

Two-Pass Herbicide Programs for Xtend Soybeans - DuPont.

Trial ID: 16-2B-W50 Location: Belleville Res. Center Trial Year: 2016
 Investigator: Karla L. Gage, Ph.D.

<p>Trial Status: F one-year/final Initiation Date: 6-1-16 Completion Date: 8-2-16</p>	Trial Location
<p>City: Belleville Country: USA State/Prov.: Illinois IL Postal Code: 62221</p>	

<p>Objectives: Demonstrate DuPont Crop Protection weed control programs for conventional-till soybeans in a RR2X soybean variety.</p>

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

Crop Description
<p>Crop 1: GLXMA Glycine max Soybean Variety: AG42X6 BBCH Scale: BSOY Description: RR2X</p> <p>Planting Date: 6-1-16 Planting Method: SEEDED</p> <p>Planting Rate, Unit: 140000 S/A Depth, Unit: 1 IN Row Spacing, Unit: 30 IN</p>

Pest Description
<p>Pest 1 Type: W Code: ECHCG Echinochloa crus-galli (L.) Beauv. Common Name: barnyardgrass</p> <p>Pest 2 Type: W Code: AMBTR Ambrosia trifida L. Common Name: ragweed, giant</p> <p>Pest 3 Type: W Code: ABUTH Abutilon theophrasti Medik. Common Name: velvetleaf</p> <p>Pest 4 Type: W Code: AMATA Amaranthus rudis Sauer Common Name: waterhemp, common</p> <p>Pest 5 Type: W Code: XANST Xanthium strumarium L. Common Name: cocklebur, common</p> <p>Pest 6 Type: W Code: IPOHE Ipomoea hederacea (L.) Jacq. Common Name: morningglory, ivyleaf</p>

Site and Design						
<p>Treated Plot Width: 7.5 FT Total Plot Width: 10 FT Site Type: FIELD Treated Plot Length: 28 FT Total Plot Length: 28 FT Experimental Unit: 1 PLOT Tillage Type: CONTIL conventional-till Replications: 3 Study Design: RACOBL Randomized Complete Block (RCB) Untreated Arrangement: INCLUDED single control randomized in each block</p>						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">No.</th> <th style="width: 45%;">Previous Crop</th> <th style="width: 50%;">Year</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>ZEAMD</td> <td>2015</td> </tr> </tbody> </table>	No.	Previous Crop	Year	1.	ZEAMD	2015
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Maintenance				
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1.	N 0 LB/A, P2O5 50 LB/A, K2O 150 LB/A			

Soil Description
<p>Description Name: 02B_2013 % OM: 2.4 Texture: SIL silt loam pH: 6.6 Soil Name: Pierron CEC: 8</p>

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Additional Measured Elements

