

Crop Protection Market Development - Corn.

Trial ID: 16-19B Location: Belleville Res. Center Trial Year: 2016  
Investigator: Karla L. Gage, Ph.D.

<p><b>Trial Status:</b> F one-year/final <b>Initiation Date:</b> 5-29-16 <b>Completion Date:</b> 10-3-16</p>	<b>Trial Location</b>
<p><b>City:</b> Belleville    <b>Country:</b> USA <b>State/Prov.:</b> Illinois IL <b>Postal Code:</b> 62221</p>	

<p><b>Objectives:</b> Demonstrate various corn herbicide weed control systems common to the midwest.</p>
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<p><b>Study Director:</b> Karla Gage, Ph.D.    <b>Title:</b> Assistant Professor of Weed Science <b>Organization:</b> Southern Illinois University Carbondale <b>Address:</b> 1205 Lincoln Drive MC 4415    <b>Phone No.:</b> 618-453-7679 <b>City+State/Prov:</b> Carbondale, IL <b>Postal Code:</b> 62901    <b>E-mail:</b> kgage@siu.edu <b>Country:</b> USA</p>	<b>Contacts</b>
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<p><b>Crop 1:</b> ZEAMD Zea mays indentata    Dent corn <b>Variety:</b> DKC 63-33    <b>BBCH Scale:</b> BCOR <b>Description:</b> SS RIB</p> <p><b>Planting Rate, Unit:</b> 32000 S/A    <b>Planting Date:</b> 5-29-16 <b>Depth, Unit:</b> 1.5 IN    <b>Planting Method:</b> SEEDED <b>Row Spacing, Unit:</b> 30 IN</p>	<b>Crop Description</b>
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<p><b>Pest 1 Type:</b> W    <b>Code:</b> SETFA Setaria faberi Herrm. <b>Common Name:</b> foxtail, giant</p> <p><b>Pest 2 Type:</b> W    <b>Code:</b> AMBTR Ambrosia trifida L. <b>Common Name:</b> ragweed, giant</p> <p><b>Pest 3 Type:</b> W    <b>Code:</b> ABUTH Abutilon theophrasti Medik. <b>Common Name:</b> velvetleaf</p> <p><b>Pest 4 Type:</b> W    <b>Code:</b> XANST Xanthium strumarium L. <b>Common Name:</b> cocklebur, common</p> <p><b>Pest 5 Type:</b> W    <b>Code:</b> IPOHE Ipomoea hederacea (L.) Jacq. <b>Common Name:</b> morningglory, ivyleaf</p>	<b>Pest Description</b>
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<p><b>Treated Plot Width:</b> 6.67 FT    <b>Total Plot Width:</b> 10 FT <b>Treated Plot Length:</b> 25 FT    <b>Total Plot Length:</b> 25 FT</p> <p><b>Replications:</b> 4</p> <p><b>Untreated Arrangement:</b> INCLUDED single control randomized in each block</p>	<p style="text-align: center;"><b>Site and Design</b></p> <p><b>Site Type:</b> FIELD <b>Experimental Unit:</b> 1 PLOT <b>Tillage Type:</b> REDTIL reduced-till <b>Study Design:</b> RACOB� Randomized Complete Block (RCB)</p>						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">No.</th> <th style="width: 75%;">Previous Crop</th> <th style="width: 20%;">Year</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td>GLXMA</td> <td style="text-align: center;">2015</td> </tr> </tbody> </table>		No.	Previous Crop	Year	1.	GLXMA	2015
No.	Previous Crop	Year					
1.	GLXMA	2015					

<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">No.</th> <th style="width: 95%;">Maintenance Product Name</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td>N 150 LB/A, P2O5 100 LB/A, K2O 150 LB/A</td> </tr> </tbody> </table>	No.	Maintenance Product Name	1.	N 150 LB/A, P2O5 100 LB/A, K2O 150 LB/A	<b>Maintenance</b>
No.	Maintenance Product Name				
1.	N 150 LB/A, P2O5 100 LB/A, K2O 150 LB/A				

<p><b>Description Name:</b> 19B_2013 <b>% OM:</b> 3.5    <b>Texture:</b> SIL silt loam <b>pH:</b> 6.6    <b>Soil Name:</b> Bethalto <b>CEC:</b> 12</p>	<b>Soil Description</b>									
<p><b>Additional Measured Elements</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Element</th> <th style="width: 35%;">Quantity</th> <th style="width: 50%;">Unit</th> </tr> </thead> <tbody> <tr> <td>P1</td> <td style="text-align: center;">54</td> <td style="text-align: center;">lb/A</td> </tr> <tr> <td>K</td> <td style="text-align: center;">335</td> <td style="text-align: center;">lb/A</td> </tr> </tbody> </table>		Element	Quantity	Unit	P1	54	lb/A	K	335	lb/A
Element	Quantity	Unit								
P1	54	lb/A								
K	335	lb/A								

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Trial ID: 16-19B Location: Belleville Res. Center Trial Year: 2016  
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Overall Moisture Conditions: NORMAL						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.	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			
47.	8-12-16					7	DAY	68	91	F
48.	8-12-16	4.85	IN	RAIN	rain	5	DAY			
49.	8-19-16					7	DAY	57	93	F

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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**

