus Durango DMA tank-mixed with Callisto and applied postemergence.

Contacts	
Study Director: Bryan Young Organization: Southern Illinois University Address: 1205 Lincoln Drive - AG 176 - MC 4415 City+State/Prov: Carbondale IL Postal Code: 62901 Country: USA	Title: Professor Phone No.: 618-453-7679 Mobile No.: 618-713-6471 E-mail: bgyoung@siu.edu

Crop Description	
Crop 1: ZEAMD Zea mays indentata Dent corn Variety: DKC 63-33 Description: SS RIB	
Planting Rate, Unit: 28000 S/A Depth, Unit: 2 IN Row Spacing, Unit: 30 IN	Planting Date: 5-20-13 Planting Method: SEEDED

Pest Description	
Pest 1 Type: W Code: AMATA <i>Amaranthus rudis</i> Sauer Common Name: waterhemp, common Description: glyphosate-resistant waterhemp	

Site and Design							
Treated Plot Width: 6.67 FT Total Plot Width: 10 FT Treated Plot Length: 30 FT Total Plot Length: 30 FT	Site Type: FIELD Experimental Unit: 1 PLOT Tillage Type: NOTILL no-till Study Design: RACOB Randomized Complete Block (RCB)						
Replications: 4 Untreated Arrangement: INCLUDED single control randomized in each block							
<table border="1" style="width: 100%;"> <tr> <th>No.</th> <th>Previous Crop</th> <th>Year</th> </tr> <tr> <td>1.</td> <td>GLXMA</td> <td>2012</td> </tr> </table>		No.	Previous Crop	Year	1.	GLXMA	2012
No.	Previous Crop	Year					
1.	GLXMA	2012					

Maintenance					
<table border="1" style="width: 100%;"> <tr> <th>No.</th> <th>Maintenance Product Name</th> </tr> <tr> <td>1.</td> <td>N 150 LB/A, P2O5 0 LB/A, K2O 0 LB/A</td> </tr> </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										
% Sand: 14 % OM: 2.12 Texture: SIL silt loam % Silt: 67 pH: 6.9 Soil Name: Okaw % Clay: 19 CEC: 12.7										
Additional Measured Elements										
<table border="1" style="width: 100%;"> <tr> <th>Element</th> <th>Quantity</th> <th>Unit</th> </tr> <tr> <td>P1</td> <td>112</td> <td>lb/A</td> </tr> <tr> <td>K</td> <td>386</td> <td>lb/A</td> </tr> </table>		Element	Quantity	Unit	P1	112	lb/A	K	386	lb/A
Element	Quantity	Unit								
P1	112	lb/A								
K	386	lb/A								

Moisture and Weather Conditions	
Overall Moisture Conditions: NORMAL Closest Weather Station: SOUTHERN IL AIRPORT (93810)	Distance, Unit: 1.5 MI

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No.	Date	Amount	Unit	Type	Type Description	Interval	Unit	Min Temp	Max Temp	Temp Unit
1.	5-3-13	1.33	IN	RAIN	rain	3	DAY			
2.	5-5-13	0.75	IN	RAIN	rain	2	DAY			
3.	5-6-13					7	DAY	41	80	F
4.	5-10-13	0.17	IN	RAIN	rain	3	DAY			
5.	5-13-13					7	DAY	37	87	F
6.	5-16-13	0.23	IN	RAIN	rain	2	DAY			
7.	5-20-13					7	DAY	43	85	F
8.	5-21-13	0.91	IN	RAIN	rain	1	DAY			
9.	5-27-13					7	DAY	59	86	F
10.	5-31-13	0.7	IN	RAIN	rain	3	DAY			
11.	6-1-13	1.67	IN	RAIN	rain	2	DAY			
12.	6-3-13					7	DAY	50	82	F
13.	6-10-13	0.13	IN	RAIN	rain	5	DAY			
14.	6-10-13					7	DAY	57	93	F
15.	6-17-13	0.36	IN	RAIN	rain	2	DAY			
16.	6-17-13					7	DAY	61	92	F
17.	6-22-13	0.34	IN	RAIN	rain	2	DAY			
18.	6-24-13					7	DAY	64	93	F
19.	6-26-13	1.25	IN	RAIN	rain	2	DAY			
20.	6-30-13	0.3	IN	RAIN	rain	2	DAY			
21.	7-1-13					7	DAY	57	88	F
22.	7-2-13	1.16	IN	RAIN	rain	2	DAY			
23.	7-8-13					7	DAY	59	92	F
24.	7-14-13	0.05	IN	RAIN	rain	5	DAY			
25.	7-15-13					7	DAY	68	93	F
26.	7-20-13	1.24	IN	RAIN	rain	2	DAY			