Element	Quantity	Unit
P1	75	lb/A
K	333	lb/A

Moisture and Weather Conditions

Overall Moisture Conditions: NORMAL
 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.	4-1-16					7	DAY	32	75	F
2.	4-6-16	0.49	IN	RAIN	rain	1	DAY			
3.	4-8-16					7	DAY	28	71	F
4.	4-10-16	0.97	IN	RAIN	rain	2	DAY			
5.	4-15-16					7	DAY	48	81	F
6.	4-20-16	0.45	IN	RAIN	rain	3	DAY			
7.	4-22-16					7	DAY	47	85	F
8.	4-26-16	1.74	IN	RAIN	rain	2	DAY			
9.	4-29-16					7	DAY	46	75	F
10.	4-29-16	1.94	IN	RAIN	rain	2	DAY			
11.	5-4-16	0.02	IN	RAIN	rain	1	DAY			
12.	5-6-16					7	DAY	44	87	F
13.	5-7-16	0.07	IN	RAIN	rain	1	DAY			
14.	5-9-16	2.12	IN	RAIN	rain	5	DAY			
15.	5-13-16					7	DAY	41	76	F
16.	5-16-16	1.06	IN	RAIN	rain	2	DAY			
17.	5-20-16					7	DAY	51	83	F
18.	5-20-16	0.06	IN	RAIN	rain	1	DAY			
19.	5-25-16	0.68	IN	RAIN	rain	3	DAY			
20.	5-27-16					7	DAY	62	88	F
21.	5-31-16	0.03	IN	RAIN	rain	2	DAY			
22.	6-3-16					7	DAY	55	89	F
23.	6-3-16	0.01	IN	RAIN	rain	1	DAY			
24.	6-4-16	0.72	IN	RAIN	rain	1	DAY			
25.	6-10-16					7	DAY	65	96	F
26.	6-13-16	0.03	IN	RAIN	rain	1	DAY			
27.	6-17-16					7	DAY	67	97	F
28.	6-21-16	0.01	IN	RAIN	rain	1	DAY			
29.	6-24-16					7	DAY	57	95	F
30.	6-25-16	0.02	IN	RAIN	rain	1	DAY			
31.	6-30-16	0.03	IN	RAIN	rain	1	DAY			
32.	7-1-16					7	DAY	60	91	F
33.	7-1-16	2.26	IN	RAIN	rain	4	DAY			
34.	7-6-16	0.32	IN	RAIN	rain	3	DAY			
35.	7-8-16					7	DAY	67	93	F
36.	7-13-16	0.49	IN	RAIN	rain	2	DAY			
37.	7-15-16					7	DAY	68	93	F
38.	7-17-16	0.02	IN	RAIN	rain	1	DAY			
39.	7-19-16	1.47	IN	RAIN	rain	2	DAY			
40.	7-22-16					7	DAY	72	94	F
41.	7-25-16	0.1	IN	RAIN	rain	1	DAY			
42.	7-29-16					7	DAY	69	91	F
43.	7-31-16	0.52	IN	RAIN	rain	3	DAY			
44.	8-3-16	0.75	IN	RAIN	rain	1	DAY			
45.	8-5-16					7	DAY	66	93	F
46.	8-5-16	0.06	IN	RAIN	rain	1	DAY			

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Comment:

Rainfall was recorded on station and provided by Illinois Climate Network.
 Air temperature was recorded at Scott Air Force Base 2.5 miles north and provided by NOAA's National Centers for Environmental Information.
 Air temperatures given are summarized as weekly high and low, detailed weather data is available on request.

Application Description

	A	B
Application Date:	6-1-16	6-21-16
Appl. Start Time:	16:20	15:40
Appl. Stop Time:	17:00	16:15
Application Method:	Spray	Spray
Application Timing:	PRE	2-4"W
Application Placement:	BROSOI	BROFOL
Applied By:	KNW	KNW
Air Temperature, Unit:	75 F	88 F
% Relative Humidity:	74	48
Wind Velocity, Unit:	3 MPH	3 MPH
Wind Direction:	W	SW
Dew Presence (Y/N):	N	N
Soil Temperature, Unit:	73 F	80 F
Soil Moisture:	NORMAL	BELNOR
% Cloud Cover:	25	0
Next Moisture Occurred On:	6-4-16	6-30-16
Time to Next Moisture, Unit:	3 DAY	9 DAY

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:		V1
Stage Maximum, Percent:		V2
Height, Unit:		4 IN
Height Minimum, Maximum:		3 4

