

## University of Tennessee

### CROP TOLERANCE, EFFICACY AND YIELD OF DAS HERBICIDE PRODUCT WEED CONTROL PROGRAMS IN RR FIELD CORN

Trial ID: NA16R3K999      Location: Jackson, TN      Trial Year: 2016  
 Protocol ID: NA16R3K999      Investigator: Dr. Larry Steckel  
 Project ID:      Study Director: Larry Steckel  
                                  Sponsor Contact: Haygood/ DOW

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Growth Unit	Stage	Appl Code	Rep 1	2	3	4	Notes
1	HERB FULTIME NXT	4.04	ZC	2.9	qt/a	PRE	A	101	203	301	406	
	HERB DURANGO DMA	4	SL	1	qt/a	2-4 IN WEEDS	C					
	HERB AATREX	4	SC	1	qt/a	2-4 IN WEEDS	C					
2	HERB DURANGO DMA	4	SL	1	qt/a	PRE	A	102	202	306	401	
	HERB AATREX	4	SC	1	qt/a	PRE	A					
	HERB RESICORE	3.298	SE	1.25	qt/a	2-4 IN WEEDS	C					
	-ACETOCHLOR	2.726048		1.03								
	-CLOYPRALID	0.2355098		0.089								
	-MESOTRIONE	0.2501752		0.095								
	-FURILAZOLE	0.08626732		0.0327								
	HERB DURANGO DMA	4	SL	1.5	pt/a	2-4 IN WEEDS	C					
	HERB AATREX	4	SC	1	qt/a	2-4 IN WEEDS	C					
3	HERB RESICORE	3.298	SE	1.25	qt/a	PRE	A	103	206	304	404	
	-ACETOCHLOR	2.726048		1.03								
	-CLOYPRALID	0.2355098		0.089								
	-MESOTRIONE	0.2501752		0.095								
	-FURILAZOLE	0.08626732		0.0327								
	HERB AATREX	4	SC	1.0	qt/a	PRE	A					
	HERB RESICORE	3.298	SE	1.25	qt/a	2-4 IN WEEDS	C					
	-ACETOCHLOR	2.726048		1.03								
	-CLOYPRALID	0.2355098		0.089								
	-MESOTRIONE	0.2501752		0.095								
	-FURILAZOLE	0.08626732		0.0327								
	HERB AATREX	4	SC	1	qt/a	2-4 IN WEEDS	C					
4	HERB RESICORE	3.298	SE	2.25	qt/a	V1 - V2 STAGE B		104	205	302	403	
	-ACETOCHLOR	2.726048		1.86								
	-CLOYPRALID	0.2355098		0.16								
	-MESOTRIONE	0.2501752		0.17								
	-FURILAZOLE	0.08626732		0.059								
	HERB DURANGO DMA	4	SL	1.0	qt/a	V1 - V2 STAGE B						
	HERB AATREX	4	SC	1.0	qt/a	V1 - V2 STAGE B						
5	HERB DURANGO DMA	4	SL	1.0	qt/a	PRE	A	105	201	305	402	
	HERB AATREX	4	SC	1.0	qt/a	PRE	A					
	HERB HALEX GT	4.368	SC	3.6	qt/a	2-4 IN WEEDS	C					
	HERB DURANGO DMA	4	SL	1.0	qt/a	2-4 IN WEEDS	C					
	HERB AATREX	4	SC	1.0	qt/a	2-4 IN WEEDS	C					
6	CHK NONTREATED						ABC	106	204	303	405	

Sort Order: Replicate 1

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## CROP TOLERANCE, EFFICACY AND YIELD OF DAS HERBICIDE PRODUCT WEED CONTROL PROGRAMS IN RR FIELD CORN

Trial ID: NA16R3K999      Location: Jackson, TN      Trial Year: 2016  
 Protocol ID: NA16R3K999      Investigator: Dr. Larry Steckel  
 Project ID:      Study Director: Larry Steckel  
                                  Sponsor Contact: Haygood/ DOW

### General Trial Information

**Study Director:** Larry Steckel  
**Investigator:** Dr. Larry Steckel

**Conducted Under GLP:** No  
**Conducted Under GEP:** No

### Objectives:

DAS Corn herbicide showcase treatments

### Contacts

**Study Director:** Larry Steckel

**Investigator:** Dr. Larry Steckel

### Crop Description

<p><b>Crop 1:</b> ZEAMX      Zea mays  <b>Variety:</b> PIONEER 1197 HR  <b>Description:</b> Herculex/LL/RR</p>	<p><b>Corn</b>  <b>BBCH Scale:</b> BCOR</p>	<p><b>Planting Date:</b> 3-28-16  <b>Planting Method:</b> PLANTD planted  <b>Planting Equipment:</b> PP      Plot Planter</p>
<p><b>Planting Rate, Unit:</b> 32000 S/A  <b>Depth, Unit:</b> 1.5 IN  <b>Row Spacing, Unit:</b> 30 IN  <b>Spacing Within Row, Unit:</b> 7 IN  <b>Soil Temperature, Unit:</b> 58 F  <b>Soil Moisture:</b> SLIWET slightly wet, moist  <b>Seed Bed:</b> MEDIUM medium</p>		

