

Two-Pass and Postemergence Weed Control Trial - Syngenta

Trial ID: 16-21M-MMMW30 Location: Belleville Res. Center Trial Year: 2016
 Investigator: Karla L. Gage, Ph.D.

Trial Status: F one-year/final
Initiation Date: 5-29-16
Completion Date: 10-3-16

Trial Location

City: Belleville **Country:** USA
State/Prov.: Illinois IL
Postal Code: 62221

Objectives:
 Evaluate top Syngenta and competitive two-pass and postemergence treatments.

Contacts

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

Crop Description

Crop 1: ZEAMD Zea mays indentata **Dent corn**
Variety: DKC 63-33 **BBCH Scale:** BCOR
Description: SS RIB

Planting Date: 5-29-16
Planting Rate, Unit: 32000 S/A **Planting Method:** SEEDED
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN

Pest Description

Pest 1 Type: W **Code:** AMBTR *Ambrosia trifida* L.
Common Name: ragweed, giant

Pest 2 Type: W **Code:** AMATA *Amaranthus rudis* Sauer
Common Name: waterhemp, common

Pest 3 Type: W **Code:** IPOHE *Ipomoea hederacea* (L.) Jacq.
Common Name: morningglory, ivyleaf

Site and Design

Treated Plot Width: 7.5 FT **Total Plot Width:** 10 FT **Site Type:** FIELD
Treated Plot Length: 30 FT **Total Plot Length:** 30 FT **Experimental Unit:** 1 PLOT
Tillage Type: REDTIL reduced-till
Study Design: RACOB L Randomized Complete Block (RCB)

Replications: 3
Untreated Arrangement: INCLUDED single control randomized in each block

No.	Previous Crop	Year
1.	GLXMA	2015

Maintenance

No.	Maintenance Product Name
1.	N 150 LB/A, P2O5 50 LB/A, K2O 150 LB/A

Soil Description

Description Name: 21M_2013
% OM: 3.4 **Texture:** SIL silt loam
pH: 6.5 **Soil Name:** Bethalto
CEC: 12

Additional Measured Elements

Element	Quantity	Unit
P1	71	lb/A
K	297	lb/A

Moisture and Weather Conditions

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

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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

	A	B	C
Application Date:	5-30-16	6-13-16	6-15-16
Appl. Start Time:	14:30	16:10	10:10
Appl. Stop Time:	15:00	16:20	10:30
Application Method:	Spray	Spray	Spray
Application Timing:	PRE	2-4"W-1	2-4"W-2
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	RLS	MCG	MCG
Air Temperature, Unit:	85 F	90 F	91 F
% Relative Humidity:	45	57	64
Wind Velocity, Unit:	2 MPH	3 MPH	3 MPH
Wind Direction:	SE	ENE	WSW
Dew Presence (Y/N):	N	N	N
Soil Temperature, Unit:	73 F	79 F	80 F
Soil Moisture:	NORMAL	NORMAL	NORMAL
% Cloud Cover:	50	25	25
Next Moisture Occurred On:	6-4-16	6-30-16	6-30-16
Time to Next Moisture, Unit:	5 DAY	17 DAY	15 DAY

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD	ZEAMD	ZEAMD
Stage Scale Used:	DESC	DESC	DESC
Stage Majority, Percent:	NA	V3	V5
Stage Minimum, Percent:		V3	V4
Stage Maximum, Percent:		V3	V5
Height, Unit:		10 IN	14 IN
Height Minimum, Maximum:		7 10	9 14

