

BroadAxe XC in Syngenta Soybean Portfolio.

Trial ID: 15-2A-ME110 Location: Belleville Res. Center Trial Year: 2015
Investigator: Ronald F. Krausz

Trial Status: F one-year/final Initiation Date: 6-12-15 Completion Date: 10-17-15	Trial Location
City: Belleville Country: USA State/Prov.: Illinois IL Postal Code: 62221	

Objectives:
 Evaluate the fit of Broadaxe XC in the Syngenta portfolio, and evaluate the yield and ROI from using a full spectrum residual versus a limited spectrum residual herbicide.

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
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Crop 1: GLXMA Glycine max Soybean Variety: NK 39-U2 BBCH Scale: BSOY Description: RR2Y	Crop Description
Planting Rate, Unit: 140000 S/A Depth, Unit: 1 IN Row Spacing, Unit: 30 IN	Planting Date: 6-12-15 Planting Method: SEEDED

Pest 1 Type: W Code: PANDI Panicum dichotomiflorum Michx. Common Name: panicum, fall	Pest Description
Pest 2 Type: W Code: AMBTR Ambrosia trifida L. Common Name: ragweed, giant	
Pest 3 Type: W Code: AMATA Amaranthus rudis Sauer Common Name: waterhemp, common	
Pest 4 Type: W Code: XANST Xanthium strumarium L. Common Name: cocklebur, common	

Treated Plot Width: 7.5 FT Total Plot Width: 10 FT Treated Plot Length: 28 FT Total Plot Length: 28 FT	Site and Design	Site Type: FIELD Experimental Unit: 1 PLOT Tillage Type: REDTIL reduced-till Study Design: RACOB� Randomized Complete Block (RCB)						
Replications: 4 Untreated Arrangement: INCLUDED single control randomized in each block								
<table border="1"> <thead> <tr> <th>No.</th> <th>Previous Crop</th> <th>Year</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>ZEAMD</td> <td>2014</td> </tr> </tbody> </table>	No.	Previous Crop	Year	1.	ZEAMD	2014		
No.	Previous Crop	Year						
1.	ZEAMD	2014						

Maintenance				
<table border="1"> <thead> <tr> <th>No.</th> <th>Maintenance Product Name</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>N 0 LB/A, P2O5 50 LB/A, K2O 150 LB/A</td> </tr> </tbody> </table>	No.	Maintenance Product Name	1.	N 0 LB/A, P2O5 50 LB/A, K2O 150 LB/A
No.	Maintenance Product Name			
1.	N 0 LB/A, P2O5 50 LB/A, K2O 150 LB/A			

Description Name: 02a_2013 % OM: 2.5 Texture: SIL silt loam pH: 6.7 Soil Name: Pierron CEC: 6	Soil Description									
<table border="1"> <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>262</td> <td>lb/A</td> </tr> </tbody> </table>	Element	Quantity	Unit	P1	65	lb/A	K	262	lb/A	Additional Measured Elements
Element	Quantity	Unit								
P1	65	lb/A								
K	262	lb/A								

BroadAxe XC in Syngenta Soybean Portfolio.