Application Description

	A
Application Date:	6-14-13
Appl. Start Time:	10:15
Appl. Stop Time:	11:00
Application Method:	Spray
Application Timing:	2-4"W
Application Placement:	BROFOL
Applied By:	NTH
Air Temperature, Unit:	88 F
% Relative Humidity:	50
Wind Velocity, Unit:	3 MPH
Wind Direction:	NE
Dew Presence (Y/N):	N
Soil Temperature, Unit:	77 F
Soil Moisture:	NORMAL
% Cloud Cover:	0
Next Moisture Occurred On:	6-17-13
Time to Next Moisture, Unit:	3 DAY

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	ZEAMD
Stage Scale Used:	DESC
Stage Majority, Percent:	V4
Stage Minimum, Percent:	V3
Stage Maximum, Percent:	V4
Height, Unit:	20 IN
Height Minimum, Maximum:	15 20

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Investigator: Bryan Young**Pest Stage At Each Application**

	A
Pest 1 Code, Type, Scale:	AMATA W
Stage Majority, Percent:	8
Stage Minimum, Percent:	2
Stage Maximum, Percent:	20
Height, Unit:	4 IN
Height Minimum, Maximum:	1 8
Density, Unit:	8 FT2

Application Equipment

	A
Appl. Equipment:	CO2 sprayer
Equipment Type:	BACSPR
Operation Pressure, Unit:	30 PSI
Nozzle Type:	XR
Nozzle Size:	8002
Boom Length, Unit:	6.67 FT
Spray Volume, Unit:	15 GPA

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Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	ZEAMD 6-17-13 Injury	ZEAMD 6-21-13 Injury	ZEAMD 6-28-13 Injury	ZEAMD 6-17-13 GROINH	ZEAMD 6-21-13 GROINH	ZEAMD 6-28-13 GROINH
							Percent	Percent	Percent	Percent	Percent	Percent
							3 DA-A	7 DA-A	14 DA-A	3 DA-A	7 DA-A	14 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	NONTREATED									0 e	0 d	0 f
2	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	7 cd	7 bc	4 cde
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A			5 bc
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A			6 bc
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A			4 bcd
3	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	6 d	6 c	3 def
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A			6 b
	CALLISTO	4 SC		0.0313 lb ai/a		1 fl oz/a		2-4"W	A			6 b
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A			3 cd
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A			
4	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	7 cd	7 bc	2 def
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A			6 b
	CALLISTO	4 SC		0.0625 lb ai/a		2 fl oz/a		2-4"W	A			6 bc
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A			2 de
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A			
5	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	9 bcd	8 bc	4 cde
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A			0 c
	AATREX 4L	4 SC		0.25 lb ai/a		0.5 pt/a		2-4"W	A			3 bcd
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A			3 cd
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A			
6	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	12 b	10 bc	7 bc
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A			3 bc
	AATREX 4L	4 SC		0.5 lb ai/a		1 pt/a		2-4"W	A			6 bc
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A			4 bcd
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A			
7	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	12 b	10 bc	6 bc
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A			6 b
	CALLISTO	4 SC		0.0313 lb ai/a		1 fl oz/a		2-4"W	A			5 bc
	AATREX 4L	4 SC		0.25 lb ai/a		0.5 pt/a		2-4"W	A			4 bcd
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A			
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A			
8	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	11 bc	9 bc	1 ef
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A			1 bc
	CALLISTO	4 SC		0.0625 lb ai/a		2 fl oz/a		2-4"W	A			3 bcd
	AATREX 4L	4 SC		0.25 lb ai/a		0.5 pt/a		2-4"W	A			0 e
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A			
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A			
9	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	12 b	10 b	9 b
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A			5 bc
	CALLISTO	4 SC		0.0313 lb ai/a		1 fl oz/a		2-4"W	A			6 b
	AATREX 4L	4 SC		0.5 lb ai/a		1 pt/a		2-4"W	A			6 b
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A			
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A			
10	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	11 bc	11 b	5 cd
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A			3 bc
	CALLISTO	4 SC		0.0625 lb ai/a		2 fl oz/a		2-4"W	A			6 b
	AATREX 4L	4 SC		0.5 lb ai/a		1 pt/a		2-4"W	A			5 bc
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A			
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A			