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Pest Stage At Each Application			
	A	B	C
Pest 1 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Stage Majority, Percent:	NA	4	2
Stage Minimum, Percent:		2	COTY
Stage Maximum, Percent:		4	4
Height, Unit:		2 IN	2 IN
Height Minimum, Maximum:		1.25 2	0.5 2
Density, Unit:		1 FT2	0.01 FT2
Pest 2 Code, Type, Scale:	AMATA W	AMATA W	AMATA W
Stage Majority, Percent:	NA	2	2
Stage Minimum, Percent:		COTY	COTY
Stage Maximum, Percent:		5	4
Height, Unit:		1.5 IN	0.75 IN
Height Minimum, Maximum:		0.125 2	0.25 1.5
Density, Unit:		3 FT2	3 FT2
Pest 3 Code, Type, Scale:	IPOHE W	IPOHE W	IPOHE W
Stage Majority, Percent:	NA	1	1
Stage Minimum, Percent:		COTY	COTY
Stage Maximum, Percent:		3	5
Height, Unit:		1 IN	1 IN
Height Minimum, Maximum:		0.25 2	0.25 1.5
Density, Unit:		0.5 FT2	3 FT2

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

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Pest Code								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	Rate Unit	Other Rate	Other Rate	Growth Unit	Stage	Appl Code			
1	NONTREATED										11.8 a	57.0 a	17 c
2	ACURON	3.44	CS	1.29	lb ai/a	1.5	qt/a	PRE	A		17.7 a	54.7 a	122 ab
	HALEX GT	4.389	CS	1.98	lb ai/a	3.6	pt/a	2-4"	W-2 C				
	NIS	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-2 C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C				
3	ACURON	3.44	CS	1.08	lb ai/a	1.25	qt/a	PRE	A		16.7 a	55.3 a	139 a
	ACURON	3.44	CS	1.08	lb ai/a	1.25	qt/a	2-4"	W-2 C				
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-2 C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C				
4	BICEP II MAGNUM	5.5	SC	1.72	lb ai/a	1.25	qt/a	PRE	A		17.2 a	55.0 a	138 a
	HALEX GT	4.389	CS	1.98	lb ai/a	3.6	pt/a	2-4"	W-2 C				
	NIS	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-2 C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C				
5	HALEX GT	4.389	CS	1.98	lb ai/a	3.6	pt/a	2-4"	W-1 B		16.5 a	55.5 a	129 ab
	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	2-4"	W-1 B				
	NIS	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-1 B				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-1 B				
6	ARMEZON PRO	5.35	EC	0.84	lb ai/a	20	fl oz/a	2-4"	W-1 B		18.8 a	54.2 a	103 b
	MSO	100	SL	1	% v/v	1	% v/v	2-4"	W-1 B				
	AMS - LIQUID	100	SL	5	% v/v	5	% v/v	2-4"	W-1 B				
7	REALM Q	38.75	WG	0.097	lb ai/a	4	oz/a	2-4"	W-1 B		16.8 a	55.2 a	133 ab
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-1 B				
	COC	100	SL	1	% v/v	1	% v/v	2-4"	W-1 B				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-1 B				
8	RESICORE	3.29	EC	1.23	lb ai/a	1.5	qt/a	PRE	A		17.0 a	55.1 a	136 a
	RESICORE	3.29	EC	1.23	lb ai/a	1.5	qt/a	2-4"	W-2 C				
	NIS	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-2 C				
9	CORVUS	2.63	SC	0.068	lb ai/a	3.3	fl oz/a	PRE	A		16.8 a	55.3 a	122 ab
	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	2-4"	W-2 C				
	COC	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C				
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C				
LSD P=.05								4.11	2.22	32.3			
Standard Deviation								2.37	1.28	18.6			
CV								14.3	2.32	16.12			
Replicate F								0.349	0.380	1.407			
Replicate Prob(F)								0.7110	0.6895	0.2736			
Treatment F								1.985	1.011	12.927			
Treatment Prob(F)								0.1158	0.4657	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 10,11,15,19,23 because error mean square = 0.