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Overall Moisture Conditions: ABONOR						Moisture and Weather Conditions				
Closest Weather Station: ICN - Belleville IL						Distance, Unit: 0.5 MI				
No.	Date	Amount	Unit	Type	Type Description	Interval	Unit	Min Temp	Max Temp	Temp Unit
1.	5-6-15					7	DAY	49	85	F
2.	5-8-15	4.09	IN	RAIN	rain	4	DAY			
3.	5-13-15					7	DAY	45	83	F
4.	5-14-15	0.33	IN	RAIN	rain	4	DAY			
5.	5-20-15					7	DAY	44	85	F
6.	5-20-15	0.16	IN	RAIN	rain	1	DAY			
7.	5-24-15	0.89	IN	RAIN	rain	1	DAY			
8.	5-26-15	0.59	IN	RAIN	rain	2	DAY			
9.	5-27-15					7	DAY	55	84	F
10.	5-29-15	2.15	IN	RAIN	rain	2	DAY			
11.	6-3-15					7	DAY	53	89	F
12.	6-5-15	0.17	IN	RAIN	rain	1	DAY			
13.	6-8-15	0.66	IN	RAIN	rain	1	DAY			
14.	6-10-15					7	DAY	64	91	F
15.	6-14-15	0.16	IN	RAIN	rain	1	DAY			
16.	6-15-15	0.11	IN	RAIN	rain	1	DAY			
17.	6-16-15	2.25	IN	RAIN	rain	1	DAY			
18.	6-17-15					7	DAY	69	91	F
19.	6-17-15	0.09	IN	RAIN	rain	1	DAY			
20.	6-18-15	0.14	IN	RAIN	rain	1	DAY			
21.	6-19-15	3.29	IN	RAIN	rain	1	DAY			
22.	6-20-15	0.2	IN	RAIN	rain	2	DAY			
23.	6-24-15					7	DAY	62	93	F
24.	6-25-15	1.66	IN	RAIN	rain	2	DAY			
25.	6-28-15	0.6	IN	RAIN	rain	2	DAY			
26.	7-1-15					7	DAY	63	88	F
27.	7-1-15	0.64	IN	RAIN	rain	2	DAY			
28.	7-7-15	1.33	IN	RAIN	rain	2	DAY			
29.	7-8-15					7	DAY	59	97	F
30.	7-10-15	0.26	IN	RAIN	rain	1	DAY			
31.	7-15-15					7	DAY	69	93	F
32.	7-19-15	0.35	IN	RAIN	rain	2	DAY			
33.	7-22-15					7	DAY	65	95	F
34.	7-26-15	1.21	IN	RAIN	rain	3	DAY			
35.	7-29-15					7	DAY	65	93	F
36.	8-5-15	2.25	IN	RAIN	rain	1	DAY			
37.	8-9-15	0.47	IN	RAIN	rain	1	DAY			
38.	8-12-15					7	DAY	63	89	F
39.	8-18-15	2.23	IN	RAIN	rain	2	DAY			
40.	8-19-15					7	DAY	52	82	F
41.	8-22-15	0.18	IN	RAIN	rain	1	DAY			
42.	8-26-15					7	DAY	54	91	F
43.	9-2-15					7	DAY	68	94	F
44.	9-8-15	1.93	IN	RAIN	rain	2	DAY			
45.	9-9-15					7	DAY	47	83	F
46.	9-11-15	0.4	IN	RAIN	rain	1	DAY			
47.	9-16-15					7	DAY	51	90	F
48.	9-19-15	0.14	IN	RAIN	rain	1	DAY			
49.	9-23-15					7	DAY	54	85	F
50.	9-28-15	0.13	IN	RAIN	rain	1	DAY			

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Application Description

	A	B
Application Date:	6-13-15	6-29-15
Appl. Start Time:	13:20	10:40
Appl. Stop Time:	14:00	11:30
Application Method:	Spray	Spray
Application Timing:	PRE	2-3"W
Application Placement:	BROSOI	BROFOL
Applied By:	LXF	MEJ
Air Temperature, Unit:	87 F	78 F
% Relative Humidity:	63	69
Wind Velocity, Unit:	5 MPH	6 MPH
Wind Direction:	SW	W
Dew Presence (Y/N):	N	N
Soil Temperature, Unit:	75 F	76 F
Soil Moisture:	NORMAL	ABONOR
% Cloud Cover:	55	50
Next Moisture Occurred On:	6-14-15	7-1-15
Time to Next Moisture, Unit:	20 HR	56 HR

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA	GLXMA
Stage Scale Used:	DESC	DESC
Stage Majority, Percent:	NA	V2
Stage Minimum, Percent:		VE
Stage Maximum, Percent:		V2
Height, Unit:		7 IN
Height Minimum, Maximum:		5 7

BroadAxe XC in Syngenta Soybean Portfolio.

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Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	PANDI W	PANDI W
Stage Majority, Percent:	NA	3
Stage Minimum, Percent:		3
Stage Maximum, Percent:		5
Height, Unit:		4 IN
Height Minimum, Maximum:		3 6
Density, Unit:		0.01 FT2
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W
Stage Majority, Percent:	NA	4
Stage Minimum, Percent:		4
Stage Maximum, Percent:		6
Height, Unit:		2 IN
Height Minimum, Maximum:		1 2.5
Density, Unit:		0.1 FT2
Pest 3 Code, Type, Scale:	AMATA W	AMATA W
Stage Majority, Percent:	NA	2
Stage Minimum, Percent:		2
Stage Maximum, Percent:		4
Height, Unit:		1 IN
Height Minimum, Maximum:		0.5 1.5
Density, Unit:		0.001 FT2
Pest 4 Code, Type, Scale:	XANST W	XANST W
Stage Majority, Percent:	NA	4
Stage Minimum, Percent:		2
Stage Maximum, Percent:		6
Height, Unit:		2.5 IN
Height Minimum, Maximum:		0.5 4
Density, Unit:		0.1 FT2

