

Corn One-Pass Mid-Postemergence Weed Control - Bayer.

Trial ID: 16-21M-E50 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: 10-5-16

Trial Location

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

Objectives:

Evaluate the strengths and weaknesses of Diflexx Duo as compared to competitive products.

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:** PANDI **Panicum dichotomiflorum Michx.**
Common Name: panicum, fall
Pest 2 Type: W **Code:** AMBTR **Ambrosia trifida L.**
Common Name: ragweed, giant
Pest 3 Type: W **Code:** ABUTH **Abutilon theophrasti Medik.**
Common Name: velvetleaf
Pest 4 Type: W **Code:** AMATA **Amaranthus rudis Sauer**
Common Name: waterhemp, common

Site and Design

Treated Plot Width: 6.67 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
Replications: 3 **Study Design:** RACOB� Randomized Complete Block (RCB)
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

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.

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Trial ID: 16-21M-E50 Location: Belleville Res. Center Trial Year: 2016
Investigator: Karla L. Gage, Ph.D.**Application Description**

	A
Application Date:	6-13-16
Appl. Start Time:	15:45
Appl. Stop Time:	16:25
Application Method:	Spray
Application Timing:	2-4"W
Application Placement:	BROFOL
Applied By:	RLS
Air Temperature, Unit:	90 F
% Relative Humidity:	57
Wind Velocity, Unit:	3 MPH
Wind Direction:	ENE
Dew Presence (Y/N):	N
Soil Temperature, Unit:	79 F
Soil Moisture:	NORMAL
% Cloud Cover:	25
Next Moisture Occurred On:	6-30-16
Time to Next Moisture, Unit:	17 DAY

Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	ZEAMD
Stage Scale Used:	DESC
Stage Majority, Percent:	V4
Stage Minimum, Percent:	V4
Stage Maximum, Percent:	V4
Height, Unit:	8 IN
Height Minimum, Maximum:	6 8

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Trial ID: 16-21M-E50 Location: Belleville Res. Center Trial Year: 2016
Investigator: Karla L. Gage, Ph.D.**Pest Stage At Each Application**

	A
Pest 1 Code, Type, Scale:	PANDI W
Stage Majority, Percent:	4
Stage Minimum, Percent:	3
Stage Maximum, Percent:	6
Height, Unit:	2 IN
Height Minimum, Maximum:	1 3
Density, Unit:	0.02 FT2
Pest 2 Code, Type, Scale:	AMBTR W
Stage Majority, Percent:	8
Stage Minimum, Percent:	6
Stage Maximum, Percent:	10
Height, Unit:	4 IN
Height Minimum, Maximum:	2 4
Density, Unit:	0.02 FT2
Pest 3 Code, Type, Scale:	ABUTH W
Stage Majority, Percent:	4
Stage Minimum, Percent:	2
Stage Maximum, Percent:	4
Height, Unit:	2 IN
Height Minimum, Maximum:	1 3
Density, Unit:	0.02 FT2
Pest 4 Code, Type, Scale:	AMATA W
Stage Majority, Percent:	6
Stage Minimum, Percent:	4
Stage Maximum, Percent:	7
Height, Unit:	2.5 IN
Height Minimum, Maximum:	1 3
Density, Unit:	0.07 FT2

