

Southern Illinois University

Sequential Programs in Corn with Impact.

Trial ID: 12-2A-M60

Location: Belleville Res. Center

Investigator: Bryan Young

General Trial Information	
<b>Study Director:</b> Bryan Young	<b>Investigator:</b> Bryan Young <b>Title:</b> Professor
<b>Trial Status:</b> F - one-year/final	<b>Initiation Date:</b> 5-16-12
Trial Location	
<b>City:</b> Belleville	<b>State/Prov.:</b> IL
<b>Postal Code:</b> 62221	<b>Country:</b> USA

<b>Objectives:</b> To evaluate Impact when used in sequential or total postemergence weed control programs and in tank-mixes with glyphosate compared to competitive programs.
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Personnel	
<b>Study Director:</b> Bryan Young	<b>Investigator:</b> Bryan Young <b>Title:</b> Professor
<b>Affiliation:</b> Southern Illinois University	<b>Address:</b> 1205 Lincoln Drive - AG 176 - MC 4415
<b>Location:</b> Carbondale IL	<b>Postal Code:</b> 62901
<b>Phone No.:</b> 618-453-7679	<b>E-mail:</b> bgyoung@siu.edu
<b>Mobile No.:</b> 618-713-6471	

Crop Description	
<b>Crop 1:</b> ZEAMD Zea mays indentata Dent corn	<b>Description:</b> RR2/LL
<b>Variety:</b> DKC 61-06	<b>Planting Date:</b> 5-16-12
<b>BBCH Scale:</b> BCOR	<b>Rate, Unit:</b> 28000 S/A
<b>Planting Method:</b> SEEDED Seeded	
<b>Depth, Unit:</b> 1.5 IN	
<b>Row Spacing, Unit:</b> 30 IN	

Pest Description	
<b>Pest 1 Type:</b> W <b>Code:</b> PANDI - Panicum dichotomiflorum Michx.	<b>Common Name:</b> panicum, fall
<b>Pest 2 Type:</b> W <b>Code:</b> ABUTH - Abrutylon theophrasti Medik.	<b>Common Name:</b> velvetleaf
<b>Pest 3 Type:</b> W <b>Code:</b> AMATA - Amaranthus rudis Sauer	<b>Common Name:</b> waterhemp, common

Site and Design	
<b>Plot Width, Unit:</b> 10 FT	<b>Site Type:</b> FIELD field
<b>Plot Length, Unit:</b> 28 FT	
<b>Plot Area, Unit:</b> 280 FT2	<b>Tillage Type:</b> REDTIL reduced-till
<b>Replications:</b> 4	<b>Study Design:</b> RACOBL Randomized Complete Block (RCB)

No.	Previous Crop	Year
1.	GLXMA	2011

Maintenance	
<b>No.</b>	<b>Maintenance Treatment Name</b>
1.	N 150 LB/A, P205 50 LB/A, K20 150 LB/A

Soil Description	
<b>% OM:</b> 1.6	<b>Texture:</b> SIL SILT LOAM
<b>pH:</b> 5.9	<b>Soil Name:</b> PIERRON
<b>CEC:</b> 6	

Additional Measured Elements		
Element	Quantity	Unit
P1	41	LB/A
K	257	LB/A

Moisture and Weather Conditions	
<b>Overall Moisture Conditions:</b>	BELNOR below normal
<b>Closest Weather Station:</b> ICN - Belleville IL	<b>Distance, Unit:</b> 0.5 MI