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Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	ECHCG W	ECHCG W
Stage Majority, Percent:	NA	3
Stage Minimum, Percent:		1
Stage Maximum, Percent:		4
Height, Unit:		2 IN
Height Minimum, Maximum:		1 3
Density, Unit:		2 FT2
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W
Stage Majority, Percent:	NA	6
Stage Minimum, Percent:		4
Stage Maximum, Percent:		8
Height, Unit:		2 IN
Height Minimum, Maximum:		1 3
Density, Unit:		1 FT2
Pest 3 Code, Type, Scale:	ABUTH W	ABUTH W
Stage Majority, Percent:	NA	6
Stage Minimum, Percent:		4
Stage Maximum, Percent:		8
Height, Unit:		2 IN
Height Minimum, Maximum:		1 3
Density, Unit:		0.5 FT2
Pest 4 Code, Type, Scale:	AMATA W	AMATA W
Stage Majority, Percent:	NA	6
Stage Minimum, Percent:		4
Stage Maximum, Percent:		8
Height, Unit:		2 IN
Height Minimum, Maximum:		1 3
Density, Unit:		1 FT2
Pest 5 Code, Type, Scale:	XANST W	XANST W
Stage Majority, Percent:	NA	4
Stage Minimum, Percent:		2
Stage Maximum, Percent:		6
Height, Unit:		3 IN
Height Minimum, Maximum:		2 4
Density, Unit:		0.5 FT2
Pest 6 Code, Type, Scale:	IPOHE W	IPOHE W
Stage Majority, Percent:	NA	4
Stage Minimum, Percent:		2
Stage Maximum, Percent:		8
Height, Unit:		2 IN
Height Minimum, Maximum:		1 3
Density, Unit:		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	TTI
Nozzle Size:	8002	11002
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							6-21-16	7-5-16	7-19-16		
Rating Date							Injury	Injury	Injury		
Rating Type							Percent	Percent	Percent		
Rating Unit							20 DA-A	14 DA-B	28 DA-B		
Rating Timing							0 DA-B	14 DA-B	28 DA-B		
Trt-Eval Interval											
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Other Rate	Other Unit	Growth Stage	Appl Code			
1	TRIVENCE	61.3	WG	0.307 lb ai/a	8 oz/a		PRE	A	0 a	0 c	0 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B			
	D1691	4	SL	0.5 lb ae/a	8 oz ai/a		2-4"W	B			
2	TRIVENCE	61.3	WG	0.307 lb ai/a	8 oz/a		PRE	A	0 a	6 b	0 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B			
	CINCH	7.64	SC	0.955 lb ai/a	1 pt/a		2-4"W	B			
	D1691	4	SL	0.5 lb ae/a	8 oz ai/a		2-4"W	B			
3	ENVIVE	41.3	WG	0.09 lb ai/a	3.5 oz/a		PRE	A	0 a	0 c	0 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B			
	D1691	4	SL	0.5 lb ae/a	8 oz ai/a		2-4"W	B			
4	ENVIVE	41.3	WG	0.09 lb ai/a	3.5 oz/a		PRE	A	0 a	2 bc	0 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B			
	CINCH	7.64	SC	0.955 lb ai/a	1 pt/a		2-4"W	B			
	D1691	4	SL	0.5 lb ae/a	8 oz ai/a		2-4"W	B			
5	ENVIVE	41.3	WG	0.09 lb ai/a	3.5 oz/a		PRE	A	0 a	10 a	0 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B			
	PREFIX	5.29	EC	1.32 lb ai/a	2 pt/a		2-4"W	B			
6	CANOPY BLEND	58.3	SG	0.273 lb ai/a	7.5 oz/a		PRE	A	0 a	0 c	0 a
	CINCH	7.64	SC	0.955 lb ai/a	1 pt/a		PRE	A			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B			
	D1691	4	SL	0.5 lb ae/a	8 oz ai/a		2-4"W	B			
7	CANOPY BLEND	58.3	SG	0.273 lb ai/a	7.5 oz/a		PRE	A	0 a	4 b	0 a
	CINCH	7.64	SC	0.955 lb ai/a	1 pt/a		PRE	A			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W	B			
	CINCH	7.64	SC	0.955 lb ai/a	1 pt/a		2-4"W	B			
	D1691	4	SL	0.5 lb ae/a	8 oz ai/a		2-4"W	B			
8	NONTREATED							0	0	0	
LSD P=.05							.	3.6	.		
Standard Deviation							0.0	2.0	0.0		
CV							0.0	64.14	0.0		
Replicate F							0.000	0.316	0.000		
Replicate Prob(F)							1.0000	0.7347	1.0000		
Treatment F							0.000	10.387	0.000		
Treatment Prob(F)							1.0000	0.0004	1.0000		