Application Equipment

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

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Pest Code							GLXMA	GLXMA	GLXMA	
Crop Code							10-17-15	10-17-15	10-17-15	
Rating Date							Moisture	Test wt.	Yield	
Rating Type							Percent	lb/bu	bu/A	
Rating Unit										
Rating Timing										
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate	Growth Unit	Appl Stage	Code
1	NONTREATED									22 g
2	BROADAXE XC	7	SC	1.37	lb ai/a	25	fl oz/a	PRE	A	10.0 a
	FLEXSTAR GT 3.5	2.82	SL	1.23	lb ae/a	3.5	pt/a	2-3"	W B	58.4 a
	PREMIUM MSO	100	SL	1	% v/v	1	% v/v	2-3"	W B	55 abc
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	
3	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	PRE	A	10.5 a
	FLEXSTAR GT 3.5	2.82	SL	1.23	lb ae/a	3.5	pt/a	2-3"	W B	58.1 a
	PREMIUM MSO	100	SL	1	% v/v	1	% v/v	2-3"	W B	52 a-d
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	
4	BROADAXE XC	7	SC	1.37	lb ai/a	25	fl oz/a	PRE	A	10.7 a
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B	57.8 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	56 ab
5	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	PRE	A	9.9 a
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B	58.5 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	46 c-f
6	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	10.6 a
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B	57.8 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	44 def
7	VALOR XLT	40.3	WG	0.0756	lb ai/a	3	oz/a	PRE	A	10.4 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B	58.1 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	41 ef
8	FIERCE	76	WG	0.143	lb ai/a	3	oz/a	PRE	A	10.3 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B	58.2 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	37 f
9	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	10.1 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B	58.3 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	55 abc
10	SIU-1							PRE	A	10.6 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B	58.0 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	48 b-e
11	AUTHORITY XL	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	9.9 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B	58.5 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	56 ab
12	OPTILL PRO (CO-PACK)							PRE	A	10.3 a
	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	58.3 a
	OUTLOOK	6	EC	0.47	lb ai/a	10	fl oz/a	PRE	A	55 abc
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B	
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	
13	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	11.5 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B	57.0 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	52 a-d

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.

Missing data estimates are included in columns: Average=23

Could not calculate LSD (% mean diff) for columns 18,12,19,24,29,20,14,21,22 because error mean square = 0.

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Pest Code Crop Code Rating Date Rating Type Rating Unit Rating Timing Trt-Eval Interval								GLXMA 10-17-15 Moisture Percent	GLXMA 10-17-15 Test wt. lb/bu	GLXMA 10-17-15 Yield bu/A		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Other Rate	Other Rate	Growth Stage	Appl Code			
14	VERDICT	5.57	EC	0.218	lb ai/a	5	fl oz/a	PRE	A	10.0 a	58.4 a	55 abc
	ZIDUA	85	WG	0.08	lb ai/a	1.5	oz/a	PRE	A			
	EXTREME	2.17	SL	0.81	lb ai/a	3	pt/a	2-3"W	B			
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"W	B			
15	TRIVENCE	61.3	WG	0.23	lb ai/a	6	oz/a	PRE	A	10.2 a	58.2 a	55 abc
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"W	B			
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"W	B			
16	BROADAXE XC	7	SC	1.75	lb ai/a	32	fl oz/a	PRE	A	10.0 a	58.5 a	58 a
	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	2-3"W	B			
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"W	B			
	PREMIUM MSO	100	SL	0.5	% v/v	0.5	% v/v	2-3"W	B			
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"W	B			
LSD P=.05								1.12	1.16	9.4		
Standard Deviation								0.78	0.81	6.6		
CV								7.57	1.39	13.4		
Replicate F								1.762	1.209	2.412		
Replicate Prob(F)								0.1692	0.3182	0.0792		
Treatment F								1.117	0.935	8.341		
Treatment Prob(F)								0.3724	0.5315	0.0001		

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Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	GLXMA 6-29-15 Stunt Percent 16 DA-A 0 DA-B	GLXMA 7-13-15 Stunt Percent 14 DA-B	GLXMA 7-20-15 Stunt Percent 21 DA-B	GLXMA 10-16-15 Stunt Percent EOS	GLXMA 6-29-15 STDRED Percent 16 DA-A 0 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	NONTREATED									0	0
2	BROADAXE XC	7	SC	1.37	lb ai/a	25	fl oz/a	PRE	A	9 b	6 c
	FLEXSTAR GT 3.5	2.82	SL	1.23	lb ae/a	3.5	pt/a	2-3"	W B		0 a
	PREMIUM MSO	100	SL	1	% v/v	1	% v/v	2-3"	W B		0 c
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		
3	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	PRE	A	5 b	6 c
	FLEXSTAR GT 3.5	2.82	SL	1.23	lb ae/a	3.5	pt/a	2-3"	W B		0 a
	PREMIUM MSO	100	SL	1	% v/v	1	% v/v	2-3"	W B		0 c
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		
4	BROADAXE XC	7	SC	1.37	lb ai/a	25	fl oz/a	PRE	A	9 b	4 c
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B		3 d
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		0 a
5	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	PRE	A	3 b	0 c
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B		0 d
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		0 a
6	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	3 b	6 c
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B		6 d
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		0 a
7	VALOR XLT	40.3	WG	0.0756	lb ai/a	3	oz/a	PRE	A	40 a	21 ab
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B		19 abc
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		6 a
8	FIERCE	76	WG	0.143	lb ai/a	3	oz/a	PRE	A	45 a	26 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B		24 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		6 a
9	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	3 b	4 c
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B		3 d
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		0 a
10	SIU-1							PRE	A	48 a	25 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B		20 ab
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		0 a
11	AUTHORITY XL	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	0 b	0 c
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B		0 d
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		0 a
12	OPTILL PRO (CO-PACK)							PRE	A	8 b	4 c
	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A		3 d
	OUTLOOK	6	EC	0.47	lb ai/a	10	fl oz/a	PRE	A		0 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B		0 c
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		
13	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	16 b	11 bc
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B		9 bcd
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		0 a