	<b>A</b>	<b>B</b>	<b>C</b>
<b>Application Date:</b>	5-30-16	6-13-16	6-17-16
<b>App. Start Time:</b>	18:00	13:45	15:20
<b>App. Stop Time:</b>	19:00	13:50	16:00
<b>Application Method:</b>	Spray	Spray	Spray
<b>Application Timing:</b>	PRE	4"W-1	4"W-2
<b>Application Placement:</b>	BROSOI	BROFOL	BROFOL
<b>Applied By:</b>	KNW	MCG	RLS
<b>Air Temperature, Unit:</b>	78 F	92 F	88 F
<b>% Relative Humidity:</b>	62	52	45
<b>Wind Velocity, Unit:</b>	2 MPH	5 MPH	5 MPH
<b>Wind Direction:</b>	NW	SW	NNE
<b>Dew Presence (Y/N):</b>	N	N	N
<b>Soil Temperature, Unit:</b>	73 F	79 F	80 F
<b>Soil Moisture:</b>	NORMAL	BELNOR	BELNOR
<b>% Cloud Cover:</b>	0	25	10
<b>Next Moisture Occurred On:</b>	6-4-16	6-30-16	6-30-16
<b>Time to Next Moisture, Unit:</b>	5 DAY	17 DAY	13 DAY

**Crop Stage At Each Application**

	<b>A</b>	<b>B</b>	<b>C</b>
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMD	ZEAMD	ZEAMD
<b>Stage Scale Used:</b>	DESC	DESC	DESC
<b>Stage Majority, Percent:</b>	NA	V4	V5
<b>Stage Minimum, Percent:</b>		V4	V5
<b>Stage Maximum, Percent:</b>		V4	V5
<b>Height, Unit:</b>		10 IN	12 IN
<b>Height Minimum, Maximum:</b>		8 10	10 12

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Pest Stage At Each Application			
	A	B	C
<b>Pest 1 Code, Type, Scale:</b>	SETFA W	SETFA W	SETFA W
<b>Stage Majority, Percent:</b>	NA	3	4
<b>Stage Minimum, Percent:</b>		1	2
<b>Stage Maximum, Percent:</b>		3	4
<b>Height, Unit:</b>		4 IN	3 IN
<b>Height Minimum, Maximum:</b>		0.5 8	1 3
<b>Density, Unit:</b>		10 FT2	5 FT2
<b>Pest 2 Code, Type, Scale:</b>	AMBTR W	AMBTR W	AMBTR W
<b>Stage Majority, Percent:</b>	NA	4	4
<b>Stage Minimum, Percent:</b>		2	2
<b>Stage Maximum, Percent:</b>		6	6
<b>Height, Unit:</b>		3 IN	2 IN
<b>Height Minimum, Maximum:</b>		1.25 3.5	2 3
<b>Density, Unit:</b>		0.3 FT2	0.01 FT2
<b>Pest 3 Code, Type, Scale:</b>	ABUTH W	ABUTH W	ABUTH W
<b>Stage Majority, Percent:</b>	NA	3	4
<b>Stage Minimum, Percent:</b>		1	4
<b>Stage Maximum, Percent:</b>		4	6
<b>Height, Unit:</b>		3 IN	1 IN
<b>Height Minimum, Maximum:</b>		1.5 4	1 2
<b>Density, Unit:</b>		2 FT2	4 FT2
<b>Pest 4 Code, Type, Scale:</b>	XANST W	XANST W	XANST W
<b>Stage Majority, Percent:</b>	NA	4	6
<b>Stage Minimum, Percent:</b>		2	3
<b>Stage Maximum, Percent:</b>		4	6
<b>Height, Unit:</b>		2 IN	3 IN
<b>Height Minimum, Maximum:</b>		1.5 2.5	1 3
<b>Density, Unit:</b>		0.1 FT2	3 FT2
<b>Pest 5 Code, Type, Scale:</b>	IPOHE W	IPOHE W	IPOHE W
<b>Stage Majority, Percent:</b>	NA	1	4
<b>Stage Minimum, Percent:</b>		COTY	2
<b>Stage Maximum, Percent:</b>		4	6
<b>Height, Unit:</b>		1 IN	1 IN
<b>Height Minimum, Maximum:</b>		1 2	1 2
<b>Density, Unit:</b>		0.5 FT2	5 FT2

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

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Pest Code							ZEAMD	ZEAMD	ZEAMD
Crop Code							10-3-16	10-3-16	10-3-16
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	Other Rate	Other Rate	Growth Stage	Appl Code	
1	HARNESXTRA 5.6L	5.6	EC	3.64 lb ai/a	2.6 qt/a		PRE	A	17.7 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		4"W-2	C	54.8 a
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-2	C	159 a
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-2	C	
2	DEGREE XTRA	4.04	CS	3.03 lb ai/a	3 qt/a		PRE	A	17.0 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		4"W-2	C	55.0 a
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-2	C	164 a
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-2	C	
3	TRIPLEFLEX	4.25	EC	1.6 lb ai/a	1.5 qt/a		PRE	A	17.2 a
	AATREX 4L	4	SC	1 lb ai/a	1 qt/a		PRE	A	55.1 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		4"W-2	C	164 a
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-2	C	
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-2	C	
4	HARNESXTRA 5.6L	5.6	EC	2.8 lb ai/a	2 qt/a		PRE	A	17.8 a
	BALANCE FLEXX	2	SC	0.047 lb ai/a	3 fl oz/a		PRE	A	54.7 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		4"W-2	C	149 a
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-2	C	
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-2	C	
5	DEGREE XTRA	4.04	CS	2.32 lb ai/a	2.3 qt/a		PRE	A	16.9 a
	BALANCE FLEXX	2	SC	0.047 lb ai/a	3 fl oz/a		PRE	A	55.2 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		4"W-2	C	161 a
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-2	C	
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-2	C	
6	CORVUS	2.63	SC	0.115 lb ai/a	5.6 fl oz/a		PRE	A	18.0 a
	AATREX 4L	4	SC	1 lb ai/a	1 qt/a		PRE	A	54.6 a
7	LUMAX EZ	3.674	SE	2.76 lb ai/a	3 qt/a		PRE	A	18.2 a
8	HALEX GT	4.389	CS	2.2 lb ai/a	2 qt/a		4"W-1	B	17.6 a
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-1	B	54.9 a
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-1	B	153 a
9	AATREX 4L	4	SC	1 lb ai/a	1 qt/a		PRE	A	17.0 a
	HALEX GT	4.389	CS	2.74 lb ai/a	2.5 qt/a		4"W-2	C	55.1 a
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-2	C	160 a
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-2	C	
10	REALM Q	38.75	WG	0.097 lb ai/a	4 oz/a		PRE	A	17.1 a
	CINCH ATZ	5.5	SC	3.58 lb ai/a	2.6 qt/a		PRE	A	55.0 a
	ABUNDIT EXTRA	3	SL	1.1 lb ae/a	47 fl oz/a		4"W-2	C	159 a
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-2	C	
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-2	C	
11	DEGREE XTRA	4.04	CS	2.53 lb ai/a	2.5 qt/a		PRE	A	17.6 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		4"W-2	C	54.9 a
	IMPACT	2.8	SC	0.0164 lb ai/a	0.75 fl oz/a		4"W-2	C	152 a
	WARRANT	3	CS	1.13 lb ai/a	48 fl oz/a		4"W-2	C	
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-2	C	
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-2	C	