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
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Pest Code	ECHCG	ECHCG	ECHCG	ECHCG	ECHCG									
Crop Code	6-15-16	6-21-16	7-5-16	7-19-16	8-2-16									
Rating Date	Control	Control	Control	Control	Control									
Rating Type	Percent	Percent	Percent	Percent	Percent									
Rating Unit	14 DAP	20 DA-A	14 DA-B	28 DA-B	42 DA-B									
Rating Timing	14 DA-A	0 DA-B	14 DA-B	28 DA-B	42 DA-B									
Trt-Eval Interval														
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
1	TRIVENCE	61.3	WG	0.307	lb ai/a	8	oz/a	PRE	A	77 b	70 b	95 a	96 a	98 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B					
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B					
2	TRIVENCE	61.3	WG	0.307	lb ai/a	8	oz/a	PRE	A	77 b	70 b	97 a	96 a	97 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B					
	CINCH	7.64	SC	0.955	lb ai/a	1	pt/a	2-4"W	B					
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B					
3	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	78 b	72 b	94 a	93 a	94 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B					
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B					
4	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	77 b	68 b	96 a	95 a	94 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B					
	CINCH	7.64	SC	0.955	lb ai/a	1	pt/a	2-4"W	B					
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B					
5	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	75 b	67 b	95 a	95 a	94 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B					
	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	2-4"W	B					
6	CANOPY BLEND	58.3	SG	0.273	lb ai/a	7.5	oz/a	PRE	A	98 a	98 a	98 a	95 a	96 a
	CINCH	7.64	SC	0.955	lb ai/a	1	pt/a	PRE	A					
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B					
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	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B					
	CINCH	7.64	SC	0.955	lb ai/a	1	pt/a	2-4"W	B					
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B					
8	NONTREATED									0	0	0	0	0
LSD P=.05		5.4		7.5		7.1		6.8		5.2				
Standard Deviation		3.1		4.2		4.0		3.8		2.9				
CV		3.7		5.42		4.18		4.01		3.03				
Replicate F		0.733		2.763		1.083		0.454		0.413				
Replicate Prob(F)		0.5009		0.1031		0.3696		0.6453		0.6708				
Treatment F		34.524		33.293		0.398		0.449		1.105				
Treatment Prob(F)		0.0001		0.0001		0.8663		0.8324		0.4140				

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Rating Type	Percent	Percent	Percent	Percent	Percent									
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	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B					
	CINCH	7.64	SC	0.955	lb ai/a	1	pt/a	2-4"W	B					
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3	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	83 c	78 c	99 a	98 a	99 a
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4	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	87 b	82 b	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B					
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	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B					
	CINCH	7.64	SC	0.955	lb ai/a	1	pt/a	2-4"W	B					
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B					
8	NONTREATED									0	0	0	0	0
LSD P=.05						3.0				3.0			1.4	2.2
Standard Deviation						1.7				1.7		0.0	0.8	1.2
CV						1.93				2.05		0.0	0.81	1.26
Replicate F						21.000				21.000		0.000	0.300	1.754
Replicate Prob(F)						0.0001				0.0001		1.0000	0.7462	0.2147
Treatment F						5.714				5.714		0.000	0.250	1.200
Treatment Prob(F)						0.0052				0.0052		1.0000	0.9500	0.3697

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 Could not calculate LSD (% mean diff) for columns 17,31,22,19,20 because error mean square = 0.

Two-Pass Herbicide Programs for Xtend Soybeans - DuPont.

Trial ID: 16-2B-W50 Location: Belleville Res. Center Trial Year: 2016
 Investigator: Karla L. Gage, Ph.D.