Application Equipment

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

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Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Rating Timing	Trt-Eval Interval	ZEAMD 10-5-16 Moisture Percent	ZEAMD 10-5-16 Test wt. lb/bu	ZEAMD 10-5-16 Yield bu/A	ZEAMD 6-20-16 Injury Percent	ZEAMD 6-27-16 Injury Percent
						7 DA-A				14 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	NONTREATED									16 c	0
2	DIFLEXX DUO	100	SC	24 fl oz/a		24 fl oz/a		2-4"W	A	16.6 a	55.1 a
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A		0 b
	COC	100	SL	1 % v/v		1 % v/v		2-4"W	A		0 a
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A		
3	DIFLEXX DUO	100	SC	32 fl oz/a		32 fl oz/a		2-4"W	A	16.4 a	55.3 a
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A		0 b
	COC	100	SL	1 % v/v		1 % v/v		2-4"W	A		0 a
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A		
4	DIFLEXX DUO	100	SC	24 fl oz/a		24 fl oz/a		2-4"W	A	15.7 a	55.7 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a		32 fl oz/a		2-4"W	A		139 ab
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A		0 b
	COC	100	SL	1 % v/v		1 % v/v		2-4"W	A		0 a
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A		
5	DIFLEXX DUO	100	SC	24 fl oz/a		24 fl oz/a		2-4"W	A	16.3 a	55.3 a
	LIBERTY 280	2.34	EC	0.402 lb ai/a		22 fl oz/a		2-4"W	A		126 ab
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A		0 b
	COC	100	SL	1 % v/v		1 % v/v		2-4"W	A		0 a
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A		
6	CAPRENO	3.45	SC	0.081 lb ai/a		3 fl oz/a		2-4"W	A	15.9 a	55.6 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a		32 fl oz/a		2-4"W	A		122 b
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A		6 a
	COC	100	SL	1 % v/v		1 % v/v		2-4"W	A		0 a
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A		
7	HALEX GT	4.389	CS	1.98 lb ai/a		57.6 fl oz/a		2-4"W	A	15.5 a	55.9 a
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A		146 a
	NIS	100	SL	0.25 % v/v		0.25 % v/v		2-4"W	A		1 b
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A		0 a
8	ARMEZON	2.8	SL	0.0125 lb ai/a		0.5717 fl oz/a		2-4"W	A	15.9 a	55.6 a
	OUTLOOK	6	EC	0.656 lb ai/a		14 fl oz/a		2-4"W	A		138 ab
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A		0 b
	NIS	100	SL	0.25 % v/v		0.25 % v/v		2-4"W	A		0 a
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A		
9	ARMEZON	2.8	SL	0.0125 lb ai/a		0.5717 fl oz/a		2-4"W	A	15.8 a	55.7 a
	STATUS	56	WG	0.105 lb ae/a		3 oz/a		2-4"W	A		140 ab
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A		0 b
	NIS	100	SL	0.25 % v/v		0.25 % v/v		2-4"W	A		0 a
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A		
10	ARMEZON	2.8	SL	0.0125 lb ai/a		0.5717 fl oz/a		2-4"W	A	15.6 a	55.9 a
	OUTLOOK	6	EC	0.656 lb ai/a		14 fl oz/a		2-4"W	A		143 ab
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a		32 fl oz/a		2-4"W	A		0 b
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A		0 a
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A		

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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Trial ID: 16-21M-E50 Location: Belleville Res. Center Trial Year: 2016
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Pest Code										ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD
Crop Code										10-5-16	10-5-16	10-5-16	6-20-16	6-27-16
Rating Date										Moisture	Test wt.	Yield	Injury	Injury
Rating Type										Percent	lb/bu	bu/A	Percent	Percent
Rating Unit														
Rating Timing														
Trt-Eval Interval													7 DA-A	14 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
11	ARMEZON	2.8	SL	0.0125	lb ai/a	0.5717	fl oz/a	2-4"W	A	15.9 a	55.6 a	128 ab	0 b	0 a
	STATUS	56	WG	0.105	lb ae/a		3 oz/a	2-4"W	A					
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a		32 fl oz/a	2-4"W	A					
	AATREX 4L	4	SC	0.5	lb ai/a		16 fl oz/a	2-4"W	A					
	AMS - LIQUID	100	SL	2.5	% v/v		2.5 % v/v	2-4"W	A					
LSD P=.05										0.81	0.58	23.6	0.8	.
Standard Deviation										0.48	0.34	13.8	0.4	0.0
CV										2.98	0.61	11.27	60.42	0.0
Replicate F										1.070	0.586	1.122	1.189	0.000
Replicate Prob(F)										0.3639	0.5667	0.3453	0.3274	1.0000
Treatment F										1.763	1.880	20.747	59.925	0.000
Treatment Prob(F)										0.1462	0.1215	0.0001	0.0001	1.0000

