

Impact Sequential and 1-Pass Programs in 2014.

Trial ID: 14-52-E30 Location: Belleville Res. Center Trial Year: 2014
Investigator: Ronald F. Krausz

Trial Status: F one-year/final Initiation Date: 5-11-14 Completion Date: 10-8-14	Trial Location City: Belleville Country: USA State/Prov.: Illinois IL Postal Code: 62221
---	--

Objectives:
 Evaluate Impact when used in sequential or total postemergence weed control programs and in tank-mixes with glyphosate compared to competitive programs.

Study Director: Ronald F. Krausz Organization: Belleville Research Center - Southern Illinois Univ Carbondale Address: 2036 Charles Lane City+State/Prov: Belleville, IL Postal Code: 62221 Country: USA	Contacts Title: Researcher/Farm Manager Phone No.: 618-566-4761 E-mail: rkrausz@siu.edu
Crop 1: ZEAMD Zea mays indentata Dent corn Variety: DKC 63-33 BBCH Scale: BCOR Description: SS RIB Planting Rate, Unit: 28000 S/A Depth, Unit: 1.5 IN Row Spacing, Unit: 30 IN	Crop Description Planting Date: 5-11-14 Planting Method: SEEDED

Pest 1 Type: W Code: SETFA Setaria faberi Herm. Common Name: foxtail, giant Pest 2 Type: W Code: AMBTR Ambrosia trifida L. Common Name: ragweed, giant Pest 3 Type: W Code: ABUTH Abutilon theophrasti Medik. Common Name: velvetleaf Pest 4 Type: W Code: AMATA Amaranthus rudis Sauer Common Name: waterhemp, common Pest 5 Type: W Code: IPOHE Ipomoea hederacea (L.) Jacq. Common Name: morningglory, ivyleaf	Pest Description
---	-------------------------

Treated Plot Width: 7.5 FT Total Plot Width: 10 FT Treated Plot Length: 25 FT Total Plot Length: 25 FT Replications: 3 Untreated Arrangement: NONE control is other than an untreated	Site and Design Site Type: FIELD Experimental Unit: 1 PLOT Tillage Type: REDTIL reduced-till Study Design: RACOB L Randomized Complete Block (RCB)						
<table border="1"> <thead> <tr> <th>No.</th> <th>Previous Crop</th> <th>Year</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>GLXMA</td> <td>2013</td> </tr> </tbody> </table>	No.	Previous Crop	Year	1.	GLXMA	2013	
No.	Previous Crop	Year					
1.	GLXMA	2013					

<table border="1"> <thead> <tr> <th>No.</th> <th>Maintenance Product Name</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>N 150 LB/A, P2O5 50 LB/A, K2O 100 LB/A</td> </tr> </tbody> </table>	No.	Maintenance Product Name	1.	N 150 LB/A, P2O5 50 LB/A, K2O 100 LB/A	Maintenance
No.	Maintenance Product Name				
1.	N 150 LB/A, P2O5 50 LB/A, K2O 100 LB/A				

% OM: 2.6 Texture: SIL silt loam pH: 6.9 Soil Name: Pierron CEC: 7	Soil Description									
<table border="1"> <thead> <tr> <th>Element</th> <th>Quantity</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>P1</td> <td>77</td> <td>lb/A</td> </tr> <tr> <td>K</td> <td>326</td> <td>lb/A</td> </tr> </tbody> </table>	Element	Quantity	Unit	P1	77	lb/A	K	326	lb/A	Additional Measured Elements
Element	Quantity	Unit								
P1	77	lb/A								
K	326	lb/A								

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

Impact Sequential and 1-Pass Programs in 2014.