Pest Code		ABUTH	ABUTH	ABUTH	ABUTH	ABUTH							
Crop Code		6-15-16	6-21-16	7-5-16	7-19-16	8-2-16							
Rating Date		Control	Control	Control	Control	Control							
Rating Type		Percent	Percent	Percent	Percent	Percent							
Rating Unit		14 DAP	20 DA-A	14 DA-B	28 DA-B	42 DA-B							
Rating Timing		14 DA-A	0 DA-B	14 DA-B	28 DA-B	42 DA-B							
Trt-Eval Interval													
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
1	TRIVENCE	61.3	WG	0.307	lb ai/a	8 oz/a	PRE	A	93 a	90 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22 fl oz/a	2-4"W	B					
	D1691	4	SL	0.5	lb ae/a	8 oz ai/a	2-4"W	B					
2	TRIVENCE	61.3	WG	0.307	lb ai/a	8 oz/a	PRE	A	93 a	92 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22 fl oz/a	2-4"W	B					
	CINCH	7.64	SC	0.955	lb ai/a	1 pt/a	2-4"W	B					
	D1691	4	SL	0.5	lb ae/a	8 oz ai/a	2-4"W	B					
3	ENVIVE	41.3	WG	0.09	lb ai/a	3.5 oz/a	PRE	A	91 a	88 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22 fl oz/a	2-4"W	B					
	D1691	4	SL	0.5	lb ae/a	8 oz ai/a	2-4"W	B					
4	ENVIVE	41.3	WG	0.09	lb ai/a	3.5 oz/a	PRE	A	96 a	94 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22 fl oz/a	2-4"W	B					
	CINCH	7.64	SC	0.955	lb ai/a	1 pt/a	2-4"W	B					
	D1691	4	SL	0.5	lb ae/a	8 oz ai/a	2-4"W	B					
5	ENVIVE	41.3	WG	0.09	lb ai/a	3.5 oz/a	PRE	A	95 a	94 a	99 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22 fl oz/a	2-4"W	B					
	PREFIX	5.29	EC	1.32	lb ai/a	2 pt/a	2-4"W	B					
6	CANOPY BLEND	58.3	SG	0.273	lb ai/a	7.5 oz/a	PRE	A	96 a	94 a	99 a	98 a	99 a
	CINCH	7.64	SC	0.955	lb ai/a	1 pt/a	PRE	A					
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22 fl oz/a	2-4"W	B					
	D1691	4	SL	0.5	lb ae/a	8 oz ai/a	2-4"W	B					
7	CANOPY BLEND	58.3	SG	0.273	lb ai/a	7.5 oz/a	PRE	A	95 a	95 a	99 a	99 a	99 a
	CINCH	7.64	SC	0.955	lb ai/a	1 pt/a	PRE	A					
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22 fl oz/a	2-4"W	B					
	CINCH	7.64	SC	0.955	lb ai/a	1 pt/a	2-4"W	B					
	D1691	4	SL	0.5	lb ae/a	8 oz ai/a	2-4"W	B					
8	NONTREATED								0	0	0	0	0
LSD P=.05		4.7		6.7		.			1.6	0.4			
Standard Deviation		2.7		3.7		0.0			0.9	0.2			
CV		2.83		4.05		0.0			0.88	0.22			
Replicate F		10.266		14.619		0.000			1.000	1.000			
Replicate Prob(F)		0.0025		0.0006		1.0000			0.3966	0.3966			
Treatment F		1.194		1.438		0.000			1.000	1.000			
Treatment Prob(F)		0.3723		0.2783		1.0000			0.4682	0.4682			

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 Could not calculate LSD (% mean diff) for columns 17,31,22,19,20 because error mean square = 0.

Two-Pass Herbicide Programs for Xtend Soybeans - DuPont.

Trial ID: 16-2B-W50 Location: Belleville Res. Center Trial Year: 2016
Investigator: Karla L. Gage, Ph.D.

Pest Code						AMATA	AMATA	AMATA	AMATA	AMATA
Crop Code						6-15-16	6-21-16	7-5-16	7-19-16	8-2-16
Rating Date						Control	Control	Control	Control	Control
Rating Type						Percent	Percent	Percent	Percent	Percent
Rating Unit						14 DAP	20 DA-A	14 DA-B	28 DA-B	42 DA-B
Rating Timing						14 DA-A	0 DA-B	14 DA-B	28 DA-B	42 DA-B
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Form Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	TRIVENCE	61.3	WG	0.307	lb ai/a	8	oz/a	PRE	A	87 b
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B	82 b
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B	99 a
2	TRIVENCE	61.3	WG	0.307	lb ai/a	8	oz/a	PRE	A	88 b
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B	83 b
	CINCH	7.64	SC	0.955	lb ai/a	1	pt/a	2-4"W	B	99 a
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B	99 a
3	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	85 b
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B	80 bc
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B	99 a
4	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	80 c
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B	75 c
	CINCH	7.64	SC	0.955	lb ai/a	1	pt/a	2-4"W	B	96 a
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B	99 a
5	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	80 c
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B	75 c
	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	2-4"W	B	99 a
6	CANOPY BLEND	58.3	SG	0.273	lb ai/a	7.5	oz/a	PRE	A	96 a
	CINCH	7.64	SC	0.955	lb ai/a	1	pt/a	PRE	A	94 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B	99 a
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B	93 c
7	CANOPY BLEND	58.3	SG	0.273	lb ai/a	7.5	oz/a	PRE	A	96 a
	CINCH	7.64	SC	0.955	lb ai/a	1	pt/a	PRE	A	96 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B	99 a
	CINCH	7.64	SC	0.955	lb ai/a	1	pt/a	2-4"W	B	99 a
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B	99 a
8	NONTREATED									0
LSD P=.05						4.7	5.4	3.4	2.6	4.5
Standard Deviation						2.6	3.0	1.9	1.4	2.5
CV						3.01	3.6	1.96	1.49	2.6
Replicate F						0.888	0.730	0.731	2.114	1.250
Replicate Prob(F)						0.4370	0.5020	0.5018	0.1635	0.3212
Treatment F						19.117	23.923	1.218	11.341	1.855
Treatment Prob(F)						0.0001	0.0001	0.3619	0.0002	0.1707