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Pest Code							ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD
Crop Code							6-6-16	6-13-16	6-22-16	6-29-16	7-13-16
Rating Date							Injury	Injury	Injury	Injury	Injury
Rating Type							Percent	Percent	Percent	Percent	Percent
Rating Unit							7 DA-A	-2 DA-C	9 DA-B	16 DA-B	30 DA-B
Rating Timing								14 DA-A	7 DA-C	14 DA-C	28 DA-C
Trt-Eval Interval											
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
2	ACURON	3.44	CS	1.29 lb ai/a	1.5	qt/a	PRE	A	0 a	0 a	0 a
	HALEX GT	4.389	CS	1.98 lb ai/a	3.6	pt/a	2-4"	W-2 C			
	NIS	100	SL	0.25 % v/v	0.25	% v/v	2-4"	W-2 C			
	AMS - LIQUID	100	SL	2.5 % v/v	2.5	% v/v	2-4"	W-2 C			
3	ACURON	3.44	CS	1.08 lb ai/a	1.25	qt/a	PRE	A	0 a	0 a	0 a
	ACURON	3.44	CS	1.08 lb ai/a	1.25	qt/a	2-4"	W-2 C			
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22	fl oz/a	2-4"	W-2 C			
	AMS - LIQUID	100	SL	2.5 % v/v	2.5	% v/v	2-4"	W-2 C			
4	BICEP II MAGNUM	5.5	SC	1.72 lb ai/a	1.25	qt/a	PRE	A	0 a	0 a	0 a
	HALEX GT	4.389	CS	1.98 lb ai/a	3.6	pt/a	2-4"	W-2 C			
	NIS	100	SL	0.25 % v/v	0.25	% v/v	2-4"	W-2 C			
	AMS - LIQUID	100	SL	2.5 % v/v	2.5	% v/v	2-4"	W-2 C			
5	HALEX GT	4.389	CS	1.98 lb ai/a	3.6	pt/a	2-4"	W-1 B		0 a	0 a
	AATREX 4L	4	SC	1 lb ai/a	1	qt/a	2-4"	W-1 B			
	NIS	100	SL	0.25 % v/v	0.25	% v/v	2-4"	W-1 B			
	AMS - LIQUID	100	SL	2.5 % v/v	2.5	% v/v	2-4"	W-1 B			
6	ARMEZON PRO	5.35	EC	0.84 lb ai/a	20	fl oz/a	2-4"	W-1 B		0 a	0 a
	MSO	100	SL	1 % v/v	1	% v/v	2-4"	W-1 B			
	AMS - LIQUID	100	SL	5 % v/v	5	% v/v	2-4"	W-1 B			
7	REALM Q	38.75	WG	0.097 lb ai/a	4	oz/a	2-4"	W-1 B		0 a	0 a
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22	fl oz/a	2-4"	W-1 B			
	COC	100	SL	1 % v/v	1	% v/v	2-4"	W-1 B			
	AMS - LIQUID	100	SL	2.5 % v/v	2.5	% v/v	2-4"	W-1 B			
8	RESICORE	3.29	EC	1.23 lb ai/a	1.5	qt/a	PRE	A	0 a	0 a	0 a
	RESICORE	3.29	EC	1.23 lb ai/a	1.5	qt/a	2-4"	W-2 C			
	NIS	100	SL	0.25 % v/v	0.25	% v/v	2-4"	W-2 C			
9	CORVUS	2.63	SC	0.068 lb ai/a	3.3	fl oz/a	PRE	A	0 a	0 a	0 a
	CAPRENO	3.45	SC	0.081 lb ai/a	3	fl oz/a	2-4"	W-2 C			
	COC	100	SL	1 % v/v	1	% v/v	2-4"	W-2 C			
	AMS - LIQUID	100	SL	2.5 % v/v	2.5	% v/v	2-4"	W-2 C			
LSD P=.05											
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