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Pest Code							PANDI	PANDI	PANDI
Crop Code							6-27-16	7-11-16	7-25-16
Rating Date							Control	Control	Control
Rating Type							Percent	Percent	Percent
Rating Unit									
Rating Timing									
Trt-Eval Interval							14 DA-A	28 DA-A	42 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code
1	NONTREATED								0
2	DIFLEXX DUO	100	SC	24 fl oz/a		24 fl oz/a		2-4"W A	82 bc
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W A	63 b
	COC	100	SL	1 % v/v		1 % v/v		2-4"W A	68 b
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W A	
3	DIFLEXX DUO	100	SC	32 fl oz/a		32 fl oz/a		2-4"W A	75 c
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W A	68 b
	COC	100	SL	1 % v/v		1 % v/v		2-4"W A	65 b
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W A	
4	DIFLEXX DUO	100	SC	24 fl oz/a		24 fl oz/a		2-4"W A	98 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a		32 fl oz/a		2-4"W A	98 a
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W A	98 a
	COC	100	SL	1 % v/v		1 % v/v		2-4"W A	98 a
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W A	
5	DIFLEXX DUO	100	SC	24 fl oz/a		24 fl oz/a		2-4"W A	98 a
	LIBERTY 280	2.34	EC	0.402 lb ai/a		22 fl oz/a		2-4"W A	96 a
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W A	96 a
	COC	100	SL	1 % v/v		1 % v/v		2-4"W A	96 a
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W A	
6	CAPRENO	3.45	SC	0.081 lb ai/a		3 fl oz/a		2-4"W A	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a		32 fl oz/a		2-4"W A	98 a
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W A	98 a
	COC	100	SL	1 % v/v		1 % v/v		2-4"W A	98 a
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W A	
7	HALEX GT	4.389	CS	1.98 lb ai/a		57.6 fl oz/a		2-4"W A	97 a
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W A	97 a
	NIS	100	SL	0.25 % v/v		0.25 % v/v		2-4"W A	97 a
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W A	
8	ARMEZON	2.8	SL	0.0125 lb ai/a		0.5717 fl oz/a		2-4"W A	96 a
	OUTLOOK	6	EC	0.656 lb ai/a		14 fl oz/a		2-4"W A	97 a
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W A	97 a
	NIS	100	SL	0.25 % v/v		0.25 % v/v		2-4"W A	97 a
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W A	
9	ARMEZON	2.8	SL	0.0125 lb ai/a		0.5717 fl oz/a		2-4"W A	92 ab
	STATUS	56	WG	0.105 lb ae/a		3 oz/a		2-4"W A	86 a
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W A	85 a
	NIS	100	SL	0.25 % v/v		0.25 % v/v		2-4"W A	
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W A	
10	ARMEZON	2.8	SL	0.0125 lb ai/a		0.5717 fl oz/a		2-4"W A	99 a
	OUTLOOK	6	EC	0.656 lb ai/a		14 fl oz/a		2-4"W A	98 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a		32 fl oz/a		2-4"W A	98 a
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W A	98 a
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W A	

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.

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										6-27-16	7-11-16	7-25-16
										Control	Control	Control
										Percent	Percent	Percent
Trt-Eval Interval										14 DA-A	28 DA-A	42 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
11	ARMEZON	2.8	SL	0.0125	lb ai/a	0.5717	fl oz/a	2-4"W	A	99 a	99 a	98 a
	STATUS	56	WG	0.105	lb ae/a		3 oz/a	2-4"W	A			
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a		32 fl oz/a	2-4"W	A			
	AATREX 4L	4	SC	0.5	lb ai/a		16 fl oz/a	2-4"W	A			
	AMS - LIQUID	100	SL	2.5	% v/v		2.5 % v/v	2-4"W	A			
LSD P=.05										12.8	17.2	16.3
Standard Deviation										7.5	10.0	9.5
CV										7.98	11.15	10.56
Replicate F										1.933	1.826	1.142
Replicate Prob(F)										0.1736	0.1897	0.3412
Treatment F										3.791	5.286	5.643
Treatment Prob(F)										0.0078	0.0013	0.0009

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Investigator: Karla L. Gage, Ph.D.

Pest Code										AMBTR	AMBTR	AMBTR
Crop Code										6-27-16	7-11-16	7-25-16
Rating Date										Control	Control	Control
Rating Type										Percent	Percent	Percent
Rating Unit										14 DA-A	28 DA-A	42 DA-A
Rating Timing												
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	DIFLEXX DUO	100	SC	24 fl oz/a		24 fl oz/a		2-4"W	A	96 a	98 a	96 a
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	COC	100	SL	1 % v/v		1 % v/v		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			
3	DIFLEXX DUO	100	SC	32 fl oz/a		32 fl oz/a		2-4"W	A	96 a	96 a	98 a
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	COC	100	SL	1 % v/v		1 % v/v		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			
4	DIFLEXX DUO	100	SC	24 fl oz/a		24 fl oz/a		2-4"W	A	97 a	96 a	96 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a		32 fl oz/a		2-4"W	A			
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	COC	100	SL	1 % v/v		1 % v/v		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			
5	DIFLEXX DUO	100	SC	24 fl oz/a		24 fl oz/a		2-4"W	A	97 a	97 a	94 a
	LIBERTY 280	2.34	EC	0.402 lb ai/a		22 fl oz/a		2-4"W	A			
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	COC	100	SL	1 % v/v		1 % v/v		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			
6	CAPRENO	3.45	SC	0.081 lb ai/a		3 fl oz/a		2-4"W	A	95 a	95 a	96 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a		32 fl oz/a		2-4"W	A			
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	COC	100	SL	1 % v/v		1 % v/v		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			
7	HALEX GT	4.389	CS	1.98 lb ai/a		57.6 fl oz/a		2-4"W	A	97 a	98 a	99 a
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	NIS	100	SL	0.25 % v/v		0.25 % v/v		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			
8	ARMEZON	2.8	SL	0.0125 lb ai/a		0.5717 fl oz/a		2-4"W	A	97 a	94 a	96 a
	OUTLOOK	6	EC	0.656 lb ai/a		14 fl oz/a		2-4"W	A			
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	NIS	100	SL	0.25 % v/v		0.25 % v/v		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			
9	ARMEZON	2.8	SL	0.0125 lb ai/a		0.5717 fl oz/a		2-4"W	A	96 a	93 a	94 a
	STATUS	56	WG	0.105 lb ae/a		3 oz/a		2-4"W	A			
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	NIS	100	SL	0.25 % v/v		0.25 % v/v		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			
10	ARMEZON	2.8	SL	0.0125 lb ai/a		0.5717 fl oz/a		2-4"W	A	95 a	95 a	93 a
	OUTLOOK	6	EC	0.656 lb ai/a		14 fl oz/a		2-4"W	A			
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a		32 fl oz/a		2-4"W	A			
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			