### Pest Description

**Pest 1 Type:** W      **Code:** ANNGR Annual Grasses

**Pest 2 Type:** W      **Code:** AMAPA Amaranthus palmeri  
**Common Name:** Palmer amaranth

### Site and Design

<p><b>Treated Plot Width:</b> 10 FT  <b>Treated Plot Length:</b> 30 FT  <b>Treated Plot Area:</b> 300 FT2      <b>Treatments:</b> 6  <b>Replications:</b> 4          -1869F</p>	<p><b>Site Type:</b> FIELD field  <b>Tillage Type:</b> NOTILL no-till  <b>Study Design:</b> RACOB L Randomized Complete Block (RCB)</p>
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### Field Prep./Maintenance:

Mar 7 - Roundup 32 oz/A + Clarity 8 oz/A  
 Mar 18 - Gramoxone SL 48 oz/A + NIS 0.25%  
 Mar 29 - Karate 2 oz/A  
 Apr 12 - Karate 2 oz/A  
 May 6 - Fertilized 180 lbs N/A using UAN

# University of Tennessee

## CROP TOLERANCE, EFFICACY AND YIELD OF DAS HERBICIDE PRODUCT WEED CONTROL PROGRAMS IN RR FIELD CORN

Trial ID: NA16R3K999      Location: Jackson, TN      Trial Year: 2016  
 Protocol ID: NA16R3K999      Investigator: Dr. Larry Steckel  
 Project ID:      Study Director: Larry Steckel  
                                  Sponsor Contact: Haygood/ DOW

### Application Description

	A	B	C
Application Date:	3-29-16	4-18-16	5-10-16
Appl. Start Time:	8:17 AM	10:39 AM	8:34 AM
Appl. Stop Time:	8:23 AM	10:40 AM	8:41 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	V1-V2	2-4 IN WEEDS
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	GM	GM	JR
Air Temperature, Unit:	57 F	76 F	74 F
% Relative Humidity:	55	42	72
Wind Velocity, Unit:	2 MPH	1.5 MPH	2 MPH
Wind Direction:	SW	SW	WSW
Dew Presence (Y/N):	Y yes	N no	Y yes
Soil Temperature, Unit:	52 F	61 F	67 F
Soil Moisture:	SLIWET	NORMAL	SLIWET
% Cloud Cover:	10	65	0

### Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:	--	BBCH	BBCH
Stage Majority, Percent:		12	V4
Height, Unit:		2 IN	8 IN
Height Minimum, Maximum:		1.5 2	6 9

### Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	ANNGR W --	ANNGR W 1LF	ANNGR W --
Stage Majority, Percent:	--		
Height, Unit:		1 IN	
Height Minimum, Maximum:		1 2	
Pest 2 Code, Type, Scale:	AMAPA W --	AMAPA W --	AMAPA W 4+L
Height, Unit:			3 IN
Height Minimum, Maximum:			2 4

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## CROP TOLERANCE, EFFICACY AND YIELD OF DAS HERBICIDE PRODUCT WEED CONTROL PROGRAMS IN RR FIELD CORN

Trial ID: NA16R3K999      Location: Jackson, TN      Trial Year: 2016  
 Protocol ID: NA16R3K999      Investigator: Dr. Larry Steckel  
 Project ID:      Study Director: Larry Steckel  
                                  Sponsor Contact: Haygood/ DOW

	Application Equipment		
	A	B	C
<b>Appl. Equipment:</b>	BACKPACK	BACKPACK	BACKPACK
<b>Equipment Type:</b>	BACCAI	BACCAI	BACCAI
<b>Operation Pressure, Unit:</b>	36 PSI	36 PSI	36 PSI
<b>Nozzle Type:</b>	AIXR	AIXR	AIXR
<b>Nozzle Size:</b>	110025	110025	110025
<b>Nozzle Spacing, Unit:</b>	19 IN	19 IN	19 IN
<b>Nozzles/Row:</b>	2	2	2
<b>Boom Length, Unit:</b>	6.33 FT	6.33 FT	6.33 FT
<b>Boom Height, Unit:</b>	16 IN	16 IN	16 IN
<b>Ground Speed, Unit:</b>	4 MPH	4 MPH	4 MPH
<b>Carrier:</b>	WATER	WATER	WATER
<b>Spray Volume, Unit:</b>	15 GAL/AC	15 GAL/AC	15 GAL/AC
<b>Mix Size, Unit:</b>	0.528 gallons	0.528 gallons	0.528 gallons
<b>Propellant:</b>	COMCO2	COMCO2	COMCO2
<b>Tank Mix (Y/N):</b>	Y yes	Y yes	Y yes

## University of Tennessee

### ARMEZON PRO TANK MIX PARTNERS EFFICACY

Trial ID: JCRBASFC31-16  
 Protocol ID: MKD-H-2016-US-C31-A-01.0  
 Project ID:

Location: Jackson, TN      Trial Year: 2016  
 Investigator: Dr. Larry Steckel  
 Study Director: Larry Steckel  
 Sponsor Contact: Daniel Waldstein/Stapleton/BASF

Trt No. Type	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	Appl Code	Rep 1	2	3	4	Notes
1	CHK NONTREATED							101	208	307	408	
2	HERB ARMEZON PRO (BAS 67703H)	5.26	EC	16.0	fl oz/a	V2 CORN A		102	203	305	402	
	HERB AATREX	480.0	SC	16.0	fl oz/a	V2 CORN A						
	ADJ COC	100	SL	1.0	% v/v	V2 CORN A						
	FERT AMS		WG	8.5	lb/100 gal	V2 CORN A						
3	HERB ARMEZON PRO	5.26	EC	16.0	fl oz/a	V2 CORN A		103	205	306	404	
	-TOPRAMEZON	0.01		0.0304								
	-DIMETHENAMID	5.25		16								
	HERB AATREX	480.0	SC	16.0	fl oz/a	V2 CORN A						
	HERB ROUNDUP POWERMAX	540.0	SL	16.0	fl oz/a	V2 CORN A						
	ADJ COC	100	SL	1.0	% v/v	V2 CORN A						
	FERT AMS		WG	8.5	lb/100 gal	V2 CORN A						
4	HERB ARMEZON PRO	5.26	EC	16.0	fl oz/a	V2 CORN A		104	210	308	407	
	-TOPRAMEZON	0.01		0.0304								
	-DIMETHENAMID	5.25		16								
	HERB AATREX	480.0	SC	16.0	fl oz/a	V2 CORN A						
	HERB ROUNDUP POWERMAX	540.0	SL	32.0	fl oz/a	V2 CORN A						
	ADJ COC	100	SL	1.0	% v/v	V2 CORN A						
	FERT AMS		WG	8.5	lb/100 gal	V2 CORN A						
5	HERB ARMEZON PRO		EC	16.0	fl oz/a	V2 CORN A		105	204	303	401	
	HERB CLARITY	480	SL	6.0	fl oz/a	V2 CORN A						
	HERB ROUNDUP POWERMAX	540.0	SL	32.0	fl oz/a	V2 CORN A						
	ADJ NIS	100	SL	0.25	% v/v	V2 CORN A						
	FERT AMS		WG	8.5	lb/100 gal	V2 CORN A						
6	HERB ACURON	3.44	SC	48.0	fl oz/a	V2 CORN A		106	202	304	410	
	HERB ROUNDUP POWERMAX	540	SL	32.0	fl oz/a	V2 CORN A						
	ADJ COC	100	SL	1.0	% v/v	V2 CORN A						
	FERT AMS		WG	8.5	lb/100 gal	V2 CORN A						
7	HERB SURPASS	768	EC	17.5	oz/a	V2 CORN A		107	201	309	403	
	HERB CALLISTO	480	SC	3.0	fl oz/a	V2 CORN A						
	HERB STINGER	360	SL	2.5	fl oz/a	V2 CORN A						
	HERB ROUNDUP POWERMAX	540.0	SL	32.0	fl oz/a	V2 CORN A						
	ADJ NIS	100	SL	0.25	% v/v	V2 CORN A						
	FERT AMS		WG	8.5	lb/100 gal	V2 CORN A						
8	HERB SURESTART	499.2	SL	32.0	fl oz/a	V2 CORN A		108	206	302	405	
	HERB ROUNDUP POWERMAX	540.0	SL	32.0	fl oz/a	V2 CORN A						
	ADJ NIS	100	SL	0.25	% v/v	V2 CORN A						
	FERT AMS		WG	8.5	lb/100 gal	V2 CORN A						
9	HERB HALEX GT	526.7	SE	57.6	fl oz/a	V2 CORN A		109	207	310	409	
	HERB AATREX	480.0	SC	16.0	fl oz/a	V2 CORN A						
	HERB ROUNDUP POWERMAX	540.0	SL	5.3	fl oz/a	V2 CORN A						
	ADJ NIS	100	SL	0.25	% v/v	V2 CORN A						
	FERT AMS		WG	8.5	lb/100 gal	V2 CORN A						
10	HERB ARMEZON PRO		EC	16.0	fl oz/a	V2 CORN A		110	209	301	406	
	HERB AATREX	480.0	SC	16.0	fl oz/a	V2 CORN A						
	HERB STATUS	56	WG	2.5	oz wt/a	V2 CORN A						
	HERB ROUNDUP POWERMAX	540.0	SL	32.0	fl oz/a	V2 CORN A						
	ADJ COC	100	SL	1.0	% v/v	V2 CORN A						
	FERT AMS		WG	8.5	lb/100 gal	V2 CORN A						

Sort Order: Replicate 1

# University of Tennessee

## ARMEZON PRO TANK MIX PARTNERS EFFICACY

Trial ID: JCRBASFC31-16  
 Protocol ID: MKD-H-2016-US-C31-A-01.0  
 Project ID:

Location: Jackson, TN      Trial Year: 2016  
 Investigator: Dr. Larry Steckel  
 Study Director: Larry Steckel  
 Sponsor Contact: Daniel Waldstein/Stapleton/BASF

### General Trial Information

**Study Director:** Larry Steckel  
**Investigator:** Dr. Larry Steckel

**Conducted Under GLP:** No  
**Conducted Under GEP:** No

### Objectives:

OBJECTIVES: 1. How does Armezon PRO perform vs. competitors? 2. How do Clarity and Status perform as tank mix partners with Armezon PRO?  
 3. How does Armezon PRO perform with different rates of glyphosate?