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Pest Code								AMBTR	AMBTR	AMBTR	AMBTR	
Crop Code								6-13-16	6-22-16	6-29-16	7-13-16	
Rating Date								Control	Control	Control	Control	
Rating Type								Percent	Percent	Percent	Percent	
Rating Unit								-2 DA-C	9 DA-B	16 DA-B	30 DA-B	
Rating Timing								14 DA-A	7 DA-C	14 DA-C	28 DA-C	
Trt-Eval Interval												
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate	Growth Unit	Stage	Appl Code		
1	NONTREATED										0	0
2	ACURON	3.44	CS	1.29	lb ai/a	1.5	qt/a	PRE	A		73 a	97 a
	HALEX GT	4.389	CS	1.98	lb ai/a	3.6	pt/a	2-4"	W-2 C			
	NIS	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-2 C			
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C			
3	ACURON	3.44	CS	1.08	lb ai/a	1.25	qt/a	PRE	A		62 b	99 a
	ACURON	3.44	CS	1.08	lb ai/a	1.25	qt/a	2-4"	W-2 C			
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-2 C			
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C			
4	BICEP II MAGNUM	5.5	SC	1.72	lb ai/a	1.25	qt/a	PRE	A		67 ab	99 a
	HALEX GT	4.389	CS	1.98	lb ai/a	3.6	pt/a	2-4"	W-2 C			
	NIS	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-2 C			
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C			
5	HALEX GT	4.389	CS	1.98	lb ai/a	3.6	pt/a	2-4"	W-1 B			96 a
	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	2-4"	W-1 B			97 ab
	NIS	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-1 B			95 a
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-1 B			
6	ARMEZON PRO	5.35	EC	0.84	lb ai/a	20	fl oz/a	2-4"	W-1 B			92 b
	MSO	100	SL	1	% v/v	1	% v/v	2-4"	W-1 B			90 d
	AMS - LIQUID	100	SL	5	% v/v	5	% v/v	2-4"	W-1 B			87 a
7	REALM Q	38.75	WG	0.097	lb ai/a	4	oz/a	2-4"	W-1 B			90 b
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-1 B			94 bc
	COC	100	SL	1	% v/v	1	% v/v	2-4"	W-1 B			92 a
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-1 B			
8	RESICORE	3.29	EC	1.23	lb ai/a	1.5	qt/a	PRE	A		77 a	96 a
	RESICORE	3.29	EC	1.23	lb ai/a	1.5	qt/a	2-4"	W-2 C			97 ab
	NIS	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-2 C			94 a
9	CORVUS	2.63	SC	0.068	lb ai/a	3.3	fl oz/a	PRE	A		60 b	85 c
	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	2-4"	W-2 C			92 cd
	COC	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C			92 a
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C			
LSD P=.05								11.0	4.3	4.2	7.4	
Standard Deviation								5.8	2.4	2.4	4.2	
CV								8.64	2.58	2.51	4.54	
Replicate F								1.366	0.275	0.358	1.027	
Replicate Prob(F)								0.3088	0.7636	0.7055	0.3836	
Treatment F								4.585	11.810	4.938	1.712	
Treatment Prob(F)								0.0322	0.0001	0.0054	0.1856	

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Two-Pass and Postemergence Weed Control Trial - Syngenta

Trial ID: 16-21M-MMM30 Location: Belleville Res. Center Trial Year: 2016
Investigator: Karla L. Gage, Ph.D.