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No.	Date	Amount	Unit	Type	Type Description	Interval	Unit	Min Temp	Max Temp	Temp Unit
1.	4-24-12					7	DAY	42.6	74.3	F
2.	4-29-12	3.06	IN	RAIN	rain					
3.	4-30-12	0.66	IN	RAIN	rain					
4.	5-1-12	0.13	IN	RAIN	rain					
5.	5-1-12					7	DAY	33.5	76	F
6.	5-4-12	0.25	IN	RAIN	rain					
7.	5-7-12	0.29	IN	RAIN	rain					
8.	5-8-12					7	DAY	47.5	87.8	F
9.	5-15-12					7	DAY	37.7	81.3	F
10.	5-21-12	0.18	IN	RAIN	rain					
11.	5-22-12					7	DAY	47.6	82.3	F
12.	5-29-12					7	DAY	48.1	90	F
13.	5-30-12	0.07	IN	RAIN	rain					
14.	5-31-12	0.21	IN	RAIN	rain					
15.	6-5-12					7	DAY	50.2	90.1	F
16.	6-11-12	0.75	IN	RAIN	rain					
17.	6-12-12					7	DAY	52.4	93.6	F
18.	6-17-12	0.36	IN	RAIN	rain					
19.	6-19-12					7	DAY	56.3	94	F
20.	6-26-12					7	DAY	51.8	105.4	F
21.	7-3-12					7	DAY	68.9	104.7	F
22.	7-8-12	0.28	IN	RAIN	rain					
23.	7-10-12					7	DAY	63.4	95	F
24.	7-17-12					7	DAY	61	102.2	F
25.	7-24-12					7	DAY	61	103	F
26.	7-29-12	0.15	IN	RAIN	rain					
27.	7-31-12					7	DAY	60.2	99.1	F
28.	8-5-12	0.18	IN	RAIN	rain					
29.	8-7-12					7	DAY	50.2	99.8	F
30.	8-13-12	0.88	IN	RAIN	rain					
31.	8-14-12					7	DAY	51	95.6	F
32.	8-17-12	1.19	IN	RAIN	rain					
33.	8-21-12					7	DAY	54.7	94.2	F
34.	8-26-12	0.04	IN	RAIN	rain					
35.	8-27-12	1.66	IN	RAIN	rain					
36.	8-31-12	0.11	IN	RAIN	rain					

Application Description

	A	B	C
Application Date:	5-17-12	5-29-12	6-4-12
Time of Day:	15:30	16:30	14:00
Application Method:	Spray	Spray	Spray
Application Timing:	PRE	2-4"W-1	2-4"W-2
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	RJW	JRK	JRK
Air Temperature, Unit:	80 F	88 F	88 F
% Relative Humidity:	28	31	48
Wind Velocity, Unit:	6 MPH	1 MPH	4 MPH
Wind Direction:	E	W	NW
Dew Presence (Y/N):	N no	N no	N no
Soil Temperature, Unit:	61 F	68 F	71 F
Soil Moisture:	BELNOR	BELNOR	BELNOR
% Cloud Cover:	30	0	20
Next Rain Occurred On:	5-21-12	5-31-12	6-11-12

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Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:	DESC	DESC	DESC
Stage Majority, Percent:	NA	V3	V5
Stage Minimum, Percent:		V2	V4
Stage Maximum, Percent:		V3	V5
Height, Unit:		6 IN	11 IN
Height Minimum, Maximum:		4 6	6 11