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Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	GLXMA 6-29-15 Stunt Percent 16 DA-A 0 DA-B	GLXMA 7-13-15 Stunt Percent 14 DA-B	GLXMA 7-20-15 Stunt Percent 21 DA-B	GLXMA 10-16-15 Stunt Percent EOS	GLXMA 6-29-15 STDRED Percent 16 DA-A 0 DA-B
14	VERDICT ZIDUA EXTREME N-PAK AMS	5.57 EC 85 WG 2.17 SL 100 SL	0.218 lb ai/a 0.08 lb ai/a 0.81 lb ai/a 2.5 % v/v	5 fl oz/a 1.5 oz/a 3 pt/a 2.5 % v/v	PRE PRE 2-3"W 2-3"W	A A B B	14 b	9 bc	9 bcd	0 a	0 c
15	TRIVENCE ROUNDUP POWERMAX N-PAK AMS	61.3 WG 4.5 SL 100 SL	0.23 lb ai/a 1.02 lb ae/a 2.5 % v/v	6 oz/a 29 fl oz/a 2.5 % v/v	PRE 2-3"W 2-3"W	A B B	6 b	4 c	3 d	0 a	3 bc
16	BROADAXE XC PREFIX TOUCHDOWN TOTAL PREMIUM MSO N-PAK AMS	7 SC 5.29 EC 4.17 SL 100 SL 100 SL	1.75 lb ai/a 1.32 lb ai/a 1.04 lb ae/a 0.5 % v/v 2.5 % v/v	32 fl oz/a 2 pt/a 32 fl oz/a 0.5 % v/v 2.5 % v/v	PRE 2-3"W 2-3"W 2-3"W 2-3"W	A B B B B	5 b	8 c	8 cd	0 a	5 abc
LSD P=.05	Standard Deviation	CV					17.7 12.4 88.18	12.6 8.9 99.36	12.0 8.4 110.99	6.3 4.4 527.8	5.7 4.0 177.4
Replicate F	Replicate Prob(F)	Treatment F	Treatment Prob(F)				10.355 0.0001 6.811 0.0001	13.524 0.0001 3.661 0.0005	10.055 0.0001 3.181 0.0019	2.154 0.1078 1.000 0.4708	6.791 0.0008 2.589 0.0087

BroadAxe XC in Syngenta Soybean Portfolio.

Trial ID: 15-2A-ME110 Location: Belleville Res. Center Trial Year: 2015
Investigator: Ronald F. Krausz

Pest Code							GLXMA	GLXMA			
Crop Code							7-6-15	7-13-15			
Rating Date							Necrosis	Necrosis			
Rating Type							Percent	Percent			
Rating Unit							7 DA-B	14 DA-B			
Rating Timing											
Trt-Eval Interval											
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Other Rate	Other Rate	Growth Unit	Appl Code		
1	NONTREATED									0	0
2	BROADAXE XC	7	SC	1.37	lb ai/a	25	fl oz/a	PRE	A	10	5
	FLEXSTAR GT 3.5	2.82	SL	1.23	lb ae/a	3.5	pt/a	2-3"	W B		
	PREMIUM MSO	100	SL	1	% v/v	1	% v/v	2-3"	W B		
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		
3	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	PRE	A	11	5
	FLEXSTAR GT 3.5	2.82	SL	1.23	lb ae/a	3.5	pt/a	2-3"	W B		
	PREMIUM MSO	100	SL	1	% v/v	1	% v/v	2-3"	W B		
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		
4	BROADAXE XC	7	SC	1.37	lb ai/a	25	fl oz/a	PRE	A	0	0
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B		
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		
5	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	PRE	A	0	0
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B		
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		
6	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	0	0
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B		
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		
7	VALOR XLT	40.3	WG	0.0756	lb ai/a	3	oz/a	PRE	A	0	0
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B		
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		
8	FIERCE	76	WG	0.143	lb ai/a	3	oz/a	PRE	A	0	0
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B		
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		
9	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	0	0
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B		
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		
10	SIU-1							PRE	A	0	0
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B		
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		
11	AUTHORITY XL	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	0	0
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B		
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		
12	OPTILL PRO (CO-PACK)							PRE	A	0	0
	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A		
	OUTLOOK	6	EC	0.47	lb ai/a	10	fl oz/a	PRE	A		
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B		
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		
13	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	0	0
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B		
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B		

BroadAxe XC in Syngenta Soybean Portfolio.