Pest Code								AMATA	AMATA	AMATA	AMATA	
Crop Code								6-13-16	6-22-16	6-29-16	7-13-16	
Rating Date								Control	Control	Control	Control	
Rating Type								Percent	Percent	Percent	Percent	
Rating Unit								-2 DA-C	9 DA-B	16 DA-B	30 DA-B	
Rating Timing								14 DA-A	7 DA-C	14 DA-C	28 DA-C	
Trt-Eval Interval												
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	ACURON	3.44	CS	1.29 lb ai/a	1.5 qt/a		PRE A		99 a	99 a	99 a	99 a
	HALEX GT	4.389	CS	1.98 lb ai/a	3.6 pt/a		2-4"W-2 C					
	NIS	100	SL	0.25 % v/v	0.25 % v/v		2-4"W-2 C					
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		2-4"W-2 C					
3	ACURON	3.44	CS	1.08 lb ai/a	1.25 qt/a		PRE A		99 a	99 a	99 a	99 a
	ACURON	3.44	CS	1.08 lb ai/a	1.25 qt/a		2-4"W-2 C					
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W-2 C					
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		2-4"W-2 C					
4	BICEP II MAGNUM	5.5	SC	1.72 lb ai/a	1.25 qt/a		PRE A		99 a	99 a	99 a	99 a
	HALEX GT	4.389	CS	1.98 lb ai/a	3.6 pt/a		2-4"W-2 C					
	NIS	100	SL	0.25 % v/v	0.25 % v/v		2-4"W-2 C					
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		2-4"W-2 C					
5	HALEX GT	4.389	CS	1.98 lb ai/a	3.6 pt/a		2-4"W-1 B			99 a	99 a	99 a
	AATREX 4L	4	SC	1 lb ai/a	1 qt/a		2-4"W-1 B					
	NIS	100	SL	0.25 % v/v	0.25 % v/v		2-4"W-1 B					
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		2-4"W-1 B					
6	ARMEZON PRO	5.35	EC	0.84 lb ai/a	20 fl oz/a		2-4"W-1 B			98 a	99 a	99 a
	MSO	100	SL	1 % v/v	1 % v/v		2-4"W-1 B					
	AMS - LIQUID	100	SL	5 % v/v	5 % v/v		2-4"W-1 B					
7	REALM Q	38.75	WG	0.097 lb ai/a	4 oz/a		2-4"W-1 B			99 a	93 a	93 b
	ROUNDUP POWERMAX	4.5	SL	0.77 lb ae/a	22 fl oz/a		2-4"W-1 B					
	COC	100	SL	1 % v/v	1 % v/v		2-4"W-1 B					
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		2-4"W-1 B					
8	RESICORE	3.29	EC	1.23 lb ai/a	1.5 qt/a		PRE A		99 a	99 a	99 a	99 a
	RESICORE	3.29	EC	1.23 lb ai/a	1.5 qt/a		2-4"W-2 C					
	NIS	100	SL	0.25 % v/v	0.25 % v/v		2-4"W-2 C					
9	CORVUS	2.63	SC	0.068 lb ai/a	3.3 fl oz/a		PRE A		92 b	98 a	99 a	99 a
	CAPRENO	3.45	SC	0.081 lb ai/a	3 fl oz/a		2-4"W-2 C					
	COC	100	SL	1 % v/v	1 % v/v		2-4"W-2 C					
	AMS - LIQUID	100	SL	2.5 % v/v	2.5 % v/v		2-4"W-2 C					
LSD P=.05								2.4	1.6	4.5	1.9	
Standard Deviation								1.3	0.9	2.5	1.1	
CV								1.32	0.91	2.59	1.1	
Replicate F								1.000	0.358	1.125	1.000	
Replicate Prob(F)								0.4096	0.7055	0.3523	0.3927	
Treatment F								19.360	0.869	2.028	9.878	
Treatment Prob(F)								0.0004	0.5535	0.1233	0.0002	

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Two-Pass and Postemergence Weed Control Trial - Syngenta

Trial ID: 16-21M-MMMW30 Location: Belleville Res. Center Trial Year: 2016
 Investigator: Karla L. Gage, Ph.D.