Pest Stage At Each Application			
	A	B	C
Pest 1 Code, Type, Scale:	PANDI W DESC	PANDI W DESC	PANDI W DESC
Stage Majority, Percent:	NA	2	2
Stage Minimum, Percent:		1	1
Stage Maximum, Percent:		2	2
Height, Unit:		2 IN	1 IN
Height Minimum, Maximum:		1 3	1 2
Density, Unit:		0.3 FT2	0.3 FT2
Pest 2 Code, Type, Scale:	ABUTH W DESC	ABUTH W DESC	ABUTH W DESC
Stage Majority, Percent:	NA	4	4
Stage Minimum, Percent:		Coty	Coty
Stage Maximum, Percent:		6	6
Height, Unit:		2 IN	3 IN
Height Minimum, Maximum:		0.5 3	0.5 4
Density, Unit:		0.01 FT2	0.01 FT2
Pest 3 Code, Type, Scale:	AMATA W DESC	AMATA W DESC	AMATA W DESC
Stage Majority, Percent:	NA	2	4
Stage Minimum, Percent:		Coty	2
Stage Maximum, Percent:		4	6
Height, Unit:		2 IN	2 IN
Height Minimum, Maximum:		0.5 3	1 3
Density, Unit:		0.1 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	XR	XR
Nozzle Size:	8002	8002	8002
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 Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval								ZEAMD 10-9-12 Moisture Percent	ZEAMD 10-9-12 Test wt. lb/bu	ZEAMD 10-9-12 Yield bu/A		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Unit	Growth Stage	Appl Code			
1	NONTREATED									16.9 a	57.1 a	38 c
2	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	17.6 a	56.8 a	82 b
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-2 C			
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C			
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C			
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C			
3	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	17.3 a	56.8 a	85 ab
	IMPACT	2.8	SC	0.0219	lb ai/a	1	fl oz/a	2-4"	W-2 C			
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C			
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C			
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C			
4	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	17.7 a	56.7 a	93 ab
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-2 C			
	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	2-4"	W-2 C			
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C			
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C			
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C			
5	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	17.2 a	56.9 a	86 ab
	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	2-4"	W-2 C			
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C			
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C			
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C			
6	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	17.1 a	57.0 a	89 ab
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-2 C			
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-2 C			
7	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	17.3 a	56.9 a	85 ab
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-2 C			
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-2 C			
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C			
	MSO (MSO ULTRA)	100	SL	0.5	% v/v	0.5	% v/v	2-4"	W-2 C			
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-2 C			
8	WARRANT	3	CS	1.13	lb ai/a	3	pt/a	2-4"	W-1 B	17.9 a	56.6 a	97 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-1 B			
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-1 B			
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-1 B			
	MSO (MSO ULTRA)	100	SL	0.5	% v/v	0.5	% v/v	2-4"	W-1 B			
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-1 B			
9	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"	W-1 B	17.5 a	56.8 a	88 ab
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-1 B			
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-1 B			
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-1 B			
LSD (P=.05)								1.23	0.46	14.7		
Standard Deviation								0.84	0.31	10.0		
CV								4.85	0.55	12.13		
Replicate F								0.037	0.334	11.882		
Replicate Prob(F)								0.9903	0.8007	0.0001		
Treatment F								0.584	0.970	12.147		
Treatment Prob(F)								0.7805	0.4830	0.0001		

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.

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Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval								ZEAMD 6-5-12 Injury Percent	ZEAMD 6-11-12 Injury Percent	ZEAMD 6-13-12 Injury Percent	ZEAMD 6-19-12 Injury Percent	ZEAMD 6-28-12 Injury Percent	ZEAMD 7-4-12 Injury Percent	ZEAMD 8-3-12 Injury Percent	
								7 DA-B	7 DA-C	15 DA-B	15 DA-C	30 DA-B	30 DA-C	60 DA-C	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Unit	Growth Stage	Appl Code						
1	NONTREATED									0 e	0 d	0 d	0 a	0 a	0 a
2	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	5 b	5 a	5 a	0 a	0 a	0 a
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-2 C						
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C						
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C						
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C						
3	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	4 bc	4 b	4 b	0 a	0 a	0 a
	IMPACT	2.8	SC	0.0219	lb ai/a	1	fl oz/a	2-4"	W-2 C						
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C						
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C						
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C						
4	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	10 a	3 bc	3 bc	0 a	0 a	0 a
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-2 C						
	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	2-4"	W-2 C						
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C						
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C						
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C						
5	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	4 c	2 c	2 c	0 a	0 a	0 a
	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	2-4"	W-2 C						
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C						
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C						
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C						
6	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	0 e	0 d	0 d	0 a	0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-2 C						
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-2 C						
7	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	2 d	0 d	0 d	0 a	0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-2 C						
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-2 C						
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C						
	MSO (MSO ULTRA)	100	SL	0.5	% v/v	0.5	% v/v	2-4"	W-2 C						
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-2 C						
8	WARRANT	3	CS	1.13	lb ai/a	3	pt/a	2-4"	W-1 B	0 e	0 d	0 d	0 a	0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-1 B						
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-1 B						
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-1 B						
	MSO (MSO ULTRA)	100	SL	0.5	% v/v	0.5	% v/v	2-4"	W-1 B						
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-1 B						
9	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"	W-1 B	0 e	0 d	0 d	0 a	0 a	0 a
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-1 B						
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-1 B						
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-1 B						
LSD (P=.05)								1.1	0.9	0.9	0.0	0.0	0.0	0.0	
Standard Deviation								0.7	0.6	0.6	0.0	0.0	0.0	0.0	
CV								27.02	42.43	42.43	0.0	0.0	0.0	0.0	
Replicate F								0.342	0.066	0.066	0.000	0.000	0.000	0.000	
Replicate Prob(F)								0.7950	0.9773	0.9773	1.0000	1.0000	1.0000	1.0000	
Treatment F								83.683	36.053	36.053	0.000	0.000	0.000	0.000	
Treatment Prob(F)								0.0001	0.0001	0.0001	1.0000	1.0000	1.0000	1.0000	