Trial ID: 15-2A-ME110 Location: Belleville Res. Center Trial Year: 2015
 Investigator: Ronald F. Krausz

Pest Code							GLXMA	GLXMA		
Crop Code							7-6-15	7-13-15		
Rating Date							Necrosis	Necrosis		
Rating Type							Percent	Percent		
Rating Unit										
Rating Timing										
Trt-Eval Interval							7 DA-B	14 DA-B		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
14	VERDICT	5.57	EC	0.218 lb ai/a	5 fl oz/a		PRE	A	0 c	0 c
	ZIDUA	85	WG	0.08 lb ai/a	1.5 oz/a		PRE	A		
	EXTREME	2.17	SL	0.81 lb ai/a	3 pt/a		2-3"W	B		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		2-3"W	B		
15	TRIVENCE	61.3	WG	0.23 lb ai/a	6 oz/a		PRE	A	0 c	0 c
	ROUNDUP POWERMAX	4.5	SL	1.02 lb ae/a	29 fl oz/a		2-3"W	B		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		2-3"W	B		
16	BROADAXE XC	7	SC	1.75 lb ai/a	32 fl oz/a		PRE	A	16 a	10 a
	PREFIX	5.29	EC	1.32 lb ai/a	2 pt/a		2-3"W	B		
	TOUCHDOWN TOTAL	4.17	SL	1.04 lb ae/a	32 fl oz/a		2-3"W	B		
	PREMIUM MSO	100	SL	0.5 % v/v	0.5 % v/v		2-3"W	B		
	N-PAK AMS	100	SL	2.5 % v/v	2.5 % v/v		2-3"W	B		
LSD P=.05							1.3	.		
Standard Deviation							0.9	0.0		
CV							35.19	0.0		
Replicate F							2.154	0.000		
Replicate Prob(F)							0.1078	1.0000		
Treatment F							146.538	0.000		
Treatment Prob(F)							0.0001	1.0000		

BroadAxe XC in Syngenta Soybean Portfolio.

Trial ID: 15-2A-ME110 Location: Belleville Res. Center Trial Year: 2015
Investigator: Ronald F. Krausz

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	PANDI	PANDI	PANDI	PANDI
							6-29-15 Control Percent 16 DA-A 0 DA-B	7-13-15 Control Percent 14 DA-B	7-20-15 Control Percent 21 DA-B	10-16-15 Control Percent EOS
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	NONTREATED									0 0 0 0
2	BROADAXE XC	7	SC	1.37	lb ai/a	25	fl oz/a	PRE	A	99 a 99 a 99 a 99 a
	FLEXSTAR GT 3.5	2.82	SL	1.23	lb ae/a	3.5	pt/a	2-3"	W B	
	PREMIUM MSO	100	SL	1	% v/v	1	% v/v	2-3"	W B	
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	
3	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	PRE	A	99 a 99 a 99 a 99 a
	FLEXSTAR GT 3.5	2.82	SL	1.23	lb ae/a	3.5	pt/a	2-3"	W B	
	PREMIUM MSO	100	SL	1	% v/v	1	% v/v	2-3"	W B	
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	
4	BROADAXE XC	7	SC	1.37	lb ai/a	25	fl oz/a	PRE	A	99 a 99 a 99 a 99 a
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B	
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	
5	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	PRE	A	99 a 99 a 99 a 99 a
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B	
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	
6	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	99 a 99 a 99 a 99 a
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B	
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	
7	VALOR XLT	40.3	WG	0.0756	lb ai/a	3	oz/a	PRE	A	99 a 99 a 99 a 99 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B	
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	
8	FIERCE	76	WG	0.143	lb ai/a	3	oz/a	PRE	A	99 a 99 a 99 a 99 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B	
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	
9	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	99 a 99 a 99 a 99 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B	
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	
10	SIU-1							PRE	A	99 a 99 a 99 a 99 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B	
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	
11	AUTHORITY XL	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	99 a 99 a 99 a 99 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B	
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	
12	OPTILL PRO (CO-PACK)							PRE	A	99 a 99 a 99 a 99 a
	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A	
	OUTLOOK	6	EC	0.47	lb ai/a	10	fl oz/a	PRE	A	
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B	
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	
13	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	99 a 99 a 99 a 99 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B	
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B	

BroadAxe XC in Syngenta Soybean Portfolio.