Trial ID: 14-52-E30 Location: Belleville Res. Center Trial Year: 2014
Investigator: Ronald F. Krausz

No.	Date	Amount	Unit	Type	Type Description	Interval	Unit	Min Temp	Max Temp	Temp Unit
1.	4-24-14	2.24	IN	RAIN	rain	5	DAY			
2.	4-29-14	0.09	IN	RAIN	rain	2	DAY			
3.	4-29-14					7	DAY	41	87	F
4.	5-6-14					7	DAY	56	86	F
5.	5-8-14	0.13	IN	RAIN	rain	2	DAY			
6.	5-12-14	0.88	IN	RAIN	rain	4	DAY			
7.	5-13-14					7	DAY	37	76	F
8.	5-20-14					7	DAY	55	87	F
9.	5-21-14	0.06	IN	RAIN	rain	1	DAY			
10.	5-25-14	0.49	IN	RAIN	rain	2	DAY			
11.	5-27-14	0.08	IN	RAIN	rain	2	DAY			
12.	5-27-14					7	DAY	60	86	F
13.	5-31-14	0.14	IN	RAIN	rain	1	DAY			
14.	6-1-14	0.13	IN	RAIN	rain	1	DAY			
15.	6-3-14					7	DAY	59	90	F
16.	6-4-14	0.67	IN	RAIN	rain	1	DAY			
17.	6-7-14	0.6	IN	RAIN	rain	1	DAY			
18.	6-9-14	1.38	IN	RAIN	rain	2	DAY			
19.	6-10-14					7	DAY	51	90	F
20.	6-12-14	0.07	IN	RAIN	rain	1	DAY			
21.	6-15-14	0.02	IN	RAIN	rain	1	DAY			
22.	6-17-14					7	DAY	67	92	F
23.	6-20-14	2.09	IN	RAIN	rain	5	DAY			
24.	6-24-14					7	DAY	65	91	F
25.	6-27-14	0.11	IN	RAIN	rain	2	DAY			
26.	7-1-14	0.01	IN	RAIN	rain	1	DAY			
27.	7-1-14					7	DAY	55	90	F
28.	7-7-14	0.79	IN	RAIN	rain	2	DAY			
29.	7-8-14					7	DAY	59	89	F
30.	7-12-14	0.49	IN	RAIN	rain	3	DAY			
31.	7-15-14					7	DAY	54	85	F
32.	7-22-14					7	DAY	57	98	F
33.	7-25-14	0.02	IN	RAIN	rain	1	DAY			
34.	7-29-14					7	DAY	52	89	F
35.	8-1-14	0.04	IN	RAIN	rain	1	DAY			
36.	8-5-14	4.04	IN	RAIN	rain	4	DAY			
37.	8-5-14					7	DAY	66	88	F
38.	8-12-14					7	DAY	57	84	F
39.	8-15-14	1.21	IN	RAIN	rain	3	DAY			
40.	8-19-14					7	DAY	67	95	F
41.	8-20-14	0.11	IN	RAIN	rain	1	DAY			
42.	8-26-14					7	DAY	68	95	F
43.	8-27-14	1.56	IN	RAIN	rain	2	DAY			
44.	9-1-14	2.21	IN	RAIN	rain	2	DAY			
45.	9-2-14					7	DAY	54	93	F
46.	9-5-14	0.24	IN	RAIN	rain	1	DAY			
47.	9-9-14					7	DAY	45	85	F
48.	9-10-14	1.06	IN	RAIN	rain	1	DAY			
49.	9-16-14					7	DAY	46	86	F
50.	9-23-14					7	DAY	46	86	F
51.	9-30-14					7	DAY	37	87	F
52.	10-1-14	0.99	IN	RAIN	rain	3	DAY			
53.	10-6-14	0.31	IN	RAIN	rain	2	DAY			

Impact Sequential and 1-Pass Programs in 2014.