### Contacts

**Study Director:** Larry Steckel

**Investigator:** Dr. Larry Steckel

### Crop Description

**Crop 1:** ZEAMX      Zea mays  
**Variety:** PIONEER 1197 HR  
**Description:** Herculex/LL/RR

**BBCH Scale:** BCOR

**Planting Date:** 3-28-16  
**Planting Method:** PLANTD planted  
**Planting Equipment:** PP      Plot Planter

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Spacing Within Row, Unit:** 7 IN  
**Soil Temperature, Unit:** 58 F  
**Soil Moisture:** SLIWET slightly wet, moist  
**Seed Bed:** MEDIUM medium

### Pest Description

**Pest 1 Type:** W    **Code:** SIDSP *Sida spinosa*  
**Common Name:** Teaweed

**Pest 2 Type:** W    **Code:** ERICA *Conyza canadensis*  
**Common Name:** Horseweed

### Site and Design

**Treated Plot Width:** 7.5 FT  
**Treated Plot Length:** 10 FT

**Site Type:** FIELD    field

**Treated Plot Area:** 75 FT<sup>2</sup>    **Treatments:** 10    **Tillage Type:** NOTILL no-till  
**Replications:** 4                    **Study Design:** RACOB� Randomized Complete Block (RCB)

### Field Prep./Maintenance:

Mar 7 - Roundup 32 oz/A + Clarity 8 oz/A  
 Mar 18 - Gramoxone SL 48 oz/A + NIS 0.25%  
 Mar 29 - Karate 2 oz/A  
 Apr 12 - Karate 2 oz/A  
 May 6 - Fertilized 180 lbs N/A using UAN

# University of Tennessee

## ARMEZON PRO TANK MIX PARTNERS EFFICACY

Trial ID: JCRBASFC31-16  
 Protocol ID: MKD-H-2016-US-C31-A-01.0  
 Project ID:

Location: Jackson, TN      Trial Year: 2016  
 Investigator: Dr. Larry Steckel  
 Study Director: Larry Steckel  
 Sponsor Contact: Daniel Waldstein/Stapleton/BASF

### Application Description

	A
Application Date:	4-18-16
Appl. Start Time:	10:42 AM
Appl. Stop Time:	10:48 AM
Application Method:	SPRAY
Application Timing:	V2 CORN
Application Placement:	BROFOL
Applied By:	GM
Air Temperature, Unit:	76 F
% Relative Humidity:	42
Wind Velocity, Unit:	1.5 MPH
Wind Direction:	SW
Dew Presence (Y/N):	N no
Soil Temperature, Unit:	61 F
Soil Moisture:	NORMAL
% Cloud Cover:	65

### Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	ZEAMX BCOR
Stage Scale Used:	V2
Height, Unit:	2 IN
Height Minimum, Maximum:	2 3

### Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale:	SIDSP W COT-
Height, Unit:	0.25 IN
Pest 2 Code, Type, Scale:	ERICA W 1-2L
Height, Unit:	0.25 IN

### Application Equipment

	A
Appl. Equipment:	BACKPACK
Equipment Type:	BACCAI
Operation Pressure, Unit:	27 PSI
Nozzle Type:	AIXR
Nozzle Size:	11003
Nozzle Spacing, Unit:	20 IN
Boom ID:	5 FT @ 15GPA
Boom Length, Unit:	5 FT
Boom Height, Unit:	16 IN
Ground Speed, Unit:	4 MPH
Spray Volume, Unit:	15 GAL/AC
Mix Size, Unit:	0.528 gallons
Spray pH:	0.528
Propellant:	COMCO2
Tank Mix (Y/N):	Y yes

## University of Tennessee

### ACURON FLEXI VS COMPETITORS FOR WEED CONTROL AND CORN TOLERANCE ( SOILS <3% OM)

Trial ID: JCRSYN4A-16      Location: Jackson, TN      Trial Year: 2016  
 Protocol ID: HBI004A4-2016US      Investigator: Dr. Larry Steckel  
 Project ID:      Study Director: Larry Steckel  
 Sponsor Contact: Scott Cully/Vail/Syngenta