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Investigator: Bryan Young

Pest Code								PANDI	PANDI	PANDI	PANDI		
Crop Code								6-11-12	6-19-12	7-4-12	8-3-12		
Rating Date								Control	Control	Control	Control		
Rating Type								Percent	Percent	Percent	Percent		
Rating Unit													
Rating Timing													
Trt-Eval Interval								7 DA-C	15 DA-C	30 DA-C	60 DA-C		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Unit	Growth Stage	Appl Code				
1	NONTREATED									0 c	0 c	0 c	0 c
2	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	98 a	98 a
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-2 C				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C				
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C				
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C				
3	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	97 a	97 a
	IMPACT	2.8	SC	0.0219	lb ai/a	1	fl oz/a	2-4"	W-2 C				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C				
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C				
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C				
4	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	98 a	97 a
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-2 C				
	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	2-4"	W-2 C				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C				
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C				
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C				
5	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	95 b	70 b	71 b	58 b
	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	2-4"	W-2 C				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C				
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C				
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C				
6	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-2 C				
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-2 C				
7	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	98 a	98 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-2 C				
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-2 C				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C				
	MSO (MSO ULTRA)	100	SL	0.5	% v/v	0.5	% v/v	2-4"	W-2 C				
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-2 C				
8	WARRANT	3	CS	1.13	lb ai/a	3	pt/a	2-4"	W-1 B	99 a	99 a	97 a	96 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-1 B				
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-1 B				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-1 B				
	MSO (MSO ULTRA)	100	SL	0.5	% v/v	0.5	% v/v	2-4"	W-1 B				
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-1 B				
9	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"	W-1 B	99 a	99 a	98 a	97 a
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-1 B				
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-1 B				
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-1 B				
LSD (P=.05)								1.7	3.6	5.2	7.7		
Standard Deviation								1.1	2.4	3.5	5.3		
CV								1.3	2.88	4.2	6.42		
Replicate F								1.572	1.085	1.428	1.575		
Replicate Prob(F)								0.2232	0.3754	0.2604	0.2225		
Treatment F								3342.742	739.941	343.532	161.603		
Treatment Prob(F)								0.0001	0.0001	0.0001	0.0001		

Southern Illinois University

Sequential Programs in Corn with Impact.

Trial ID: 12-2A-M60

Location: Belleville Res. Center

Investigator: Bryan Young

Pest Code	ABUTH	ABUTH	ABUTH	ABUTH									
Crop Code	6-11-12	6-19-12	7-4-12	8-3-12									
Rating Date	Control	Control	Control	Control									
Rating Type	Percent	Percent	Percent	Percent									
Rating Unit													
Rating Timing													
Trt-Eval Interval	7 DA-C	15 DA-C	30 DA-C	60 DA-C									
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Unit	Growth Stage	Appl Code				
1	NONTREATED									0 c	0 b	0 c	0 c
2	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	98 a	96 ab
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-2 C				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C				
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C				
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C				
3	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	98 a	95 ab
	IMPACT	2.8	SC	0.0219	lb ai/a	1	fl oz/a	2-4"	W-2 C				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C				
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C				
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C				
4	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	99 a	99 a
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-2 C				
	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	2-4"	W-2 C				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C				
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C				
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C				
5	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	99 a	99 a
	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	2-4"	W-2 C				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C				
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C				
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C				
6	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	98 a	92 ab
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-2 C				
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-2 C				
7	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	98 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-2 C				
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-2 C				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C				
	MSO (MSO ULTRA)	100	SL	0.5	% v/v	0.5	% v/v	2-4"	W-2 C				
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-2 C				
8	WARRANT	3	CS	1.13	lb ai/a	3	pt/a	2-4"	W-1 B	99 b	99 a	94 b	87 b
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-1 B				
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-1 B				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-1 B				
	MSO (MSO ULTRA)	100	SL	0.5	% v/v	0.5	% v/v	2-4"	W-1 B				
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-1 B				
9	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"	W-1 B	99 a	99 a	99 a	99 a
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-1 B				
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-1 B				
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-1 B				
LSD (P=.05)										0.5	0.0	2.6	8.7
Standard Deviation										0.3	0.0	1.8	5.9
CV										0.39	0.0	2.07	6.99
Replicate F										0.958	0.000	3.149	3.194
Replicate Prob(F)										0.4291	1.0000	0.0444	0.0425
Treatment F										37524.023	0.000	1310.944	117.050
Treatment Prob(F)										0.0001	1.0000	0.0001	0.0001