Trial ID: 14-52-E30 Location: Belleville Res. Center Trial Year: 2014
Investigator: Ronald F. Krausz

Application Description

	A	B	C
Application Date:	5-13-14	5-29-14	6-5-14
Appl. Start Time:	8:30	15:00	9:00
Appl. Stop Time:	9:00	15:30	9:30
Application Method:	Spray	Spray	Spray
Application Timing:	PRE	2-4"W-1	2-4"W-2
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	RFK	MEJ	RJW
Air Temperature, Unit:	61 F	81 F	71 F
% Relative Humidity:	100	61	81
Wind Velocity, Unit:	4 MPH	5 MPH	5 MPH
Wind Direction:	N	N	E
Dew Presence (Y/N):	N	N	N
Soil Temperature, Unit:	67 F	71 F	73 F
Soil Moisture:	ABONOR	NORMAL	ABONOR
% Cloud Cover:	75	50	98
Next Moisture Occurred On:	5-13-14	5-31-14	6-7-14
Time to Next Moisture, Unit:	2 HR	2 DAY	2 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:		V3	V4
Stage Maximum, Percent:		V3	V5
Height, Unit:		8 IN	12 IN
Height Minimum, Maximum:		6 8	10 12

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Stage Majority, Percent:	NA	6	4
Stage Minimum, Percent:		5	2
Stage Maximum, Percent:		6	6
Height, Unit:		4 IN	3 IN
Height Minimum, Maximum:		2 4	2 4
Density, Unit:		5 FT2	0.1 FT2
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Stage Majority, Percent:	NA	8	NA
Stage Minimum, Percent:		6	
Stage Maximum, Percent:		8	
Height, Unit:		4 IN	
Height Minimum, Maximum:		2 4	
Density, Unit:		0.01 FT2	
Pest 3 Code, Type, Scale:	ABUTH W	ABUTH W	ABUTH W
Stage Majority, Percent:	NA	6	4
Stage Minimum, Percent:		4	2
Stage Maximum, Percent:		8	6
Height, Unit:		3 IN	2 IN
Height Minimum, Maximum:		2 4	0.5 2
Density, Unit:		0.1 FT2	0.1 FT2
Pest 4 Code, Type, Scale:	AMATA W	AMATA W	AMATA W
Stage Majority, Percent:	NA	4	NA
Stage Minimum, Percent:		4	
Stage Maximum, Percent:		6	
Height, Unit:		0.5 IN	
Height Minimum, Maximum:		0.25 1	
Density, Unit:		0.001 FT2	
Pest 5 Code, Type, Scale:	IPOHE W	IPOHE W	IPOHE W
Stage Majority, Percent:	NA	NA	NA

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

Impact Sequential and 1-Pass Programs in 2014.

Trial ID: 14-52-E30 Location: Belleville Res. Center Trial Year: 2014
Investigator: Ronald F. Krausz

Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval							ZEAMD 10-8-14 Moisture Percent	ZEAMD 10-8-14 Test wt lb/bu	ZEAMD 10-8-14 Yield bu/A	ZEAMD 6-5-14 Injury Percent	ZEAMD 6-13-14 Injury Percent	ZEAMD 6-20-14 Injury Percent	ZEAMD 6-28-14 Injury Percent	ZEAMD 7-5-14 Injury Percent
										0 DA-C 7 DA-B	8 DA-C 15 DA-B	15 DA-C 22 DA-B	23 DA-C 30 DA-B	30 DA-C 37 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate	Growth Unit	Stage	Appl Code					
1	NONTREATED									14.5 a	58.8 a	166 b	0	0
2	DEGREE XTRA IMPACT AATREX 4L MSO (MSO ULTRA) 28% UAN	4.04 CS 2.8 SC 4 SC 100 SL 100 SL		2.02 lb ai/a 0.0164 lb ai/a 0.75 lb ai/a 1 % v/v 2.5 % v/v	4 0 pt/a 0.75 fl oz/a 1.5 pt/a 1 % v/v 2.5 % v/v		PRE	A 2-4"W-2 C 2-4"W-2 C 2-4"W-2 C 2-4"W-2 C		14.7 a	58.7 a	261 a	0 a	0 a
3	DEGREE XTRA IMPACT STATUS AATREX 4L MSO (MSO ULTRA) 28% UAN	4.04 CS 2.8 SC 56 WG 4 SC 100 SL 100 SL		2.02 lb ai/a 0.0164 lb ai/a 0.0875 lb ae/a 0.75 lb ai/a 1 % v/v 2.5 % v/v	4 0 pt/a 0.75 fl oz/a 2.5 oz/a 1.5 pt/a 1 % v/v 2.5 % v/v		PRE	A 2-4"W-2 C 2-4"W-2 C 2-4"W-2 C 2-4"W-2 C 2-4"W-2 C		15.1 a	58.5 a	254 a	0 a	0 a
4	DEGREE XTRA ROUNDUP POWERMAX N-PAK AMS	4.04 CS 4.5 SL 100 SL		2.02 lb ai/a 1.13 lb ae/a 2.5 % v/v	4 0 pt/a 32 fl oz/a 2.5 % v/v		PRE	A 2-4"W-2 C 2-4"W-2 C		14.8 a	58.6 a	262 a	0 a	0 a
5	DEGREE XTRA ROUNDUP POWERMAX IMPACT AATREX 4L MSO (MSO ULTRA) N-PAK AMS	4.04 CS 4.5 SL 2.8 SC 4 SC 100 SL 100 SL		2.02 lb ai/a 1.13 lb ae/a 0.0164 lb ai/a 0.75 lb ai/a 0.5 % v/v 2.5 % v/v	4 0 pt/a 32 fl oz/a 0.75 fl oz/a 1.5 pt/a 0.5 % v/v 2.5 % v/v		PRE	A 2-4"W-2 C 2-4"W-2 C 2-4"W-2 C 2-4"W-2 C 2-4"W-2 C		14.4 a	58.9 a	265 a	0 a	0 a
6	HARNESS XTRA 5.6L ROUNDUP POWERMAX IMPACT MSO (MSO ULTRA) N-PAK AMS	5.6 EC 4.5 SL 2.8 SC 100 SL 100 SL		2.24 lb ai/a 1.13 lb ae/a 0.0164 lb ai/a 0.5 % v/v 2.5 % v/v	3 2 pt/a 32 fl oz/a 0.75 fl oz/a 0.5 % v/v 2.5 % v/v		2-4"W-1 B			14.8 a	58.6 a	252 a	0 a	0 a
7	HALEX GT AATREX 4L NIS (ACTIVATOR 90) N-PAK AMS	4.389 CS 4 SC 100 SL 100 SL		1.97 lb ai/a 1 lb ai/a 0.25 % v/v 2.5 % v/v	3.6 pt/a 2 pt/a 0.25 % v/v 2.5 % v/v		2-4"W-1 B			14.9 a	58.5 a	242 a	0 a	0 a
LSD (P=.05)							0.72	0.45	29.2	0.0	0.0	0.0	0.0	0.0
Standard Deviation							0.40	0.25	16.4	0.0	0.0	0.0	0.0	0.0
CV							2.74	0.43	6.74	0.0	0.0	0.0	0.0	0.0
Replicate F							4.519	5.143	0.243	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)							0.0344	0.0244	0.7883	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F							1.015	0.905	13.501	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)							0.4602	0.5224	0.0001	1.0000	1.0000	1.0000	1.0000	1.0000

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.

Impact Sequential and 1-Pass Programs in 2014.

Trial ID: 14-52-E30 Location: Belleville Res. Center Trial Year: 2014
Investigator: Ronald F. Krausz