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

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

Could not calculate LSD (% mean diff) for columns 17,31,22,19,20 because error mean square = 0.

Two-Pass Herbicide Programs for Xtend Soybeans - DuPont.

Trial ID: 16-2B-W50 Location: Belleville Res. Center Trial Year: 2016
Investigator: Karla L. Gage, Ph.D.

Pest Code						XANST	XANST	XANST	XANST	XANST
Crop Code						6-15-16	6-21-16	7-5-16	7-19-16	8-2-16
Rating Date						Control	Control	Control	Control	Control
Rating Type						Percent	Percent	Percent	Percent	Percent
Rating Unit						14 DAP	20 DA-A	14 DA-B	28 DA-B	42 DA-B
Rating Timing						14 DA-A	0 DA-B	14 DA-B	28 DA-B	42 DA-B
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Form Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	TRIVENCE ROUNDUP POWERMAX D1691	61.3 4.5 4	WG SL SL	0.307 0.77 0.5	lb ai/a lb ae/a lb ae/a	8 22 8	oz/a fl oz/a oz ai/a	PRE 2-4" 2-4"	A W W	92 a 90 a 99 a
2	TRIVENCE ROUNDUP POWERMAX CINCH D1691	61.3 4.5 7.64 4	WG SL SC SL	0.307 0.77 0.955 0.5	lb ai/a lb ae/a lb ai/a lb ae/a	8 22 1 8	oz/a fl oz/a pt/a oz ai/a	PRE 2-4" 2-4" 2-4"	A W W W	90 a 85 a 99 a 99 a
3	ENVIVE ROUNDUP POWERMAX D1691	41.3 4.5 4	WG SL SL	0.09 0.77 0.5	lb ai/a lb ae/a lb ae/a	3.5 22 8	oz/a fl oz/a oz ai/a	PRE 2-4" 2-4"	A W W	94 a 92 a 99 a
4	ENVIVE ROUNDUP POWERMAX CINCH D1691	41.3 4.5 7.64 4	WG SL SC SL	0.09 0.77 0.955 0.5	lb ai/a lb ae/a lb ai/a lb ae/a	3.5 22 1 8	oz/a fl oz/a pt/a oz ai/a	PRE 2-4" 2-4" 2-4"	A W W W	90 a 86 a 99 a 99 a
5	ENVIVE ROUNDUP POWERMAX PREFIX D1691	41.3 4.5 5.29	WG SL EC	0.09 0.77 1.32	lb ai/a lb ae/a lb ai/a	3.5 22 2	oz/a fl oz/a pt/a	PRE 2-4" 2-4"	A W W	94 a 93 a 99 a
6	CANOPY BLEND CINCH ROUNDUP POWERMAX D1691	58.3 7.64 4.5 4	SG SC SL SL	0.273 0.955 0.77 0.5	lb ai/a lb ai/a lb ae/a lb ae/a	7.5 1 22 8	oz/a pt/a fl oz/a oz ai/a	PRE PRE 2-4" 2-4"	A A W W	93 a 90 a 99 a 99 a
7	CANOPY BLEND CINCH ROUNDUP POWERMAX CINCH D1691	58.3 7.64 4.5 7.64 4	SG SC SL SC SL	0.273 0.955 0.77 0.955 0.5	lb ai/a lb ai/a lb ae/a lb ai/a lb ae/a	7.5 1 22 1 8	oz/a pt/a fl oz/a pt/a oz ai/a	PRE PRE 2-4" 2-4" 2-4"	A A W W W	96 a 94 a 99 a 99 a 99 a
8	NONTREATED									0 0 0 0 0
LSD P=.05						6.7	8.4	.	0.5	0.4
Standard Deviation						3.8	4.7	0.0	0.3	0.2
CV						4.06	5.23	0.0	0.31	0.22
Replicate F						9.005	13.053	0.000	4.500	1.000
Replicate Prob(F)						0.0041	0.0010	1.0000	0.0348	0.3966
Treatment F						1.173	1.573	0.000	1.000	1.000
Treatment Prob(F)						0.3817	0.2373	1.0000	0.4682	0.4682

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Could not calculate LSD (% mean diff) for columns 17,31,22,19,20 because error mean square = 0.