Pest Code								IPOHE	IPOHE	IPOHE	IPOHE	
Crop Code								6-13-16	6-22-16	6-29-16	7-13-16	
Rating Date								Control	Control	Control	Control	
Rating Type								Percent	Percent	Percent	Percent	
Rating Unit								-2 DA-C	9 DA-B	16 DA-B	30 DA-B	
Rating Timing								14 DA-A	7 DA-C	14 DA-C	28 DA-C	
Trt-Eval Interval												
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit Unit	Other Rate	Other Rate	Growth Unit	Stage	Appl Code		
1	NONTREATED										0	0
2	ACURON	3.44	CS	1.29	lb ai/a	1.5	qt/a	PRE	A		83 ab	98 a
	HALEX GT	4.389	CS	1.98	lb ai/a	3.6	pt/a	2-4"	W-2 C			96 a
	NIS	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-2 C			83 a
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C			
3	ACURON	3.44	CS	1.08	lb ai/a	1.25	qt/a	PRE	A		75 c	99 a
	ACURON	3.44	CS	1.08	lb ai/a	1.25	qt/a	2-4"	W-2 C			99 a
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-2 C			87 a
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C			
4	BICEP II MAGNUM	5.5	SC	1.72	lb ai/a	1.25	qt/a	PRE	A		77 bc	99 a
	HALEX GT	4.389	CS	1.98	lb ai/a	3.6	pt/a	2-4"	W-2 C			96 a
	NIS	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-2 C			87 a
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C			
5	HALEX GT	4.389	CS	1.98	lb ai/a	3.6	pt/a	2-4"	W-1 B			98 a
	AATREX 4L	4	SC	1	lb ai/a	1	qt/a	2-4"	W-1 B			97 a
	NIS	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-1 B			90 a
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-1 B			
6	ARMEZON PRO	5.35	EC	0.84	lb ai/a	20	fl oz/a	2-4"	W-1 B			62 d
	MSO	100	SL	1	% v/v	1	% v/v	2-4"	W-1 B			73 b
	AMS - LIQUID	100	SL	5	% v/v	5	% v/v	2-4"	W-1 B			58 b
7	REALM Q	38.75	WG	0.097	lb ai/a	4	oz/a	2-4"	W-1 B			90 b
	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4"	W-1 B			94 a
	COC	100	SL	1	% v/v	1	% v/v	2-4"	W-1 B			83 a
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-1 B			
8	RESICORE	3.29	EC	1.23	lb ai/a	1.5	qt/a	PRE	A		87 a	98 a
	RESICORE	3.29	EC	1.23	lb ai/a	1.5	qt/a	2-4"	W-2 C			97 a
	NIS	100	SL	0.25	% v/v	0.25	% v/v	2-4"	W-2 C			94 a
9	CORVUS	2.63	SC	0.068	lb ai/a	3.3	fl oz/a	PRE	A		73 c	85 c
	CAPRENO	3.45	SC	0.081	lb ai/a	3	fl oz/a	2-4"	W-2 C			92 a
	COC	100	SL	1	% v/v	1	% v/v	2-4"	W-2 C			83 a
	AMS - LIQUID	100	SL	2.5	% v/v	2.5	% v/v	2-4"	W-2 C			
LSD P=.05								7.5	3.8	14.0	12.8	
Standard Deviation								4.0	2.2	8.0	7.3	
CV								5.04	2.36	8.6	8.81	
Replicate F								1.263	0.351	0.735	3.556	
Replicate Prob(F)								0.3336	0.7098	0.4973	0.0564	
Treatment F								6.211	107.676	3.182	6.377	
Treatment Prob(F)								0.0142	0.0001	0.0311	0.0017	

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Two-Pass and Postemergence Weed Control Trial - Syngenta

Trial ID: 16-21M-MMMW30 Location: Belleville Res. Center Trial Year: 2016
Investigator: Karla L. Gage, Ph.D.

Trial Comments

1. Protocol: Syngenta (EHLCor2-2016).
2. Ratings:
CI 7 and 14 DA-A, 0 DA-C rate all plots; 7, 14, and 28 DA-C.
WC 14 DA-A, 0 DA-C rate all plots; 7, 14, and 28 DA-C.
3. Yield.
4. Application C, 2-4"W-2 = 2-4 inch weeds in the treatment 4 Bicep and best if just 2 inch.
Application C, 2-4"W-2 must be applied before V4-V5 corn even if there are no weeds.
5. Photos not requested, maybe 14 DA-C.
6. Rainfall following the PRE application A was 0.73 inch over 2 days beginning 5 days later.
Rainfall following the 2-4"W-1 application B was 2.61 inch over 9 days beginning 17 days later.
Rainfall following the 2-4"W-2 application C was 2.61 inch over 9 days beginning 15 days
7. Harvested 10-3-16, (2) 30 inch rows by 27 ft.