Trt No.	Treatment Type Name	Form Conc	Form Type	Rate Unit	Growth Stage	Appl Code	Rep 1	2	3	4	Notes
1	CHK NONTREATED						101	209	304	408	
2	HERB ACURON	3.43274999	ZC	2.5 qt/a	PREPRE A		102	203	306	401	
3	HERB ACURON	3.43274999	ZC	2 qt/a	PREPRE A		103	212	308	406	
4	HERB ACURON FLEXI	3.24674988	ZC	2 qt/a	PREPRE A		104	204	313	414	
5	HERB ACURON FLEXI	3.24674988	ZC	1.51 qt/a	PREPRE A		105	215	311	411	
6	HERB ACURON FLEXI HERB PRINCEP	3.24674988	ZC 4 SC	2 qt/a 1 qt/a	PREPRE A PREPRE A		106	214	310	415	
7	HERB LUMAX EZ	3.66499996	ZC	2.7 qt/a	PREPRE A		107	211	301	403	
8	HERB LEXAR EX	3.69833326	ZC	3 qt/a	PREPRE A		108	202	307	410	
9	HERB CALLISTO HERB HARNESS HERB STINGER	6.99166679	4 SC EC 3 SL	4.7 oz/a 1.47 pt/a 3.2 oz/a	PREPRE A PREPRE A PREPRE A		109	210	303	413	
10	HERB CALLISTO HERB HARNESS HERB STINGER	6.99166679	4 SC EC 3 SL	5.9 oz/a 1.84 pt/a 4 oz/a	PREPRE A PREPRE A PREPRE A		110	208	315	402	
11	HERB CORVUS	2.625	SC	5.6 oz/a	PREPRE A		111	201	309	405	
12	HERB CORVUS HERB AATREX	2.625	SC 4 SC	5.6 oz/a 1 qt/a	PREPRE A PREPRE A		112	207	302	412	
13	HERB VERDICT	5.5583334	EC	0.5 qt/a	PREPRE A		113	206	305	404	
14	HERB SURESTART II	4.24383354	SC	3.02 pt/a	PREPRE A		114	213	312	409	
15	HERB INSTIGATE HERB CINCH ATZ LITE	45.84	WG 6 SC	5.5 oz wt/a 1.5 qt/a	PREPRE A PREPRE A		115	205	314	407	

Sort Order: Replicate 1



# University of Tennessee

## ACURON FLEXI VS COMPETITORS FOR WEED CONTROL AND CORN TOLERANCE ( SOILS <3% OM)

Trial ID: JCRSYN4A-16      Location: Jackson, TN      Trial Year: 2016  
 Protocol ID: HBI004A4-2016US      Investigator: Dr. Larry Steckel  
 Project ID:      Study Director: Larry Steckel  
 Sponsor Contact: Scott Cully/Vail/Syngenta

### General Trial Information

**Study Director:** Larry Steckel  
**Investigator:** Dr. Larry Steckel

**Conducted Under GLP:** No  
**Conducted Under GEP:** No

### Objectives:

TX\_RTF32 17.0.540.501; Do Acuron and Acuron Flexi provide better preemergence control of difficult broadleaf weeds compared to current and new competitive products?

Does the tank mix of Acuron Flexi plus Princep provide the same level of preemergence control of difficult weeds as Acuron?

### Contacts

**Study Director:** Larry Steckel

**Investigator:** Dr. Larry Steckel

### Crop Description

**Crop 1:** ZEAMX      Zea mays  
**Variety:** PIONEER 1319 HR  
**Description:** Herculex/LL/RR

**BBCH Scale:** BCOR

Corn

**Planting Date:** 3-28-16

**Planting Method:** PLANTD planted

**Planting Equipment:** PP      Plot Planter

**Planting Rate, Unit:** 32000 S/A

**Depth, Unit:** 1.5 IN

**Row Spacing, Unit:** 30 IN

**Spacing Within Row, Unit:** 7 IN

**Soil Temperature, Unit:** 58 F

**Soil Moisture:** SLIWET slightly wet, moist

**Seed Bed:** MEDIUM medium

### Site and Design

**Treated Plot Width:** 10 FT

**Treated Plot Length:** 30 FT

**Treated Plot Area:** 300 FT<sup>2</sup>      **Treatments:** 15

**Replications:** 4

**Site Type:** FIELD field

**Tillage Type:** NOTILL no-till

**Study Design:** RACOB L Randomized Complete Block (RCB)

### Comment:

NW corner  
 N35.63238  
 W088.85604

SW corner  
 N35.63197  
 W088.85638

SE corner  
 N35.63172  
 W088.85596

NE corner  
 N35.63219  
 W088.85560

### Field Prep./Maintenance:

Mar 18 - Gramoxone SL 48 oz/A + NIS 0.25%

Mar 29 - Karate 2 oz/A

Apr 12 - Karate 2 oz/A

May 6 - Fertilized 180 lbs N/A using UAN

# University of Tennessee

## ACURON FLEXI VS COMPETITORS FOR WEED CONTROL AND CORN TOLERANCE ( SOILS <3% OM)

Trial ID: JCRSYN4A-16      Location: Jackson, TN      Trial Year: 2016  
 Protocol ID: HBI004A4-2016US      Investigator: Dr. Larry Steckel  
 Project ID:      Study Director: Larry Steckel  
                                  Sponsor Contact: Scott Cully/Vail/Syngenta