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Pest Code Crop Code Rating Date Rating Type								ZEAMD 6-17-13 Injury	ZEAMD 6-21-13 Injury	ZEAMD 6-28-13 Injury	ZEAMD 6-17-13 GROINH	ZEAMD 6-21-13 GROINH	ZEAMD 6-28-13 GROINH		
Rating Unit Rating Timing Trt-Eval Interval								Percent	Percent	Percent	Percent	Percent	Percent		
								3 DA-A	7 DA-A	14 DA-A	3 DA-A	7 DA-A	14 DA-A		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
11	DURANGO DMA CORVUS PREFERENCE N-PAK AMS	4 SL 2.63 SC 100 SL 100 SL		1 lb ae/a 0.115 lb ai/a 0.25 % v/v 2.5 % v/v		1 qt/a 5.6 fl oz/a 0.25 % v/v 2.5 % v/v		2-4"W A 2-4"W A 2-4"W A 2-4"W A		31 a	34 a	23 a	30 a	30 a	19 a
12	DURANGO DMA PREFERENCE N-PAK AMS	4 SL 100 SL 100 SL		1 lb ae/a 0.25 % v/v 2.5 % v/v		1 qt/a 0.25 % v/v 2.5 % v/v		2-4"W A 2-4"W A 2-4"W A		0 e	0 d	0 f	0 c	0 d	0 e
13	HALEX GT PREFERENCE N-PAK AMS	4.389 CS 100 SL 100 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		2-4"W A 2-4"W A 2-4"W A		1 e	1 d	0 f	1 bc	1 cd	0 e
LSD (P=.05)								4.2	4.0	3.2	5.1	4.9	2.5		
Standard Deviation								3.0	2.8	2.2	3.5	3.4	1.7		
CV								32.83	31.88	46.46	69.94	57.07	47.45		
Replicate F								0.791	1.921	0.809	1.366	1.758	3.301		
Replicate Prob(F)								0.5069	0.1436	0.4970	0.2686	0.1726	0.0311		
Treatment F								28.821	37.351	29.168	19.827	19.656	33.034		
Treatment Prob(F)								0.0001	0.0001	0.0001	0.0001	0.0001	0.0000		

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Pest Code Crop Code Rating Date Rating Type										ZEAMD 6-17-13 Chlorosis	ZEAMD 6-21-13 Chlorosis	ZEAMD 6-28-13 Chlorosis	ZEAMD 6-17-13 Necrosis	ZEAMD 6-21-13 Necrosis	ZEAMD 6-28-13 Necrosis
Rating Unit Rating Timing Trt-Eval Interval										Percent	Percent	Percent	Percent	Percent	Percent
										3 DA-A	7 DA-A	14 DA-A	3 DA-A	7 DA-A	14 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	NONTREATED									0 d	0 e	0 d	0 c	0 a	0 a
2	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	2 c	2 cd	0 d	0 c	0 a	0 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A						
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A						
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A						
3	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	0 d	0 e	0 d	0 c	0 a	0 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A						
	CALLISTO	4 SC		0.0313 lb ai/a		1 fl oz/a		2-4"W	A						
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A						
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A						
4	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	2 c	2 de	0 d	0 c	0 a	0 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A						
	CALLISTO	4 SC		0.0625 lb ai/a		2 fl oz/a		2-4"W	A						
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A						
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A						
5	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	5 b	4 bc	2 bcd	6 ab	2 a	1 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A						
	AATREX 4L	4 SC		0.25 lb ai/a		0.5 pt/a		2-4"W	A						
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A						
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A						
6	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	6 b	5 b	3 ab	9 a	0 a	1 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A						
	AATREX 4L	4 SC		0.5 lb ai/a		1 pt/a		2-4"W	A						
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A						
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A						
7	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	5 b	4 bc	2 bc	3 bc	1 a	1 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A						
	CALLISTO	4 SC		0.0313 lb ai/a		1 fl oz/a		2-4"W	A						
	AATREX 4L	4 SC		0.25 lb ai/a		0.5 pt/a		2-4"W	A						
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A						
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A						
8	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	6 b	4 b	1 cd	6 ab	2 a	1 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A						
	CALLISTO	4 SC		0.0625 lb ai/a		2 fl oz/a		2-4"W	A						
	AATREX 4L	4 SC		0.25 lb ai/a		0.5 pt/a		2-4"W	A						
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A						
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A						
9	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	5 b	4 b	2 abc	6 ab	2 a	2 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A						
	CALLISTO	4 SC		0.0313 lb ai/a		1 fl oz/a		2-4"W	A						
	AATREX 4L	4 SC		0.5 lb ai/a		1 pt/a		2-4"W	A						
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A						
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A						
10	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A	6 b	4 bc	0 d	5 ab	2 a	0 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A						
	CALLISTO	4 SC		0.0625 lb ai/a		2 fl oz/a		2-4"W	A						
	AATREX 4L	4 SC		0.5 lb ai/a		1 pt/a		2-4"W	A						
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A						
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A						