Southern Illinois University

Sequential Programs in Corn with Impact.

Trial ID: 12-2A-M60

Location: Belleville Res. Center

Investigator: Bryan Young

Pest Code							AMATA	AMATA	AMATA	AMATA			
Crop Code							6-11-12	6-19-12	7-4-12	8-3-12			
Rating Date							Control	Control	Control	Control			
Rating Type							Percent	Percent	Percent	Percent			
Rating Unit													
Rating Timing													
Trt-Eval Interval							7 DA-C	15 DA-C	30 DA-C	60 DA-C			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Unit	Growth Stage	Appl Code				
1	NONTREATED									0 b	0 b	0 b	0 c
2	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	99 a	99 a
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-2 C				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C				
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C				
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C				
3	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	99 a	99 a
	IMPACT	2.8	SC	0.0219	lb ai/a	1	fl oz/a	2-4"	W-2 C				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C				
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C				
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C				
4	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	99 a	99 b
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-2 C				
	STATUS	56	WG	0.0875	lb ae/a	2.5	oz/a	2-4"	W-2 C				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C				
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C				
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C				
5	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	99 a	99 a
	LAUDIS	3.5	SC	0.082	lb ai/a	3	fl oz/a	2-4"	W-2 C				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C				
	MSO (MSO ULTRA)	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C				
	28% UAN	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C				
6	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-2 C				
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-2 C				
7	DEGREE XTRA	4.04	CS	2.02	lb ai/a	4	pt/a	PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-2 C				
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-2 C				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-2 C				
	MSO (MSO ULTRA)	100	SL	0.5	% v/v	0.5	% v/v	2-4"	W-2 C				
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-2 C				
8	WARRANT	3	CS	1.13	lb ai/a	3	pt/a	2-4"	W-1 B	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-1 B				
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	2-4"	W-1 B				
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-1 B				
	MSO (MSO ULTRA)	100	SL	0.5	% v/v	0.5	% v/v	2-4"	W-1 B				
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-1 B				
9	HALEX GT	4.38	CS	1.97	lb ai/a	3.6	pt/a	2-4"	W-1 B	99 a	99 a	99 a	99 a
	AATREX	4	SC	0.5	lb ai/a	1	pt/a	2-4"	W-1 B				
	NIS (ACTIVATOR 90)	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-1 B				
	N-PAK AMS	100	SL	2.5	% v/v	3	pt/a	2-4"	W-1 B				
LSD (P=.05)							0.0	0.0	0.0	0.5			
Standard Deviation							0.0	0.0	0.0	0.3			
CV							0.0	0.0	0.0	0.39			
Replicate F							0.000	0.000	0.000	0.958			
Replicate Prob(F)							1.0000	1.0000	1.0000	0.4291			
Treatment F							0.000	0.000	0.000	37524.023			
Treatment Prob(F)							1.0000	1.0000	1.0000	0.0001			



Sequential Programs in Corn with Impact.

Trial ID: 12-2A-M60

Location: Belleville Res. Center

Investigator: Bryan Young

Trial Comments

1. Protocol: AMVAC (12C04H086).
2. CI at 7, 15, and 30 DA-B and DA-C; WC at 7, 15, 30, and 60 DA-C.
3. Yield.
4. Application B and C should be around V2-V3 and V3-V4 corn, respectively.
5. Rainfall following the PRE application was 0.18 inch 4 days later and 0.28 inch 14 days later.
6. Missing data for plot 201 was due to spraying error.
7. Harvested 10-9-12, (2) 30 inch rows by 25 ft.