### Application Description

	A
Application Date:	3-29-16
Appl. Start Time:	7:55 AM
Appl. Stop Time:	8:15 AM
Application Method:	SPRAY
Application Timing:	PRE
Application Placement:	BROSOL
Applied By:	GM
Air Temperature, Unit:	50 F
% Relative Humidity:	80
Wind Velocity, Unit:	0
Dew Presence (Y/N):	Y yes
Soil Temperature, Unit:	51 F
Soil Moisture:	SLIWET
% Cloud Cover:	10

### Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	ZEAMX BCOR

### Application Equipment

	A
Appl. Equipment:	BACKPACK
Equipment Type:	BACCAI
Operation Pressure, Unit:	30 PSI
Nozzle Type:	TTI
Nozzle Size:	003
Nozzle Spacing, Unit:	19 IN
Boom Length, Unit:	6.33 FT
Boom Height, Unit:	16 IN
Ground Speed, Unit:	4 MPH
Incorporation Equip.:	4
Hours to Incorp.:	0
Carrier:	WATER
Spray Volume, Unit:	15 gal/ac
Mix Size, Unit:	0.528 gallons
Propellant:	COMCO2
Tank Mix (Y/N):	Y yes

## University of Tennessee

### CROP PROTECTION MARKET DEVELOPMENT CORN TRIAL

Trial ID: 2016-01-2415      Location: Jackson, TN      Trial Year: 2016  
 Protocol ID: 2016-01-24-15      Investigator: Dr. Larry Steckel  
 Project ID:      Study Director: Larry Steckel  
 Sponsor Contact: Paul G Ratliff/Monsanto/Bob

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	Appl Code	Rep 1	2	3	4	Notes
1	HERB HARNESS XTRA	6	SE	2.6	qt/a	PRE	A	101	210	305	412	
	HERB ROUNDUP POWERMAX	4.5	SL	32	oz/a	4IN WEEDS	C					
	ADJ CLASS ACT NEXT GENERATION	100	AD	2.5	% v/v	4IN WEEDS	C					
2	HERB DEGREE XTRA	4.04	CS	3	qt/a	PRE	A	102	205	309	401	
	HERB ROUNDUP POWERMAX	4.5	SL	32	oz/a	4IN WEEDS	C					
	ADJ CLASS ACT NEXT GENERATION	100	AD	2.5	% v/v	4IN WEEDS	C					
3	HERB TRIPLEFLEX	4.25	EC	1.5	qt/a	PRE	A	103	211	313	410	
	HERB AATREX	4	SC	1	qt/a	PRE	A					
	HERB ROUNDUP POWERMAX	4.5	SL	32	oz/a	4IN WEEDS	C					
	ADJ CLASS ACT NEXT GENERATION	100	AD	2.5	% v/v	4IN WEEDS	C					
4	HERB HARNESS XTRA	6	SE	2	qt/a	PRE	A	104	201	310	408	
	HERB BALANCE FLEXX	2	SC	3	oz/a	PRE	A					
	HERB ROUNDUP POWERMAX	4.5	SL	32	oz/a	4IN WEEDS	C					
	ADJ CLASS ACT NEXT GENERATION	100	AD	2.5	% v/v	4IN WEEDS	C					
5	HERB DEGREE XTRA	4.04	CS	2.3	qt/a	PRE	A	105	203	311	413	
	HERB BALANCE FLEXX	2	SC	3	oz/a	PRE	A					
	HERB ROUNDUP POWERMAX	4.5	SL	32	oz/a	4IN WEEDS	C					
	ADJ CLASS ACT NEXT GENERATION	100	AD	2.5	% v/v	4IN WEEDS	C					
6	HERB CORVUS	2.63	SC	4	oz/a	PRE	A	106	214	307	406	
	HERB AATREX	4	SC	1	qt/a	PRE	A					
7	HERB LUMAX EZ	3.674	EC	3	qt/a	PRE	A	107	204	301	409	
8	HERB HALEX GT	4.389	SL	2	qt/a	4IN WEEDS	B	108	212	308	411	
	ADJ NIS	100	AD	0.25	% v/v	4IN WEEDS	B					
9	HERB AATREX	4	SC	1	qt/a	PRE	A	109	206	312	402	
	HERB HALEX GT	4.389	SL	5.5	% v/v	4IN WEEDS	C					
	ADJ CLASS ACT NEXT GENERATION	100	AD	2.5	% v/v	4IN WEEDS	C					
10	HERB REALM Q HERBICIDE	38.75	DF	4	oz/a	PRE	A	110	209	304	414	
	HERB CINCH ATZ	5.5	SC	2.6	qt/a	PRE	A					
	HERB ABUNDIT EXTRA	3	SL	1.1	lb ae/a	4IN WEEDS	C					
	ADJ CLASS ACT NEXT GENERATION	100	AD	2.5	% v/v	4IN WEEDS	C					
11	HERB DEGREE XTRA	4.04	CS	2.5	qt/a	PRE	A	111	202	314	405	
	HERB ROUNDUP POWERMAX	4.5	SL	32	oz/a	4IN WEEDS	C					
	HERB IMPACT	2.8	EC	0.75	oz/a	4IN WEEDS	C					
	HERB WARRANT	3	CS	48	oz/a	4IN WEEDS	C					
	ADJ CLASS ACT NEXT GENERATION	100	AD	2.5	% v/v	4IN WEEDS	C					
12	HERB DEGREE XTRA	4.04	CS	3	qt/a	PRE	A	112	207	303	407	
	HERB ROUNDUP POWERMAX	4.5	SL	32	oz/a	4IN WEEDS	C					
	HERB IMPACT	2.8	EC	0.75	oz/a	4IN WEEDS	C					
	ADJ CLASS ACT NEXT GENERATION	100	AD	2.5	% v/v	4IN WEEDS	C					
13	HERB DEGREE XTRA	4.04	CS	3	qt/a	PRE	A	113	208	306	403	
	HERB ROUNDUP POWERMAX	4.5	SL	32	oz/a	4IN WEEDS	C					
	HERB STATUS	61.1	WG	3	oz/a	4IN WEEDS	C					
	ADJ CLASS ACT NEXT GENERATION	100	AD	2.5	% v/v	4IN WEEDS	C					
14	HERB DEGREE XTRA	4.04	CS	3	qt/a	PRE	A	114	213	302	404	
	HERB ROUNDUP POWERMAX	4.5	SL	32	oz/a	4IN WEEDS	C					
	HERB TRIPLEFLEX	4.25	EC	1.5	qt/a	4IN WEEDS	C					
	ADJ CLASS ACT NEXT GENERATION	100	AD	2.5	% v/v	4IN WEEDS	C					