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 10,11,17,23,29 because error mean square = 0.

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Pest Code							ZEAMD	ZEAMD	ZEAMD		
Crop Code							10-3-16	10-3-16	10-3-16		
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	Other Rate	Other Rate	Growth Stage	Appl Code			
12	DEGREE XTRA	4.04	CS	3.03 lb ai/a		3 qt/a	PRE	A	17.3 a	55.0 a	153 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a		32 fl oz/a	4"W-2	C			
	IMPACT	2.8	SC	0.0164 lb ai/a		0.75 fl oz/a	4"W-2	C			
	NIS	100	SL	0.5 % v/v		0.5 % v/v	4"W-2	C			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v	4"W-2	C			
13	DEGREE XTRA	4.04	CS	3.03 lb ai/a		3 qt/a	PRE	A	17.4 a	55.0 a	156 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a		32 fl oz/a	4"W-2	C			
	STATUS	56	WG	0.105 lb ae/a		3 oz/a	4"W-2	C			
	NIS	100	SL	0.5 % v/v		0.5 % v/v	4"W-2	C			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v	4"W-2	C			
14	DEGREE XTRA	4.04	CS	3.03 lb ai/a		3 qt/a	PRE	A	17.1 a	55.1 a	152 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a		32 fl oz/a	4"W-2	C			
	TRIPLEFLEX	4.25	EC	1.6 lb ai/a		1.5 qt/a	4"W-2	C			
	NIS	100	SL	0.5 % v/v		0.5 % v/v	4"W-2	C			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v	4"W-2	C			
15	NONTREATED							20.1 a	53.4 b	43 c	
16	ACURON	3.44	CS	2.15 lb ai/a		2.5 qt/a	PRE	A	18.1 a	54.6 a	114 b
	PRINCEP 4L	4	SC	1 lb ai/a		1 qt/a	PRE	A			
LSD P=.05							2.40	0.82	18.0		
Standard Deviation							1.68	0.58	12.6		
CV							9.54	1.05	8.86		
Replicate F							0.540	0.538	2.196		
Replicate Prob(F)							0.6573	0.6586	0.1015		
Treatment F							0.856	2.078	24.205		
Treatment Prob(F)							0.6143	0.0299	0.0001		

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)  
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Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	ZEAMD 6-6-16 Injury Percent	ZEAMD 6-13-16 Injury Percent 15 DAP	ZEAMD 6-17-16 Injury Percent 18 DA-A	ZEAMD 7-15-16 Injury Percent 32 DA-B	ZEAMD 8-5-16 Injury Percent Canopy
							7 DA-A	0 DA-B	0 DA-C	28 DA-C	49 DA-C
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Stage	Appl Code			
1	HARNESX XTRA 5.6L	5.6	EC	3.64 lb ai/a	2.6 qt/a		PRE	A	0 a	0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		4"W-2	C			
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-2	C			
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-2	C			
2	DEGREE XTRA	4.04	CS	3.03 lb ai/a	3 qt/a		PRE	A	0 a	0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		4"W-2	C			
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-2	C			
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-2	C			
3	TRIPLEFLEX	4.25	EC	1.6 lb ai/a	1.5 qt/a		PRE	A	0 a	0 a	0 a
	AATREX 4L	4	SC	1 lb ai/a	1 qt/a		PRE	A			
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		4"W-2	C			
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-2	C			
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-2	C			
4	HARNESX XTRA 5.6L	5.6	EC	2.8 lb ai/a	2 qt/a		PRE	A	0 a	0 a	0 a
	BALANCE FLEXX	2	SC	0.047 lb ai/a	3 fl oz/a		PRE	A			
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		4"W-2	C			
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-2	C			
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-2	C			
5	DEGREE XTRA	4.04	CS	2.32 lb ai/a	2.3 qt/a		PRE	A	0 a	0 a	0 a
	BALANCE FLEXX	2	SC	0.047 lb ai/a	3 fl oz/a		PRE	A			
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		4"W-2	C			
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-2	C			
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-2	C			
6	CORVUS	2.63	SC	0.115 lb ai/a	5.6 fl oz/a		PRE	A	0 a	0 a	0 a
	AATREX 4L	4	SC	1 lb ai/a	1 qt/a		PRE	A			
7	LUMAX EZ	3.674	SE	2.76 lb ai/a	3 qt/a		PRE	A	0 a	0 a	0 a
8	HALEX GT	4.389	CS	2.2 lb ai/a	2 qt/a		4"W-1	B		0 a	0 a
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-1	B			
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-1	B			
9	AATREX 4L	4	SC	1 lb ai/a	1 qt/a		PRE	A	0 a	0 a	0 a
	HALEX GT	4.389	CS	2.74 lb ai/a	2.5 qt/a		4"W-2	C			
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-2	C			
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-2	C			
10	REALM Q	38.75	WG	0.097 lb ai/a	4 oz/a		PRE	A	0 a	0 a	0 a
	CINCH ATZ	5.5	SC	3.58 lb ai/a	2.6 qt/a		PRE	A			
	ABUNDIT EXTRA	3	SL	1.1 lb ae/a	47 fl oz/a		4"W-2	C			
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-2	C			
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-2	C			
11	DEGREE XTRA	4.04	CS	2.53 lb ai/a	2.5 qt/a		PRE	A	0 a	0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a		4"W-2	C			
	IMPACT	2.8	SC	0.0164 lb ai/a	0.75 fl oz/a		4"W-2	C			
	WARRANT	3	CS	1.13 lb ai/a	48 fl oz/a		4"W-2	C			
	NIS	100	SL	0.5 % v/v	0.5 % v/v		4"W-2	C			
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		4"W-2	C			