Trial ID: 15-2A-ME110 Location: Belleville Res. Center Trial Year: 2015
 Investigator: Ronald F. Krausz

Pest Code							PANDI	PANDI	PANDI	PANDI
Crop Code							6-29-15	7-13-15	7-20-15	10-16-15
Rating Date							Control	Control	Control	Control
Rating Type							Percent	Percent	Percent	Percent
Rating Unit							16 DA-A	14 DA-B	21 DA-B	EOS
Rating Timing							0 DA-B			
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Rate	Growth Unit	Appl Stage	Code
14	VERDICT	5.57	EC	0.218	lb ai/a	5	fl oz/a	PRE	A	99 a
	ZIDUA	85	WG	0.08	lb ai/a	1.5	oz/a	PRE	A	99 a
	EXTREME	2.17	SL	0.81	lb ai/a	3	pt/a	2-3"W	B	99 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"W	B	99 a
15	TRIVENCE	61.3	WG	0.23	lb ai/a	6	oz/a	PRE	A	99 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"W	B	99 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"W	B	99 a
16	BROADAXE XC	7	SC	1.75	lb ai/a	32	fl oz/a	PRE	A	99 a
	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	2-3"W	B	99 a
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"W	B	99 a
	PREMIUM MSO	100	SL	0.5	% v/v	0.5	% v/v	2-3"W	B	99 a
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"W	B	99 a
LSD P=.05							0.0	0.0	0.0	0.0
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

BroadAxe XC in Syngenta Soybean Portfolio.

Trial ID: 15-2A-ME110 Location: Belleville Res. Center Trial Year: 2015
Investigator: Ronald F. Krausz

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	AMBTR	AMBTR	AMBTR	AMBTR			
							6-29-15 Control Percent 16 DA-A 0 DA-B	7-13-15 Control Percent 14 DA-B	7-20-15 Control Percent 21 DA-B	10-16-15 Control Percent EOS			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	NONTREATED									0	0	0	0
2	BROADAXE XC	7	SC	1.37	lb ai/a	25	fl oz/a	PRE	A	58 b	99 a	99 a	98 a
	FLEXSTAR GT 3.5	2.82	SL	1.23	lb ae/a	3.5	pt/a	2-3"	W B				
	PREMIUM MSO	100	SL	1	% v/v	1	% v/v	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
3	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	PRE	A	93 a	99 a	99 a	96 a
	FLEXSTAR GT 3.5	2.82	SL	1.23	lb ae/a	3.5	pt/a	2-3"	W B				
	PREMIUM MSO	100	SL	1	% v/v	1	% v/v	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
4	BROADAXE XC	7	SC	1.37	lb ai/a	25	fl oz/a	PRE	A	90 a	99 a	99 a	97 a
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
5	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	PRE	A	90 a	99 a	99 a	98 a
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
6	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	97 a	99 a	99 a	98 a
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
7	VALOR XLT	40.3	WG	0.0756	lb ai/a	3	oz/a	PRE	A	99 a	99 a	99 a	97 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
8	FIERCE	76	WG	0.143	lb ai/a	3	oz/a	PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
9	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	97 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
10	SIU-1							PRE	A	99 a	99 a	99 a	98 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
11	AUTHORITY XL	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	97 a	99 a	99 a	97 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
12	OPTILL PRO (CO-PACK)							PRE	A	99 a	99 a	99 a	99 a
	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A				
	OUTLOOK	6	EC	0.47	lb ai/a	10	fl oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
13	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				

BroadAxe XC in Syngenta Soybean Portfolio.

Trial ID: 15-2A-ME110 Location: Belleville Res. Center Trial Year: 2015
 Investigator: Ronald F. Krausz

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	AMBTR	AMBTR	AMBTR	AMBTR
							6-29-15 Control Percent 16 DA-A 0 DA-B	7-13-15 Control Percent 14 DA-B	7-20-15 Control Percent 21 DA-B	10-16-15 Control Percent EOS
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Rate	Unit	Growth Stage	Appl Code
14	VERDICT	5.57	EC	0.218	lb ai/a	5	fl oz/a		PRE	A
	ZIDUA	85	WG	0.08	lb ai/a	1.5	oz/a		PRE	A
	EXTREME	2.17	SL	0.81	lb ai/a	3	pt/a		2-3"	W B
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v		2-3"	W B
15	TRIVENCE	61.3	WG	0.23	lb ai/a	6	oz/a		PRE	A
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a		2-3"	W B
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v		2-3"	W B
16	BROADAXE XC	7	SC	1.75	lb ai/a	32	fl oz/a		PRE	A
	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a		2-3"	W B
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a		2-3"	W B
	PREMIUM MSO	100	SL	0.5	% v/v	0.5	% v/v		2-3"	W B
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v		2-3"	W B
LSD P=.05							15.9		0.5	2.8
Standard Deviation							11.2	0.0	0.4	2.0
CV							11.9	0.0	0.38	2.04
Replicate F							1.086	0.000	0.747	1.789
Replicate Prob(F)							0.3654	1.0000	0.5301	0.1640
Treatment F							3.552	0.000	0.708	0.900
Treatment Prob(F)							0.0007	1.0000	0.7541	0.5646

BroadAxe XC in Syngenta Soybean Portfolio.