Pest Code Crop Code Rating Date Rating Type Rating Unit							SETFA	SETFA	SETFA	SETFA	SETFA	SETFA
Rating Timing Trt-Eval Interval							6-5-14 Control Percent	6-13-14 Control Percent	6-20-14 Control Percent	6-28-14 Control Percent	7-5-14 Control Percent	8-4-14 Control Percent
Trt Treatment No. Name							0 DA-C 7 DA-B	8 DA-C 15 DA-B	15 DA-C 22 DA-B	23 DA-C 30 DA-B	30 DA-C 37 DA-B	60 DA-C
Form	Form	Rate	Other	Other	Growth	Appl						
Conc	Type	Unit	Rate	Rate	Unit	Stage						
1 NONTREATED							0	0	0	0	0	0
2 DEGREE XTRA	4.04 CS	2.02 lb ai/a	4.0 pt/a	PRE	A		96 a	99 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 4L	4 SC	0.75 lb ai/a	1.5 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	4.0 pt/a	PRE	A		99 a	99 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 4L	4 SC	0.75 lb ai/a	1.5 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	4.0 pt/a	PRE	A		99 a	99 a	99 a	99 a	99 a	99 a
ROUNDUP POWERMAX	4.5 SL	1.13 lb ae/a	32 fl oz/a	2-4"W-2 C								
N-PAK AMS	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	4.0 pt/a	PRE	A		99 a	99 a	99 a	99 a	99 a	99 a
ROUNDUP POWERMAX	4.5 SL	1.13 lb ae/a	32 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 4L	4 SC	0.75 lb ai/a	1.5 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	2.5 % v/v	2-4"W-2 C								
6 HARNESS XTRA 5.6L	5.6 EC	2.24 lb ai/a	3.2 pt/a	2-4"W-1 B			99 a	99 a	99 a	99 a	99 a	99 a
ROUNDUP POWERMAX	4.5 SL	1.13 lb ae/a	32 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								
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	2.5 % v/v	2-4"W-1 B								
7 HALEX GT	4.389 CS	1.97 lb ai/a	3.6 pt/a	2-4"W-1 B			99 a	99 a	99 a	99 a	99 a	99 a
AATREX 4L	4 SC	1 lb ai/a	2 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	2.5 % v/v	2-4"W-1 B								
LSD (P=.05)							3.9	0.0	0.0	0.0	0.0	0.0
Standard Deviation							2.1	0.0	0.0	0.0	0.0	0.0
CV							2.15	0.0	0.0	0.0	0.0	0.0
Replicate F							1.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)							0.4019	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F							1.000	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)							0.4651	1.0000	1.0000	1.0000	1.0000	1.0000

Impact Sequential and 1-Pass Programs in 2014.

Trial ID: 14-52-E30 Location: Belleville Res. Center Trial Year: 2014
Investigator: Ronald F. Krausz

Pest Code Crop Code Rating Date Rating Type Rating Unit							AMBTR 6-5-14 Control Percent	AMBTR 6-13-14 Control Percent	AMBTR 6-20-14 Control Percent	AMBTR 6-28-14 Control Percent	AMBTR 7-5-14 Control Percent	AMBTR 8-4-14 Control Percent
Rating Timing Trt-Eval Interval							0 DA-C 7 DA-B	8 DA-C 15 DA-B	15 DA-C 22 DA-B	23 DA-C 30 DA-B	30 DA-C 37 DA-B	60 DA-C
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Unit	Stage	Appl Code			
1	NONTREATED									0	0	0
2	DEGREE XTRA	4.04	CS	2.02 lb ai/a	4.0 pt/a		PRE	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 4L	4	SC	0.75 lb ai/a	1.5 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	4.0 pt/a		PRE	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 4L	4	SC	0.75 lb ai/a	1.5 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	4.0 pt/a		PRE	A		99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		2-4"	W-2 C				
	N-PAK AMS	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	4.0 pt/a		PRE	A		99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 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 4L	4	SC	0.75 lb ai/a	1.5 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	2.5 % v/v		2-4"	W-2 C				
6	HARNESS XTRA 5.6L	5.6	EC	2.24 lb ai/a	3.2 pt/a		2-4"	W-1 B		99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 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				
	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	2.5 % v/v		2-4"	W-1 B				
7	HALEX GT	4.389	CS	1.97 lb ai/a	3.6 pt/a		2-4"	W-1 B		99 a	99 a	99 a
	AATREX 4L	4	SC	1 lb ai/a	2 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	2.5 % v/v		2-4"	W-1 B				
LSD (P=.05)							0.4	0.0	0.0	0.0	0.0	0.0
Standard Deviation							0.2	0.0	0.0	0.0	0.0	0.0
CV							0.24	0.0	0.0	0.0	0.0	0.0
Replicate F							1.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)							0.4019	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F							1.000	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)							0.4651	1.0000	1.0000	1.0000	1.0000	1.0000

Impact Sequential and 1-Pass Programs in 2014.