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 11 because error mean square = 0.

Corn One-Pass Mid-Postemergence Weed Control - Bayer.

Trial ID: 16-21M-E50 Location: Belleville Res. Center Trial Year: 2016
 Investigator: Karla L. Gage, Ph.D.

Pest Code								AMBTR	AMBTR	AMBTR		
Crop Code												
Rating Date								6-27-16	7-11-16	7-25-16		
Rating Type								Control	Control	Control		
Rating Unit								Percent	Percent	Percent		
Rating Timing												
Trt-Eval Interval								14 DA-A	28 DA-A	42 DA-A		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
11	ARMEZON	2.8	SL	0.0125	lb ai/a	0.5717	fl oz/a	2-4"W	A	96 a	97 a	95 a
	STATUS	56	WG	0.105	lb ae/a		3 oz/a	2-4"W	A			
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a		32 fl oz/a	2-4"W	A			
	AATREX 4L	4	SC	0.5	lb ai/a		16 fl oz/a	2-4"W	A			
	AMS - LIQUID	100	SL	2.5	% v/v		2.5 % v/v	2-4"W	A			
LSD P=.05								4.1	3.5	3.6		
Standard Deviation								2.4	2.1	2.1		
CV								2.46	2.16	2.2		
Replicate F								1.185	0.195	14.759		
Replicate Prob(F)								0.3284	0.8247	0.0002		
Treatment F								0.410	1.943	1.784		
Treatment Prob(F)								0.9131	0.1102	0.1413		

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Corn One-Pass Mid-Postemergence Weed Control - Bayer.

Trial ID: 16-21M-E50 Location: Belleville Res. Center Trial Year: 2016
Investigator: Karla L. Gage, Ph.D.

Pest Code							ABUTH	ABUTH	ABUTH	AMATA	AMATA	AMATA
Crop Code							6-27-16	7-11-16	7-25-16	6-27-16	7-11-16	7-25-16
Rating Date							Control	Control	Control	Control	Control	Control
Rating Type							Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit												
Rating Timing												
Trt-Eval Interval							14 DA-A	28 DA-A	42 DA-A	14 DA-A	28 DA-A	42 DA-A
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	DIFLEXX DUO	100	SC	24 fl oz/a		24 fl oz/a		2-4"W	A	98 a	97 a	99 a
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	COC	100	SL	1 % v/v		1 % v/v		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			
3	DIFLEXX DUO	100	SC	32 fl oz/a		32 fl oz/a		2-4"W	A	98 a	97 a	99 a
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	COC	100	SL	1 % v/v		1 % v/v		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			
4	DIFLEXX DUO	100	SC	24 fl oz/a		24 fl oz/a		2-4"W	A	98 a	97 a	97 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a		32 fl oz/a		2-4"W	A			
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	COC	100	SL	1 % v/v		1 % v/v		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			
5	DIFLEXX DUO	100	SC	24 fl oz/a		24 fl oz/a		2-4"W	A	99 a	99 a	98 a
	LIBERTY 280	2.34	EC	0.402 lb ai/a		22 fl oz/a		2-4"W	A			
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	COC	100	SL	1 % v/v		1 % v/v		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			
6	CAPRENO	3.45	SC	0.081 lb ai/a		3 fl oz/a		2-4"W	A	97 a	98 a	99 a
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a		32 fl oz/a		2-4"W	A			
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	COC	100	SL	1 % v/v		1 % v/v		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			
7	HALEX GT	4.389	CS	1.98 lb ai/a		57.6 fl oz/a		2-4"W	A	99 a	98 a	99 a
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	NIS	100	SL	0.25 % v/v		0.25 % v/v		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			
8	ARMEZON	2.8	SL	0.0125 lb ai/a		0.5717 fl oz/a		2-4"W	A	99 a	98 a	99 a
	OUTLOOK	6	EC	0.656 lb ai/a		14 fl oz/a		2-4"W	A			
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	NIS	100	SL	0.25 % v/v		0.25 % v/v		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			
9	ARMEZON	2.8	SL	0.0125 lb ai/a		0.5717 fl oz/a		2-4"W	A	97 a	97 a	99 a
	STATUS	56	WG	0.105 lb ae/a		3 oz/a		2-4"W	A			
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	NIS	100	SL	0.25 % v/v		0.25 % v/v		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			
10	ARMEZON	2.8	SL	0.0125 lb ai/a		0.5717 fl oz/a		2-4"W	A	96 a	96 a	98 a
	OUTLOOK	6	EC	0.656 lb ai/a		14 fl oz/a		2-4"W	A			
	ROUNDUP POWERMAX	4.5	SL	1.13 lb ae/a		32 fl oz/a		2-4"W	A			
	AATREX 4L	4	SC	0.5 lb ai/a		16 fl oz/a		2-4"W	A			
	AMS - LIQUID	100	SL	2.5 % v/v		2.5 % v/v		2-4"W	A			