Trial ID: 15-2A-ME110 Location: Belleville Res. Center Trial Year: 2015
Investigator: Ronald F. Krausz

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	AMATA	AMATA	AMATA	AMATA			
							6-29-15 Control Percent 16 DA-A 0 DA-B	7-13-15 Control Percent 14 DA-B	7-20-15 Control Percent 21 DA-B	10-16-15 Control Percent EOS			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	NONTREATED									0	0	0	0
2	BROADAXE XC	7	SC	1.37	lb ai/a	25	fl oz/a	PRE	A	99 a	99 a	99 a	99 a
	FLEXSTAR GT 3.5	2.82	SL	1.23	lb ae/a	3.5	pt/a	2-3"	W B				
	PREMIUM MSO	100	SL	1	% v/v	1	% v/v	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
3	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	PRE	A	99 a	99 a	99 a	99 a
	FLEXSTAR GT 3.5	2.82	SL	1.23	lb ae/a	3.5	pt/a	2-3"	W B				
	PREMIUM MSO	100	SL	1	% v/v	1	% v/v	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
4	BROADAXE XC	7	SC	1.37	lb ai/a	25	fl oz/a	PRE	A	99 a	99 a	99 a	99 a
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
5	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	PRE	A	99 a	99 a	99 a	99 ab
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
6	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	99 a	99 a	99 a	99 a
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
7	VALOR XLT	40.3	WG	0.0756	lb ai/a	3	oz/a	PRE	A	99 a	99 a	99 a	98 c
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
8	FIERCE	76	WG	0.143	lb ai/a	3	oz/a	PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
9	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
10	SIU-1							PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
11	AUTHORITY XL	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	99 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
12	OPTILL PRO (CO-PACK)							PRE	A	99 a	99 a	99 a	99 ab
	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A				
	OUTLOOK	6	EC	0.47	lb ai/a	10	fl oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
13	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	99 a	99 a	99 a	99 bc
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				

BroadAxe XC in Syngenta Soybean Portfolio.

Trial ID: 15-2A-ME110 Location: Belleville Res. Center Trial Year: 2015
 Investigator: Ronald F. Krausz

Pest Code							AMATA	AMATA	AMATA	AMATA					
Crop Code							6-29-15	7-13-15	7-20-15	10-16-15					
Rating Date							Control	Control	Control	Control					
Rating Type							Percent	Percent	Percent	Percent					
Rating Unit							16 DA-A	14 DA-B	21 DA-B	EOS					
Rating Timing							0 DA-B								
Trt-Eval Interval															
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Rate	Growth Unit	Appl Stage	Code					
14	VERDICT	5.57	EC	0.218	lb ai/a	5	fl oz/a	PRE	A		99 a	99 a	99 a	99 ab	
	ZIDUA	85	WG	0.08	lb ai/a	1.5	oz/a	PRE	A						
	EXTREME	2.17	SL	0.81	lb ai/a	3	pt/a	2-3"	W	B					
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W	B					
15	TRIVENCE	61.3	WG	0.23	lb ai/a	6	oz/a	PRE	A		99 a	99 a	99 a	99 a	
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W	B					
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W	B					
16	BROADAXE XC	7	SC	1.75	lb ai/a	32	fl oz/a	PRE	A		99 a	99 a	99 a	99 a	
	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	2-3"	W	B					
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W	B					
	PREMIUM MSO	100	SL	0.5	% v/v	0.5	% v/v	2-3"	W	B					
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W	B					
LSD P=.05							.	.	0.3	0.4					
Standard Deviation							0.0	0.0	0.2	0.3					
CV							0.0	0.0	0.23	0.28					
Replicate F							0.000	0.000	0.318	3.500					
Replicate Prob(F)							1.0000	1.0000	0.8121	0.0235					
Treatment F							0.000	0.000	0.818	2.750					
Treatment Prob(F)							1.0000	1.0000	0.6459	0.0057					

BroadAxe XC in Syngenta Soybean Portfolio.