Trial ID: 14-52-E30 Location: Belleville Res. Center Trial Year: 2014
Investigator: Ronald F. Krausz

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH	ABUTH
					6-5-14 Control Percent	6-13-14 Control Percent	6-20-14 Control Percent	6-28-14 Control Percent	7-5-14 Control Percent	8-4-14 Control Percent
Rating Timing					0 DA-C	8 DA-C	15 DA-C	23 DA-C	30 DA-C	60 DA-C
Trt-Eval Interval					7 DA-B	15 DA-B	22 DA-B	30 DA-B	37 DA-B	60 DA-C
Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Other Rate	Other Rate	Growth Unit	Stage	Appl Code	
1	NONTREATED									0
2	DEGREE XTRA	4.04	CS	2.02 lb ai/a	4.0 pt/a		PRE	A		92 a
	IMPACT	2.8	SC	0.0164 lb ai/a	0.75 fl oz/a		2-4"W-2 C			99 a
	AATREX 4L	4	SC	0.75 lb ai/a	1.5 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	4.0 pt/a		PRE	A		93 a
	IMPACT	2.8	SC	0.0164 lb ai/a	0.75 fl oz/a		2-4"W-2 C			99 a
	STATUS	56	WG	0.0875 lb ae/a	2.5 oz/a		2-4"W-2 C			
	AATREX 4L	4	SC	0.75 lb ai/a	1.5 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	4.0 pt/a		PRE	A		99 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		2-4"W-2 C			99 a
	N-PAK AMS	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	4.0 pt/a		PRE	A		93 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		2-4"W-2 C			99 a
	IMPACT	2.8	SC	0.0164 lb ai/a	0.75 fl oz/a		2-4"W-2 C			
	AATREX 4L	4	SC	0.75 lb ai/a	1.5 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	2.5 % v/v		2-4"W-2 C			
6	HARNESS XTRA 5.6L	5.6	EC	2.24 lb ai/a	3.2 pt/a		2-4"W-1 B			99 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		2-4"W-1 B			99 a
	IMPACT	2.8	SC	0.0164 lb ai/a	0.75 fl oz/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	2.5 % v/v		2-4"W-1 B			
7	HALEX GT	4.389	CS	1.97 lb ai/a	3.6 pt/a		2-4"W-1 B			99 a
	AATREX 4L	4	SC	1 lb ai/a	2 pt/a		2-4"W-1 B			99 a
	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	2.5 % v/v		2-4"W-1 B			
LSD (P=.05)					7.2	0.0	0.0	0.0	0.0	0.0
Standard Deviation					4.0	0.0	0.0	0.0	0.0	0.0
CV					4.16	0.0	0.0	0.0	0.0	0.0
Replicate F					0.151	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)					0.8621	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F					2.476	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)					0.1043	1.0000	1.0000	1.0000	1.0000	1.0000

Impact Sequential and 1-Pass Programs in 2014.

Trial ID: 14-52-E30 Location: Belleville Res. Center Trial Year: 2014
Investigator: Ronald F. Krausz

Pest Code Crop Code Rating Date Rating Type Rating Unit							AMATA	AMATA	AMATA	AMATA	AMATA	AMATA
							6-5-14 Control Percent	6-13-14 Control Percent	6-20-14 Control Percent	6-28-14 Control Percent	7-5-14 Control Percent	8-4-14 Control Percent
Rating Timing Trt-Eval Interval							0 DA-C 7 DA-B	8 DA-C 15 DA-B	15 DA-C 22 DA-B	23 DA-C 30 DA-B	30 DA-C 37 DA-B	60 DA-C
Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	NONTREATED								0	0	0	0
2	DEGREE XTRA	4.04	CS	2.02 lb ai/a	4.0 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 4L	4	SC	0.75 lb ai/a	1.5 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	4.0 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 4L	4	SC	0.75 lb ai/a	1.5 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	4.0 pt/a		PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		2-4"W-2 C					
	N-PAK AMS	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	4.0 pt/a		PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 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 4L	4	SC	0.75 lb ai/a	1.5 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	2.5 % v/v		2-4"W-2 C					
6	HARNESS XTRA 5.6L	5.6	EC	2.24 lb ai/a	3.2 pt/a		2-4"W-1 B		99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 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					
	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	2.5 % v/v		2-4"W-1 B					
7	HALEX GT	4.389	CS	1.97 lb ai/a	3.6 pt/a		2-4"W-1 B		99 a	99 a	99 a	99 a
	AATREX 4L	4	SC	1 lb ai/a	2 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	2.5 % v/v		2-4"W-1 B					
LSD (P=.05)							0.0	0.0	0.0	0.0	0.0	0.0
Standard Deviation							0.0	0.0	0.0	0.0	0.0	0.0
CV							0.0	0.0	0.0	0.0	0.0	0.0
Replicate F							0.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)							1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F							0.000	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)							1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Impact Sequential and 1-Pass Programs in 2014.