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Corn One-Pass Mid-Postemergence Weed Control - Bayer.

Trial ID: 16-21M-E50 Location: Belleville Res. Center Trial Year: 2016
 Investigator: Karla L. Gage, Ph.D.

Pest Code								ABUTH	ABUTH	ABUTH	AMATA	AMATA	AMATA		
Crop Code								6-27-16	7-11-16	7-25-16	6-27-16	7-11-16	7-25-16		
Rating Date								Control	Control	Control	Control	Control	Control		
Rating Type								Percent	Percent	Percent	Percent	Percent	Percent		
Rating Unit								14 DA-A	28 DA-A	42 DA-A	14 DA-A	28 DA-A	42 DA-A		
Rating Timing															
Trt-Eval Interval															
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
11	ARMEZON	2.8	SL	0.0125	lb ai/a	0.5717	fl oz/a	2-4"W	A	98 a	98 a	98 a	99 a		
	STATUS	56	WG	0.105	lb ae/a		3 oz/a	2-4"W	A						
	ROUNDUP POWERMAX	4.5	SL	1.13	lb ae/a		32 fl oz/a	2-4"W	A						
	AATREX 4L	4	SC	0.5	lb ai/a		16 fl oz/a	2-4"W	A						
	AMS - LIQUID	100	SL	2.5	% v/v		2.5 % v/v	2-4"W	A						
LSD P=.05										2.3	3.1	2.5	1.4	2.9	0.5
Standard Deviation										1.4	1.8	1.4	0.8	1.7	0.3
CV										1.39	1.84	1.46	0.84	1.71	0.32
Replicate F										0.880	3.117	0.114	3.513	3.569	1.000
Replicate Prob(F)										0.4318	0.0688	0.8930	0.0515	0.0495	0.3874
Treatment F										1.407	0.810	0.463	0.647	0.613	0.778
Treatment Prob(F)										0.2563	0.6135	0.8807	0.7438	0.7711	0.6390

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 11 because error mean square = 0.

Corn One-Pass Mid-Postemergence Weed Control - Bayer.

Trial ID: 16-21M-E50 Location: Belleville Res. Center Trial Year: 2016
 Investigator: Karla L. Gage, Ph.D.

Trial Comments

1. Protocol: Bayer (WMV).
2. Ratings:
 CI 7 and 14 DA-A.
 WC 14, 28, and 42 DA-A.
 Record percent ground cover of each weed rated in each nontreated plot at each weed control rating.
3. Yield if possible.
4. Photos of CI as closeups if CI is evident.
 Photos of WC at 14 and 42 DA-A.
5. Rainfall following the 2-4"W application A was 2.61 inch over 9 days beginning 17 days later.
6. Percent ground cover in the nontreated plots at each rating timing was;

Date	DA-A	Plot	PANDI	AMBTR	ABUTH	AMATA
6-27-16	14	101	2	50	3	1
		206	2	60	8	1
		304	2	70	5	1
7-11-16	28	101	4	60	5	1
		206	4	70	15	1
		304	4	80	5	1
7-25-16	42	101	4	70	5	1
		206	4	80	15	1
		304	4	90	5	1

7. Harvested 10-5-16, (2) 30 inch rows by 27 ft.