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 10,11,17,23,29 because error mean square = 0.

Crop Protection Market Development - Corn.

Trial ID: 16-19B Location: Belleville Res. Center Trial Year: 2016  
 Investigator: Karla L. Gage, Ph.D.

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	ZEAMD 6-6-16 Injury Percent	ZEAMD 6-13-16 Injury Percent 15 DAP	ZEAMD 6-17-16 Injury Percent 18 DA-A	ZEAMD 7-15-16 Injury Percent 32 DA-B	ZEAMD 8-5-16 Injury Percent Canopy
Trit-Eval Interval						7 DA-A	0 DA-B	0 DA-C	28 DA-C	49 DA-C
Trit No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Stage	Appl Code		
12	DEGREE XTRA	4.04	CS	3.03 lb ai/a	3 qt/a	3 qt/a	PRE	A	0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a	32 fl oz/a	4"W-2	C		
	IMPACT	2.8	SC	0.0164 lb ai/a	0.75 fl oz/a	0.75 fl oz/a	4"W-2	C		
	NIS	100	SL	0.5 % v/v	0.5 % v/v	0.5 % v/v	4"W-2	C		
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v	2.5 % v/v	4"W-2	C		
13	DEGREE XTRA	4.04	CS	3.03 lb ai/a	3 qt/a	3 qt/a	PRE	A	0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a	32 fl oz/a	4"W-2	C		
	STATUS	56	WG	0.105 lb ae/a	3 oz/a	3 oz/a	4"W-2	C		
	NIS	100	SL	0.5 % v/v	0.5 % v/v	0.5 % v/v	4"W-2	C		
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v	2.5 % v/v	4"W-2	C		
14	DEGREE XTRA	4.04	CS	3.03 lb ai/a	3 qt/a	3 qt/a	PRE	A	0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a	32 fl oz/a	4"W-2	C		
	TRIPLEFLEX	4.25	EC	1.6 lb ai/a	1.5 qt/a	1.5 qt/a	4"W-2	C		
	NIS	100	SL	0.5 % v/v	0.5 % v/v	0.5 % v/v	4"W-2	C		
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v	2.5 % v/v	4"W-2	C		
15	NONTREATED					0	0	0	0	0
16	ACURON	3.44	CS	2.15 lb ai/a	2.5 qt/a	2.5 qt/a	PRE	A	0 a	0 a
	PRINCEP 4L	4	SC	1 lb ai/a	1 qt/a	1 qt/a	PRE	A		
LSD P=.05						0.0	0.0	0.0	0.0	0.0
Standard Deviation						0.0	0.0	0.0	0.0	0.0
CV						0.0	0.0	0.0	0.0	0.0
Replicate F						0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)						1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F						0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)						1.0000	1.0000	1.0000	1.0000	1.0000

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 10,11,17,23,29 because error mean square = 0.



## Crop Protection Market Development - Corn.

Trial ID: 16-19B Location: Belleville Res. Center Trial Year: 2016  
Investigator: Karla L. Gage, Ph.D.

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	SETFA	SETFA	SETFA	SETFA			
							6-13-16 Control Percent -4 DA-C	6-17-16 Control Percent 18 DA-A	7-15-16 Control Percent 32 DA-B	8-5-16 Control Percent Canopy			
							0 DA-B	0 DA-C	28 DA-C	49 DA-C			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	HARNESX XTRA 5.6L	5.6	EC	3.64	lb ai/a	2.6	qt/a	PRE	A	98 a	98 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
2	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	94 ab	94 ab	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
3	TRIPLEFLEX	4.25	EC	1.6	lb ai/a	1.5	qt/a	PRE	A	97 a	97 a	99 a	99 a
	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
4	HARNESX XTRA 5.6L	5.6	EC	2.8	lb ai/a	2	qt/a	PRE	A	98 a	98 a	99 a	99 a
	BALANCE FLEXX	2	SC	0.047	lb ai/a	3	fl oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
5	DEGREE XTRA	4.04	CS	2.32	lb ai/a	2.3	qt/a	PRE	A	90 ab	90 ab	99 a	99 a
	BALANCE FLEXX	2	SC	0.047	lb ai/a	3	fl oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
6	CORVUS	2.63	SC	0.115	lb ai/a	5.6	fl oz/a	PRE	A	83 b	83 b	18 b	54 b
	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A				
7	LUMAX EZ	3.674	SE	2.76	lb ai/a	3	qt/a	PRE	A	87 ab	87 ab	38 b	48 b
8	HALEX GT	4.389	CS	2.2	lb ai/a	2	qt/a	4"W-1	B			99 a	98 a
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-1	B				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
9	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A	45 c	45 c	99 a	98 a
	HALEX GT	4.389	CS	2.74	lb ai/a	2.5	qt/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
10	REALM Q	38.75	WG	0.097	lb ai/a	4	oz/a	PRE	A	94 ab	94 ab	99 a	99 a
	CINCH ATZ	5.5	SC	3.58	lb ai/a	2.6	qt/a	PRE	A				
	ABUNDIT EXTRA	3	SL	1.1	lb ae/a	47	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
11	DEGREE XTRA	4.04	CS	2.53	lb ai/a	2.5	qt/a	PRE	A	98 a	98 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W-2	C				
	WARRANT	3	CS	1.13	lb ai/a	48	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				