Trial ID: 14-52-E30 Location: Belleville Res. Center Trial Year: 2014
Investigator: Ronald F. Krausz

Pest Code Crop Code Rating Date Rating Type Rating Unit							IPOHE 6-5-14 Control Percent	IPOHE 6-13-14 Control Percent	IPOHE 6-20-14 Control Percent	IPOHE 6-28-14 Control Percent	IPOHE 7-5-14 Control Percent	IPOHE 8-4-14 Control Percent
Rating Timing Trt-Eval Interval							0 DA-C 7 DA-B	8 DA-C 15 DA-B	15 DA-C 22 DA-B	23 DA-C 30 DA-B	30 DA-C 37 DA-B	60 DA-C
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Rate	Growth Unit	Stage	Appl Code			
1	NONTREATED									0	0	0
2	DEGREE XTRA	4.04	CS	2.02 lb ai/a	4.0 pt/a		PRE	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 4L	4	SC	0.75 lb ai/a	1.5 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	4.0 pt/a		PRE	A		98 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 4L	4	SC	0.75 lb ai/a	1.5 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	4.0 pt/a		PRE	A		99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		2-4"W-2 C					
	N-PAK AMS	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	4.0 pt/a		PRE	A		99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 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 4L	4	SC	0.75 lb ai/a	1.5 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	2.5 % v/v		2-4"W-2 C					
6	HARNESS XTRA 5.6L	5.6	EC	2.24 lb ai/a	3.2 pt/a		2-4"W-1 B			99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 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					
	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	2.5 % v/v		2-4"W-1 B					
7	HALEX GT	4.389	CS	1.97 lb ai/a	3.6 pt/a		2-4"W-1 B			99 a	99 a	99 a
	AATREX 4L	4	SC	1 lb ai/a	2 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	2.5 % v/v		2-4"W-1 B					
LSD (P=.05)							1.8	0.0	0.0	0.0	0.0	0.0
Standard Deviation							1.0	0.0	0.0	0.0	0.0	0.0
CV							1.01	0.0	0.0	0.0	0.0	0.0
Replicate F							0.730	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)							0.5058	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F							0.865	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)							0.5365	1.0000	1.0000	1.0000	1.0000	1.0000

Impact Sequential and 1-Pass Programs in 2014.

Trial ID: 14-52-E30 Location: Belleville Res. Center Trial Year: 2014
Investigator: Ronald F. Krausz

Trial Comments

1. Protocol: AMVAC (Impact Sequential).
2. Ratings: CI 0, 7, 15, and 30 DA-C; CI 7, 15, and 30 DA-B;
WC 0, 7, 15, 30, and 60 DA-C; WC 7, 15, and 30 DA-B.
3. Yield.
4. Following the PRE application the first significant rainfall event was 0.49 inch the next day.
Following the 2-4"W-1 application the first significant rainfall event beginning 2 days later
was 0.27 inch over 2 days then 0.67 inch 6 days after application.
Following the 2-4"W-2 application the first significant rainfall was 2.05 inch over the next 7 days.
5. Harvested 10-8-14, (2) 30 inch rows by 22 ft.