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Pest Code								ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD
Crop Code								6-17-13	6-21-13	6-28-13	6-17-13	6-21-13	6-28-13
Rating Date								Chlorosis	Chlorosis	Chlorosis	Necrosis	Necrosis	Necrosis
Rating Type													
Rating Unit								Percent	Percent	Percent	Percent	Percent	Percent
Rating Timing													
Trt-Eval Interval								3 DA-A	7 DA-A	14 DA-A	3 DA-A	7 DA-A	14 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
11	DURANGO DMA	4	SL	1 lb ae/a		1 qt/a		2-4"W	A	21 a	9 a	4 a	3 bc
	CORVUS	2.63	SC	0.115 lb ai/a		5.6 fl oz/a		2-4"W	A				1 a
	PREFERENCE	100	SL	0.25 % v/v		0.25 % v/v		2-4"W	A				0 a
	N-PAK AMS	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A				
12	DURANGO DMA	4	SL	1 lb ae/a		1 qt/a		2-4"W	A	0 d	0 e	0 d	0 c
	PREFERENCE	100	SL	0.25 % v/v		0.25 % v/v		2-4"W	A				0 a
	N-PAK AMS	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A				0 a
13	HALEX GT	4.389	CS	1.98 lb ai/a		3.6 pt/a		2-4"W	A	0 d	0 e	0 d	0 c
	PREFERENCE	100	SL	0.25 % v/v		0.25 % v/v		2-4"W	A				0 a
	N-PAK AMS	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A				0 a
LSD (P=.05)								1.9	1.9	1.6	4.2	2.0	1.2
Standard Deviation								1.3	1.3	1.1	2.9	1.4	0.9
CV								30.21	47.92	111.63	101.89	174.85	222.26
Replicate F								8.006	0.984	1.000	1.273	1.548	0.772
Replicate Prob(F)								0.0003	0.4114	0.4040	0.2982	0.2189	0.5173
Treatment F								71.564	15.053	5.578	4.546	1.816	1.860
Treatment Prob(F)								0.0001	0.0001	0.0001	0.0002	0.0827	0.0748

Surestart Combinations Applied Early Postemergence in Corn.

Trial ID: 13-DSO-H001 Location: De Soto, IL Trial Year: 2013
Investigator: Bryan Young

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval										AMATA-HR 6-28-13 Control Percent 14 DA-A	AMATA-HR 7-12-13 Control Percent 28 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Other Rate	Other Rate	Growth Unit	Stage	Appl Code	
1	NONTREATED										0 e 0 c
2	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A		90 c 96 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A		
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A		
3	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A		92 bc 97 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A		
	CALLISTO	4 SC		0.0313 lb ai/a		1 fl oz/a		2-4"W	A		
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A		
4	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A		96 ab 98 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A		
	CALLISTO	4 SC		0.0625 lb ai/a		2 fl oz/a		2-4"W	A		
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A		
5	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A		97 ab 99 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A		
	AATREX 4L	4 SC		0.25 lb ai/a		0.5 pt/a		2-4"W	A		
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A		
6	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A		99 a 99 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A		
	AATREX 4L	4 SC		0.5 lb ai/a		1 pt/a		2-4"W	A		
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A		
7	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A		99 a 99 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A		
	CALLISTO	4 SC		0.0313 lb ai/a		1 fl oz/a		2-4"W	A		
	AATREX 4L	4 SC		0.25 lb ai/a		0.5 pt/a		2-4"W	A		
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A		
8	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A		99 a 99 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A		
	CALLISTO	4 SC		0.0625 lb ai/a		2 fl oz/a		2-4"W	A		
	AATREX 4L	4 SC		0.25 lb ai/a		0.5 pt/a		2-4"W	A		
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A		
9	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A		99 a 99 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A		
	CALLISTO	4 SC		0.0313 lb ai/a		1 fl oz/a		2-4"W	A		
	AATREX 4L	4 SC		0.5 lb ai/a		1 pt/a		2-4"W	A		
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A		
10	SURESTART	4.25 SE		1.06 lb ai/a		2 pt/a		2-4"W	A		99 a 99 a
	DURANGO DMA	4 SL		1 lb ae/a		1 qt/a		2-4"W	A		
	CALLISTO	4 SC		0.0625 lb ai/a		2 fl oz/a		2-4"W	A		
	AATREX 4L	4 SC		0.5 lb ai/a		1 pt/a		2-4"W	A		
	PREFERENCE	100 SL		0.25 % v/v		0.25 % v/v		2-4"W	A		
	N-PAK AMS	100 SL		2.5 % v/v		2.5 % v/v		2-4"W	A		