Two-Pass Herbicide Programs for Xtend Soybeans - DuPont.

Trial ID: 16-2B-W50 Location: Belleville Res. Center Trial Year: 2016
Investigator: Karla L. Gage, Ph.D.

Pest Code						IPOHE	IPOHE	IPOHE	IPOHE	IPOHE
Crop Code						6-15-16	6-21-16	7-5-16	7-19-16	8-2-16
Rating Date						Control	Control	Control	Control	Control
Rating Type						Percent	Percent	Percent	Percent	Percent
Rating Unit						14 DAP	20 DA-A	14 DA-B	28 DA-B	42 DA-B
Rating Timing						14 DA-A	0 DA-B	14 DA-B	28 DA-B	42 DA-B
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
1	TRIVENCE	61.3	WG	0.307	lb ai/a	8	oz/a	PRE	A	95 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B	92 a
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B	97 a
2	TRIVENCE	61.3	WG	0.307	lb ai/a	8	oz/a	PRE	A	96 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B	96 a
	CINCH	7.64	SC	0.955	lb ai/a	1	pt/a	2-4"W	B	98 a
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B	98 a
3	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	95 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B	92 a
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B	99 a
4	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	95 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B	92 a
	CINCH	7.64	SC	0.955	lb ai/a	1	pt/a	2-4"W	B	99 a
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B	97 a
5	ENVIVE	41.3	WG	0.09	lb ai/a	3.5	oz/a	PRE	A	93 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B	90 a
	PREFIX	5.29	EC	1.32	lb ai/a	2	pt/a	2-4"W	B	98 a
6	CANOPY BLEND	58.3	SG	0.273	lb ai/a	7.5	oz/a	PRE	A	95 a
	CINCH	7.64	SC	0.955	lb ai/a	1	pt/a	PRE	A	92 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B	88 b
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B	92 b
7	CANOPY BLEND	58.3	SG	0.273	lb ai/a	7.5	oz/a	PRE	A	94 a
	CINCH	7.64	SC	0.955	lb ai/a	1	pt/a	PRE	A	93 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"W	B	88 b
	CINCH	7.64	SC	0.955	lb ai/a	1	pt/a	2-4"W	B	93 b
	D1691	4	SL	0.5	lb ae/a	8	oz ai/a	2-4"W	B	97 a
8	NONTREATED									0
LSD P=.05						3.7	6.7	3.2	2.4	2.4
Standard Deviation						2.1	3.8	1.8	1.3	1.3
CV						2.17	4.09	1.91	1.4	1.35
Replicate F						0.553	1.570	1.856	0.419	1.982
Replicate Prob(F)						0.5894	0.2479	0.1985	0.6668	0.1804
Treatment F						0.470	0.725	20.763	11.965	1.502
Treatment Prob(F)						0.8180	0.6379	0.0001	0.0002	0.2579

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
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Two-Pass Herbicide Programs for Xtend Soybeans - DuPont.

Trial ID: 16-2B-W50 Location: Belleville Res. Center Trial Year: 2016
Investigator: Karla L. Gage, Ph.D.

Trial Comments

1. Protocol: DuPont (133).
2. Ratings:
CI not requested but consider 0, 14, and 28 DA-B.
WC 14 DAP; 0, 14, 28 and 42 DA-B.
Rate before spray application B.
3. Yield not requested, destroy crop before harvest or otherwise insure grain is not sold.
4. Photos not requested.
5. Rainfall following the PRE application A was 0.73 inch over 2 days beginning 3 days later.
Rainfall following the 2-4"W application B was 2.61 inch over 9 days beginning 9 days later.
6. Not harvested, crop destruct.