Means followed by same letter or symbol do not significantly differ (P=0.05, LSD)  
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Could not calculate LSD (% mean diff) for columns 10,11,17,23,29 because error mean square = 0.

Crop Protection Market Development - Corn.

Trial ID: 16-19B Location: Belleville Res. Center Trial Year: 2016  
 Investigator: Karla L. Gage, Ph.D.

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	SETFA	SETFA	SETFA	SETFA			
							6-13-16 Control Percent -4 DA-C	6-17-16 Control Percent 18 DA-A	7-15-16 Control Percent 32 DA-B	8-5-16 Control Percent Canopy			
							0 DA-B	0 DA-C	28 DA-C	49 DA-C			
Trt No.	Treatment Name	Form Conc	Form Type	Form Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
12	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	96 ab	96 ab	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
13	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	95 ab	95 ab	99 a	98 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	STATUS	56	WG	0.105	lb ae/a	3	oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
14	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	97 ab	97 ab	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	TRIPLEFLEX	4.25	EC	1.6	lb ai/a	1.5	qt/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
15	NONTREATED									0	0	0	0
16	ACURON	3.44	CS	2.15	lb ai/a	2.5	qt/a	PRE	A	95 ab	95 ab	87 a	84 a
	PRINCEP 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A				
LSD P=.05										14.2	14.2	21.5	20.6
Standard Deviation										9.9	9.9	15.1	14.5
CV										10.96	10.96	17.04	15.85
Replicate F										1.413	1.413	0.265	0.305
Replicate Prob(F)										0.2535	0.2535	0.8504	0.8218
Treatment F										7.814	7.814	11.214	5.512
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

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## Crop Protection Market Development - Corn.

Trial ID: 16-19B Location: Belleville Res. Center Trial Year: 2016  
Investigator: Karla L. Gage, Ph.D.

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	AMBTR	AMBTR	AMBTR	AMBTR			
							6-13-16 Control Percent -4 DA-C	6-17-16 Control Percent 18 DA-A	7-15-16 Control Percent 32 DA-B	8-5-16 Control Percent Canopy			
							0 DA-B	0 DA-C	28 DA-C	49 DA-C			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	HARNESX XTRA 5.6L	5.6	EC	3.64	lb ai/a	2.6	qt/a	PRE	A	94 ab	94 ab	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
2	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	87 bc	87 bc	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
3	TRIPLEFLEX	4.25	EC	1.6	lb ai/a	1.5	qt/a	PRE	A	99 a	99 a	99 a	99 a
	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
4	HARNESX XTRA 5.6L	5.6	EC	2.8	lb ai/a	2	qt/a	PRE	A	98 a	98 a	99 a	99 a
	BALANCE FLEXX	2	SC	0.047	lb ai/a	3	fl oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
5	DEGREE XTRA	4.04	CS	2.32	lb ai/a	2.3	qt/a	PRE	A	86 bc	86 bc	99 a	99 a
	BALANCE FLEXX	2	SC	0.047	lb ai/a	3	fl oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
6	CORVUS	2.63	SC	0.115	lb ai/a	5.6	fl oz/a	PRE	A	95 ab	95 ab	73 a	92 b
	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A				
7	LUMAX EZ	3.674	SE	2.76	lb ai/a	3	qt/a	PRE	A	95 ab	95 ab	91 a	84 c
8	HALEX GT	4.389	CS	2.2	lb ai/a	2	qt/a	4"W-1	B			98 a	97 ab
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-1	B				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
9	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A	81 c	81 c	99 a	99 a
	HALEX GT	4.389	CS	2.74	lb ai/a	2.5	qt/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
10	REALM Q	38.75	WG	0.097	lb ai/a	4	oz/a	PRE	A	98 a	98 a	99 a	99 a
	CINCH ATZ	5.5	SC	3.58	lb ai/a	2.6	qt/a	PRE	A				
	ABUNDIT EXTRA	3	SL	1.1	lb ae/a	47	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
11	DEGREE XTRA	4.04	CS	2.53	lb ai/a	2.5	qt/a	PRE	A	97 a	97 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W-2	C				
	WARRANT	3	CS	1.13	lb ai/a	48	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				

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 10,11,17,23,29 because error mean square = 0.

Crop Protection Market Development - Corn.

Trial ID: 16-19B Location: Belleville Res. Center Trial Year: 2016  
 Investigator: Karla L. Gage, Ph.D.