Trial ID: 15-2A-ME110 Location: Belleville Res. Center Trial Year: 2015
Investigator: Ronald F. Krausz

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	XANST	XANST	XANST	XANST			
							6-29-15 Control Percent 16 DA-A 0 DA-B	7-13-15 Control Percent 14 DA-B	7-20-15 Control Percent 21 DA-B	10-16-15 Control Percent EOS			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	NONTREATED									0	0	0	0
2	BROADAXE XC	7	SC	1.37	lb ai/a	25	fl oz/a	PRE	A	92 a	99 a	99 a	99 a
	FLEXSTAR GT 3.5	2.82	SL	1.23	lb ae/a	3.5	pt/a	2-3"	W B				
	PREMIUM MSO	100	SL	1	% v/v	1	% v/v	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
3	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	PRE	A	92 a	99 a	96 a-d	93 abc
	FLEXSTAR GT 3.5	2.82	SL	1.23	lb ae/a	3.5	pt/a	2-3"	W B				
	PREMIUM MSO	100	SL	1	% v/v	1	% v/v	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
4	BROADAXE XC	7	SC	1.37	lb ai/a	25	fl oz/a	PRE	A	92 a	99 a	96 a-d	95 ab
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
5	BOUNDARY	6.5	EC	1.46	lb ai/a	1.8	pt/a	PRE	A	83 a	99 a	91 de	90 bc
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
6	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	PRE	A	68 a	99 a	94 b-e	89 c
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
7	VALOR XLT	40.3	WG	0.0756	lb ai/a	3	oz/a	PRE	A	99 a	99 a	93 cde	93 abc
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
8	FIERCE	76	WG	0.143	lb ai/a	3	oz/a	PRE	A	95 a	99 a	90 e	89 c
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
9	SONIC	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	99 a	99 a	99 ab	98 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
10	SIU-1							PRE	A	98 a	99 a	96 a-d	96 ab
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
11	AUTHORITY XL	70	WG	0.28	lb ai/a	6.4	oz/a	PRE	A	99 a	99 a	99 ab	99 a
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
12	OPTILL PRO (CO-PACK)							PRE	A	96 a	99 a	98 abc	96 ab
	OPTILL	68	WG	0.085	lb ai/a	2	oz/a	PRE	A				
	OUTLOOK	6	EC	0.47	lb ai/a	10	fl oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				
13	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	98 a	99 a	96 a-d	96 ab
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a	2-3"	W B				
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v	2-3"	W B				

BroadAxe XC in Syngenta Soybean Portfolio.

Trial ID: 15-2A-ME110 Location: Belleville Res. Center Trial Year: 2015
 Investigator: Ronald F. Krausz

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	XANST	XANST	XANST	XANST
							6-29-15 Control Percent 16 DA-A 0 DA-B	7-13-15 Control Percent 14 DA-B	7-20-15 Control Percent 21 DA-B	10-16-15 Control Percent EOS
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Rate	Unit	Growth Stage	Appl Code
14	VERDICT	5.57	EC	0.218	lb ai/a	5	fl oz/a		PRE	A
	ZIDUA	85	WG	0.08	lb ai/a	1.5	oz/a		PRE	A
	EXTREME	2.17	SL	0.81	lb ai/a	3	pt/a		2-3"	W B
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v		2-3"	W B
15	TRIVENCE	61.3	WG	0.23	lb ai/a	6	oz/a		PRE	A
	ROUNDUP POWERMAX	4.5	SL	1.02	lb ae/a	29	fl oz/a		2-3"	W B
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v		2-3"	W B
16	BROADAXE XC	7	SC	1.75	lb ai/a	32	fl oz/a		PRE	A
	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a		2-3"	W B
	TOUCHDOWN TOTAL	4.17	SL	1.04	lb ae/a	32	fl oz/a		2-3"	W B
	PREMIUM MSO	100	SL	0.5	% v/v	0.5	% v/v		2-3"	W B
	N-PAK AMS	100	SL	2.5	% v/v	2.5	% v/v		2-3"	W B
LSD P=.05							17.1		5.1	5.8
Standard Deviation							12.0	0.0	3.6	4.0
CV							12.9	0.0	3.73	4.27
Replicate F							1.771	0.000	0.557	0.719
Replicate Prob(F)							0.1673	1.0000	0.6463	0.5460
Treatment F							1.932	0.000	2.597	2.795
Treatment Prob(F)							0.0503	1.0000	0.0086	0.0051

BroadAxe XC in Syngenta Soybean Portfolio.

Trial ID: 15-2A-ME110 Location: Belleville Res. Center Trial Year: 2015
Investigator: Ronald F. Krausz

Trial Comments

1. Protocol: Syngenta (ZSOY95AD-2015US).
2. Ratings:
CI at 0, 7, and 14 DA-B.
WC at 0, and 21 DA-B, WC at harvest.
Rate before spray application B.
3. Yield.
4. Application B (2-3"W) should be sprayed when weeds are 2-3 inch in the Boundary and Broadaxe XC plots.
5. Special instructions at planting, uses a different soybean variety.
6. Photos.
7. Treatment 10, do not sell grain, do not report except with PRE coded as SIU-1.
8. Rainfall following the PRE application was 2.52 inch over 3 days beginning 20 hours later.
Rainfall following the 2-3"W application was 0.64 inch over 2 days beginning 56 hours later.
9. GLXMA, STDRED = Soybean stand reduction.
EOS = End of season.
10. Harvested 10-17-15, (2) 30 inch rows by 25 ft.