Surestart Combinations Applied Early Postemergence in Corn.

Trial ID: 13-DSO-H001 Location: De Soto, IL Trial Year: 2013
Investigator: Bryan Young

Pest Code								AMATA-HR	AMATA-HR
Crop Code								6-28-13	7-12-13
Rating Date								Control	Control
Rating Type								Percent	Percent
Rating Unit								14 DA-A	28 DA-A
Rating Timing									
Trt-Eval Interval									
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code
11	DURANGO DMA	4	SL	1 lb ae/a	1 lb ae/a	1 qt/a	1 qt/a	2-4"W	A
	CORVUS	2.63	SC	0.115 lb ai/a	0.115 lb ai/a	5.6 fl oz/a	5.6 fl oz/a	2-4"W	A
	PREFERENCE	100	SL	0.25 % v/v	0.25 % v/v	0.25 % v/v	0.25 % v/v	2-4"W	A
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	2.5 % v/v	2.5 % v/v	2-4"W	A
12	DURANGO DMA	4	SL	1 lb ae/a	1 lb ae/a	1 qt/a	1 qt/a	2-4"W	A
	PREFERENCE	100	SL	0.25 % v/v	0.25 % v/v	0.25 % v/v	0.25 % v/v	2-4"W	A
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	2.5 % v/v	2.5 % v/v	2-4"W	A
13	HALEX GT	4.389	CS	1.98 lb ai/a	1.98 lb ai/a	3.6 pt/a	3.6 pt/a	2-4"W	A
	PREFERENCE	100	SL	0.25 % v/v	0.25 % v/v	0.25 % v/v	0.25 % v/v	2-4"W	A
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v	2.5 % v/v	2.5 % v/v	2-4"W	A
LSD (P=.05)								5.1	6.2
Standard Deviation								3.6	4.4
CV								4.1	4.85
Replicate F								4.823	2.191
Replicate Prob(F)								0.0064	0.1059
Treatment F								225.582	155.500
Treatment Prob(F)								0.0001	0.0001

Surestart Combinations Applied Early Postemergence in Corn.

Trial ID: 13-DSO-H001 Location: De Soto, IL Trial Year: 2013
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Trial Comments

1. Protocol: Dow (NA13P6H001).
2. Ratings: CI/growth inhibition/chlorosis/necrosis at 3, 7, and 14 DA-A; WC 14 and 28 DA-A.
3. Record corn height, leaf stage (V stage) in nontreated plots at each evaluation.
Record for each weed species evaluated; weed height, leaf stage, and density in nontreated plots at each evaluation.
Report crop and weed information from the nontreated plots in both data header and comments.
4. Blanket burndown of glyphosate (1.5 lbae/A) plus Salvo (12 floz/A) was applied to all plots on 4-2-13.
Blanket prior to planting of Gramoxone (3 pt/A) + Warrior (1.92 oz/A) was applied to all plots on 5-20-13.
5. Yield not requested.
6. Following the 2-4"W application the first rainfall event, beginning 3 days later, was 0.36 inch over 2 days.
7. GROINH = Corn growth inhibition.
AMATA-HR = Herbicide-resistant waterhemp (glyphosate).
8. Crop stage and height, and weed stage, height, and density in nontreated plots;

Eval date	Trt-Eval-Interval	Corn Stage	Corn Ht (inch)	AMATA-HR Leaves	AMATA-HR Ht (inch)	AMATA-HR no./sqft
06-17-13	3 DA-A	V5	18	16	10-12	10
06-21-13	7 DA-A	V6	24	16	10-12	10
06-28-13	14 DA-A	V5-V6	30	6-28, 16	4-15, 12	7
07-12-13	28 DA-A	R1	72	20+	12-40	5

9. Not harvested.