							AMBTR	AMBTR	AMBTR	AMBTR		
							6-13-16	6-17-16	7-15-16	8-5-16		
							Control	Control	Control	Control		
							Percent	Percent	Percent	Percent		
							-4 DA-C	18 DA-A	32 DA-B	Canopy		
Trt-Eval Interval							0 DA-B	0 DA-C	28 DA-C	49 DA-C		
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate	Growth Stage	Appl Code				
12	DEGREE XTRA	4.04	CS	3.03 lb ai/a	3 qt/a	3 qt/a	PRE	A	87 bc	87 bc	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a	32 fl oz/a	4"W-2	C				
	IMPACT	2.8	SC	0.0164 lb ai/a	0.75 fl oz/a	0.75 fl oz/a	4"W-2	C				
	NIS	100	SL	0.5 % v/v	0.5 % v/v	0.5 % v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v	2.5 % v/v	4"W-2	C				
13	DEGREE XTRA	4.04	CS	3.03 lb ai/a	3 qt/a	3 qt/a	PRE	A	94 ab	94 ab	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a	32 fl oz/a	4"W-2	C				
	STATUS	56	WG	0.105 lb ae/a	3 oz/a	3 oz/a	4"W-2	C				
	NIS	100	SL	0.5 % v/v	0.5 % v/v	0.5 % v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v	2.5 % v/v	4"W-2	C				
14	DEGREE XTRA	4.04	CS	3.03 lb ai/a	3 qt/a	3 qt/a	PRE	A	92 ab	92 ab	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a	32 fl oz/a	32 fl oz/a	4"W-2	C				
	TRIPLEFLEX	4.25	EC	1.6 lb ai/a	1.5 qt/a	1.5 qt/a	4"W-2	C				
	NIS	100	SL	0.5 % v/v	0.5 % v/v	0.5 % v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v	2.5 % v/v	4"W-2	C				
15	NONTREATED						0	0	0	0		
16	ACURON	3.44	CS	2.15 lb ai/a	2.5 qt/a	2.5 qt/a	PRE	A	93 ab	93 ab	95 a	96 ab
	PRINCEP 4L	4	SC	1 lb ai/a	1 qt/a	1 qt/a	PRE	A				
LSD P=.05							9.4	9.4	18.2	5.3		
Standard Deviation							6.6	6.6	12.7	3.7		
CV							7.14	7.14	13.23	3.84		
Replicate F							2.223	2.223	1.221	2.296		
Replicate Prob(F)							0.1008	0.1008	0.3138	0.0915		
Treatment F							2.465	2.465	1.127	5.236		
Treatment Prob(F)							0.0149	0.0149	0.3645	0.0001		

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 10,11,17,23,29 because error mean square = 0.

## Crop Protection Market Development - Corn.

Trial ID: 16-19B Location: Belleville Res. Center Trial Year: 2016  
Investigator: Karla L. Gage, Ph.D.

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	ABUTH	ABUTH	ABUTH	ABUTH			
							6-13-16 Control Percent -4 DA-C	6-17-16 Control Percent 18 DA-A	7-15-16 Control Percent 32 DA-B	8-5-16 Control Percent Canopy			
							0 DA-B	0 DA-C	28 DA-C	49 DA-C			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	HARNESX XTRA 5.6L	5.6	EC	3.64	lb ai/a	2.6	qt/a	PRE	A	96 ab	96 ab	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
2	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	89 bc	89 bc	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
3	TRIPLEFLEX	4.25	EC	1.6	lb ai/a	1.5	qt/a	PRE	A	99 a	99 a	99 a	99 a
	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
4	HARNESX XTRA 5.6L	5.6	EC	2.8	lb ai/a	2	qt/a	PRE	A	96 a	96 a	99 a	99 a
	BALANCE FLEXX	2	SC	0.047	lb ai/a	3	fl oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
5	DEGREE XTRA	4.04	CS	2.32	lb ai/a	2.3	qt/a	PRE	A	96 a	96 a	99 a	99 a
	BALANCE FLEXX	2	SC	0.047	lb ai/a	3	fl oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
6	CORVUS	2.63	SC	0.115	lb ai/a	5.6	fl oz/a	PRE	A	99 a	99 a	99 a	92 bc
	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A				
7	LUMAX EZ	3.674	SE	2.76	lb ai/a	3	qt/a	PRE	A	99 a	99 a	99 a	89 c
8	HALEX GT	4.389	CS	2.2	lb ai/a	2	qt/a	4"W-1	B			99 a	99 a
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-1	B				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
9	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A	76 d	76 d	99 a	99 a
	HALEX GT	4.389	CS	2.74	lb ai/a	2.5	qt/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
10	REALM Q	38.75	WG	0.097	lb ai/a	4	oz/a	PRE	A	99 a	99 a	99 a	99 a
	CINCH ATZ	5.5	SC	3.58	lb ai/a	2.6	qt/a	PRE	A				
	ABUNDIT EXTRA	3	SL	1.1	lb ae/a	47	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
11	DEGREE XTRA	4.04	CS	2.53	lb ai/a	2.5	qt/a	PRE	A	84 c	84 c	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W-2	C				
	WARRANT	3	CS	1.13	lb ai/a	48	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				

Means followed by same letter or symbol do not significantly differ (P=0.05, LSD)

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

Could not calculate LSD (% mean diff) for columns 10,11,17,23,29 because error mean square = 0.

Crop Protection Market Development - Corn.

Trial ID: 16-19B Location: Belleville Res. Center Trial Year: 2016  
 Investigator: Karla L. Gage, Ph.D.

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	ABUTH	ABUTH	ABUTH	ABUTH			
							6-13-16 Control Percent -4 DA-C	6-17-16 Control Percent 18 DA-A	7-15-16 Control Percent 32 DA-B	8-5-16 Control Percent Canopy			
							0 DA-B	0 DA-C	28 DA-C	49 DA-C			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
12	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	84 c	84 c	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
13	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	85 c	85 c	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	STATUS	56	WG	0.105	lb ae/a	3	oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
14	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	87 c	87 c	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	TRIPLEFLEX	4.25	EC	1.6	lb ai/a	1.5	qt/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
15	NONTREATED									0	0	0	0
16	ACURON	3.44	CS	2.15	lb ai/a	2.5	qt/a	PRE	A	98 a	98 a	97 a	96 ab
	PRINCEP 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A				
LSD P=.05										7.2	7.2	1.7	5.9
Standard Deviation										5.0	5.0	1.2	4.1
CV										5.49	5.49	1.2	4.25
Replicate F										1.065	1.065	0.872	0.825
Replicate Prob(F)										0.3751	0.3751	0.4632	0.4873
Treatment F										8.923	8.923	0.959	2.280
Treatment Prob(F)										0.0001	0.0001	0.5085	0.0199

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 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.  
 Could not calculate LSD (% mean diff) for columns 10,11,17,23,29 because error mean square = 0.

## Crop Protection Market Development - Corn.

Trial ID: 16-19B Location: Belleville Res. Center Trial Year: 2016  
Investigator: Karla L. Gage, Ph.D.

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	XANST	XANST	XANST	XANST			
							6-13-16 Control Percent -4 DA-C	6-17-16 Control Percent 18 DA-A	7-15-16 Control Percent 32 DA-B	8-5-16 Control Percent Canopy			
							0 DA-B	0 DA-C	28 DA-C	49 DA-C			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	HARNESX XTRA 5.6L	5.6	EC	3.64	lb ai/a	2.6	qt/a	PRE	A	89 a	89 a	96 a	97 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
2	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	74 a	74 a	95 a	96 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
3	TRIPLEFLEX	4.25	EC	1.6	lb ai/a	1.5	qt/a	PRE	A	94 a	94 a	97 a	99 a
	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
4	HARNESX XTRA 5.6L	5.6	EC	2.8	lb ai/a	2	qt/a	PRE	A	94 a	94 a	99 a	97 a
	BALANCE FLEXX	2	SC	0.047	lb ai/a	3	fl oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
5	DEGREE XTRA	4.04	CS	2.32	lb ai/a	2.3	qt/a	PRE	A	91 a	91 a	97 a	98 a
	BALANCE FLEXX	2	SC	0.047	lb ai/a	3	fl oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
6	CORVUS	2.63	SC	0.115	lb ai/a	5.6	fl oz/a	PRE	A	92 a	92 a	70 a	82 bc
	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A				
7	LUMAX EZ	3.674	SE	2.76	lb ai/a	3	qt/a	PRE	A	89 a	89 a	71 a	69 c
8	HALEX GT	4.389	CS	2.2	lb ai/a	2	qt/a	4"W-1	B			99 a	98 a
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-1	B				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
9	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A	65 a	65 a	99 a	98 a
	HALEX GT	4.389	CS	2.74	lb ai/a	2.5	qt/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
10	REALM Q	38.75	WG	0.097	lb ai/a	4	oz/a	PRE	A	93 a	93 a	98 a	98 a
	CINCH ATZ	5.5	SC	3.58	lb ai/a	2.6	qt/a	PRE	A				
	ABUNDIT EXTRA	3	SL	1.1	lb ae/a	47	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
11	DEGREE XTRA	4.04	CS	2.53	lb ai/a	2.5	qt/a	PRE	A	74 a	74 a	97 a	96 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W-2	C				
	WARRANT	3	CS	1.13	lb ai/a	48	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				

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 10,11,17,23,29 because error mean square = 0.

Crop Protection Market Development - Corn.

Trial ID: 16-19B Location: Belleville Res. Center Trial Year: 2016  
 Investigator: Karla L. Gage, Ph.D.

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	XANST	XANST	XANST	XANST			
							6-13-16 Control Percent -4 DA-C	6-17-16 Control Percent 18 DA-A	7-15-16 Control Percent 32 DA-B	8-5-16 Control Percent Canopy			
							0 DA-B	0 DA-C	28 DA-C	49 DA-C			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
12	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	72 a	72 a	96 a	95 ab
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
13	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	74 a	74 a	98 a	97 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	STATUS	56	WG	0.105	lb ae/a	3	oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
14	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	93 a	93 a	99 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	TRIPLEFLEX	4.25	EC	1.6	lb ai/a	1.5	qt/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
15	NONTREATED									0	0	0	0
16	ACURON	3.44	CS	2.15	lb ai/a	2.5	qt/a	PRE	A	96 a	96 a	89 a	89 ab
	PRINCEP 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A				
LSD P=.05										25.2	25.2	24.3	13.6
Standard Deviation										17.6	17.6	17.0	9.5
CV										20.71	20.71	18.31	10.13
Replicate F										2.592	2.592	2.288	3.416
Replicate Prob(F)										0.0664	0.0664	0.0924	0.0258
Treatment F										1.465	1.465	1.289	3.035
Treatment Prob(F)										0.1750	0.1750	0.2542	0.0027

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 10,11,17,23,29 because error mean square = 0.



## Crop Protection Market Development - Corn.

Trial ID: 16-19B Location: Belleville Res. Center Trial Year: 2016  
Investigator: Karla L. Gage, Ph.D.

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	IPOHE	IPOHE	IPOHE	IPOHE			
							6-13-16 Control Percent -4 DA-C	6-17-16 Control Percent 18 DA-A	7-15-16 Control Percent 32 DA-B	8-5-16 Control Percent Canopy			
							0 DA-B	0 DA-C	28 DA-C	49 DA-C			
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	HARNESX XTRA 5.6L	5.6	EC	3.64	lb ai/a	2.6	qt/a	PRE	A	85 a-d	85 a-d	92 ab	96 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
2	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	76 d	76 d	86 bcd	93 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
3	TRIPLEFLEX	4.25	EC	1.6	lb ai/a	1.5	qt/a	PRE	A	90 ab	90 ab	89 abc	96 a
	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
4	HARNESX XTRA 5.6L	5.6	EC	2.8	lb ai/a	2	qt/a	PRE	A	91 ab	91 ab	93 a	97 a
	BALANCE FLEXX	2	SC	0.047	lb ai/a	3	fl oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
5	DEGREE XTRA	4.04	CS	2.32	lb ai/a	2.3	qt/a	PRE	A	80 bcd	80 bcd	90 ab	96 a
	BALANCE FLEXX	2	SC	0.047	lb ai/a	3	fl oz/a	PRE	A				
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
6	CORVUS	2.63	SC	0.115	lb ai/a	5.6	fl oz/a	PRE	A	95 a	95 a	92 ab	50 b
	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A				
7	LUMAX EZ	3.674	SE	2.76	lb ai/a	3	qt/a	PRE	A	89 abc	89 abc	83 cde	0 c
8	HALEX GT	4.389	CS	2.2	lb ai/a	2	qt/a	4"W-1	B			76 e	92 a
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-1	B				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-1	B				
9	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A	80 bcd	80 bcd	91 ab	96 a
	HALEX GT	4.389	CS	2.74	lb ai/a	2.5	qt/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
10	REALM Q	38.75	WG	0.097	lb ai/a	4	oz/a	PRE	A	94 a	94 a	93 ab	95 a
	CINCH ATZ	5.5	SC	3.58	lb ai/a	2.6	qt/a	PRE	A				
	ABUNDIT EXTRA	3	SL	1.1	lb ae/a	47	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				
11	DEGREE XTRA	4.04	CS	2.53	lb ai/a	2.5	qt/a	PRE	A	80 bcd	80 bcd	88 abc	94 a
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C				
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W-2	C				
	WARRANT	3	CS	1.13	lb ai/a	48	fl oz/a	4"W-2	C				
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C				

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 10,11,17,23,29 because error mean square = 0.

Crop Protection Market Development - Corn.

Trial ID: 16-19B Location: Belleville Res. Center Trial Year: 2016  
 Investigator: Karla L. Gage, Ph.D.

Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	IPOHE	IPOHE	IPOHE	IPOHE				
							6-13-16 Control Percent -4 DA-C	6-17-16 Control Percent 18 DA-A	7-15-16 Control Percent 32 DA-B	8-5-16 Control Percent Canopy				
							0 DA-B	0 DA-C	28 DA-C	49 DA-C				
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
12	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	64 e	64 e	89 abc	94 a	
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C					
	IMPACT	2.8	SC	0.0164	lb ai/a	0.75	fl oz/a	4"W-2	C					
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C					
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
13	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	75 de	75 de	93 ab	96 a	
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C					
	STATUS	56	WG	0.105	lb ae/a	3	oz/a	4"W-2	C					
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C					
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
14	DEGREE XTRA	4.04	CS	3.03	lb ai/a	3	qt/a	PRE	A	78 cd	78 cd	94 a	98 a	
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a	32	fl oz/a	4"W-2	C					
	TRIPLEFLEX	4.25	EC	1.6	lb ai/a	1.5	qt/a	4"W-2	C					
	NIS	100	SL	0.5	% v/v	0.5	% v/v	4"W-2	C					
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	4"W-2	C					
15	NONTREATED										0	0	0	0
16	ACURON	3.44	CS	2.15	lb ai/a	2.5	qt/a	PRE	A	93 a	93 a	80 de	0 c	
	PRINCEP 4L	4	SC	1	lb ai/a	1	qt/a	PRE	A					
LSD P=.05							11.3	11.3	6.9	12.9				
Standard Deviation							7.9	7.9	4.8	9.1				
CV							9.48	9.48	5.43	11.41				
Replicate F							1.795	1.795	2.146	0.785				
Replicate Prob(F)							0.1641	0.1641	0.1087	0.5091				
Treatment F							5.050	5.050	4.738	57.269				
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001				

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 10,11,17,23,29 because error mean square = 0.

Crop Protection Market Development - Corn.

Trial ID: 16-19B      Location: Belleville Res. Center      Trial Year: 2016  
Investigator: Karla L. Gage, Ph.D.

Trial Comments

1. Protocol: Monsanto (24-15 revised 5-19-16 no Class Act NG).
2. Ratings:  
CI 14 DAP; 0 DA-B all plots; 0 DA-C all plots; and at canopy closure all plots.  
WC 0 DA-B all plots; 0 DA-C all plots; and at canopy closure all plots.  
Rate before spray applications B and C.
3. Yield.
4. Applications B and C, spray 4 inch weeds, but less than 11 inch corn and not past V5.
5. Photos at 0 and 28 DA-C all treatments. High quality photos, submit full resolution raw photos.
6. Rainfall following the PRE application A was 0.73 inch over 2 days beginning 5 days later.  
Rainfall following the 4"W-1 application B was 2.61 inch over 9 days beginning 17 days later.  
Rainfall following the 4"W-2 application C was 2.61 inch over 9 days beginning 13 days later.
7. Ratings at 0 DA-C were also only 4 DA-B and too soon to rate weed control for treatment 8 (POST only).
8. There was no change in weed control ratings between 6-13-16 and 6-17-16.
9. Harvested 10-3-16, (2) 30 inch rows by 22 ft.