Sort Order: Replicate 1

# University of Tennessee

## CROP PROTECTION MARKET DEVELOPMENT CORN TRIAL

Trial ID: 2016-01-2415      Location: Jackson, TN      Trial Year: 2016  
 Protocol ID: 2016-01-24-15      Investigator: Dr. Larry Steckel  
 Project ID:      Study Director: Larry Steckel  
 Sponsor Contact: Paul G Ratliff/Monsanto/Bob

### General Trial Information

**Study Director:** Larry Steckel  
**Investigator:** Dr. Larry Steckel

### Trial Location

**Country:** USA United States

**Conducted Under GLP:** No  
**Conducted Under GEP:** No

### Objectives:

Demonstrate various corn herbicide weed control systems common to the midwest.

### Contacts

**Study Director:** Larry Steckel

**Investigator:** Dr. Larry Steckel

### Crop Description

**Crop 1:** ZEAMX      Zea mays      **Corn**  
**Variety:** PIONEER 1319 HR      **BBCH Scale:** BCOR  
**Description:** Herculex/LL/RR  
**Planting Rate, Unit:** 32000 S/A      **Planting Date:** 3-28-16  
**Depth, Unit:** 1.5 IN      **Planting Method:** PLANTD planted  
**Row Spacing, Unit:** 30 IN      **Planting Equipment:** FE      Field Equipment  
**Spacing Within Row, Unit:** 7 IN  
**Soil Temperature, Unit:** 58 F  
**Soil Moisture:** SLIWET slightly wet, moist  
**Seed Bed:** MEDIUM medium

### Pest Description

**Pest 1 Type:** W      **Code:** AMAPA *Amaranthus palmeri*  
**Common Name:** Palmer amaranth

**Pest 2 Type:** W      **Code:** ANNGR Annual Grasses

**Pest 3 Type:** W      **Code:** IPOLA *Ipomoea lacunosa*  
**Common Name:** Pitted morningglory

### Site and Design

**Treated Plot Width:** 10 FT      **Site Type:** FIELD field  
**Treated Plot Length:** 30 FT  
**Treated Plot Area:** 300 FT<sup>2</sup>      **Treatments:** 14      **Tillage Type:** NOTILL no-till  
**Replications:** 4      **Study Design:** RACOB L Randomized Complete Block (RCB)

### Field Prep./Maintenance:

Mar 18 - Gramoxone SL 48 oz/A + NIS 0.25%  
 Mar 29 - Karate 2 oz/A  
 Apr 12 - Karate 2 oz/A  
 May 6 - Fertilized 180 lbs N/A using UAN

# University of Tennessee

## CROP PROTECTION MARKET DEVELOPMENT CORN TRIAL

Trial ID: 2016-01-2415      Location: Jackson, TN      Trial Year: 2016  
 Protocol ID: 2016-01-24-15      Investigator: Dr. Larry Steckel  
 Project ID:      Study Director: Larry Steckel  
 Sponsor Contact: Paul G Ratliff/Monsanto/Bob

### Application Description

	A	B	C
Application Date:	3-29-16	5-4-16	5-10-16
Appl. Start Time:	8:44 AM	11:36 AM	8:46 AM
Appl. Stop Time:	9:04 AM	11:38 AM	9:19 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	4 IN WEED	4 IN WEED
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	GM	GM	JR
Air Temperature, Unit:	54 F	73 F	74 F
% Relative Humidity:	57	60	72
Wind Velocity, Unit:	5 MPH	2 MPH	5 MPH
Wind Direction:	SW	N	WSW
Dew Presence (Y/N):	N no	N no	Y yes
Soil Temperature, Unit:	50 F	67 F	67 F
Soil Moisture:	SLIWET	SLIWET	SLIWET
% Cloud Cover:	5	15	0

### Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		V3	V4
Height, Unit:		8 IN	8 IN
Height Minimum, Maximum:		7 9	6 9

### Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	AMAPA W --	AMAPA W 4LF	AMAPA W 6=L
Height, Unit:		2 IN	3 IN
Height Minimum, Maximum:		2 3	2 4
Pest 2 Code, Type, Scale:	ANNGR W --	ANNGR W 2LF	ANNGR W --
Height, Unit:		1 IN	
Height Minimum, Maximum:		1 2	
Pest 3 Code, Type, Scale:	IPOLA W --	IPOLA W --	IPOLA W COT
Height, Unit:			1.5 IN
Height Minimum, Maximum:			1 3

# University of Tennessee

## CROP PROTECTION MARKET DEVELOPMENT CORN TRIAL

Trial ID: 2016-01-2415      Location: Jackson, TN      Trial Year: 2016  
 Protocol ID: 2016-01-24-15      Investigator: Dr. Larry Steckel  
 Project ID:      Study Director: Larry Steckel  
                                  Sponsor Contact: Paul G Ratliff/Monsanto/Bob

Application Equipment			
	A	B	C
<b>Appl. Equipment:</b>	BACKPACK	BACKPACK	BACKPACK
<b>Equipment Type:</b>	BACCAI	BACCAI	BACCAI
<b>Operation Pressure, Unit:</b>	36 PSI	36 PSI	36 PSI
<b>Nozzle Type:</b>	AIXR	AIXR	AIXR
<b>Nozzle Size:</b>	110025	110025	110025
<b>Nozzle Spacing, Unit:</b>	19 IN	19 IN	19 IN
<b>Nozzles/Row:</b>	2	2	2
<b>Boom Length, Unit:</b>	6.33 FT	6.33 FT	6.33 FT
<b>Boom Height, Unit:</b>	16 IN	16 IN	16 IN
<b>Ground Speed, Unit:</b>	4 MPH	4 MPH	4 MPH
<b>Carrier:</b>	WATER	WATER	WATER
<b>Spray Volume, Unit:</b>	15 GAL/AC	15 GAL/AC	15 GAL/AC
<b>Mix Size, Unit:</b>	0.528 gallons	0.528 gallons	0.528 gallons
<b>Propellant:</b>	COMCO2	COMCO2	COMCO2
<b>Tank Mix (Y/N):</b>	Y yes	Y yes	Y yes

## University of Tennessee

### ANTHEM MAXX / SOLSTICE - CORN PRE/POST PROGRAM

Trial ID: JCRFMC16      Location: Jackson, TN      Trial Year: 2016  
 Protocol ID: JCRFMC16      Investigator: Dr. Larry Steckel  
 Project ID:      Study Director:  
 Sponsor Contact: R. Mitchell

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Growth Stage	Appl Code	Rep				Notes
							1	2	3	4	
1	CHK NONTREATED						101	208	309	403	
2	HERB ANTHEM MAXX	4.3	SE	3 oz/a	PRE	A	102	206	311	412	
	HERB AATREX	4	L	1 qt/a	PRE	A					
	HERB ROUNDUP POWERMAX	5.5	SL	32 oz/a	POST	B					
3	HERB ANTHEM MAXX	4.3	SE	2.5 oz/a	PRE	A	103	211	301	409	
	HERB SOLSTICE	4	SC	2.5 oz/a	POST	B					
	HERB AATREX	4	L	1 qt/a	POST	B					
	HERB ROUNDUP POWERMAX	5.5	SL	32 oz/a	POST	B					
	ADJ AGRIDEX	100	SL	0.5 % v/v	POST	B					
4	HERB ANTHEM MAXX	4.3	SE	3 oz/a	PRE	A	104	210	306	407	
	HERB SOLSTICE	4	SC	2.5 oz/a	POST	B					
	HERB AATREX	4	L	1 qt/a	POST	B					
	HERB ROUNDUP POWERMAX	5.5	SL	32 oz/a	POST	B					
	ADJ AGRIDEX		L	0.5 % v/v	POST	B					
5	HERB ANTHEM MAXX	4.3	SE	3 oz/a	PRE	A	105	209	307	402	
	HERB AATREX	4	L	1 qt/a	PRE	A					
	HERB SOLSTICE	4	SC	2.5 oz/a	POST	B					
	HERB AATREX	4	L	1 qt/a	POST	B					
	HERB ROUNDUP POWERMAX	5.5	SL	32 oz/a	POST	B					
	ADJ AGRIDEX		L	0.5 % v/v	POST	B					
6	HERB BICEP II MAGNUM	5.5	SC	21 oz/a	POST	B	106	203	310	406	
	HERB SOLSTICE	4	SC	2.5 oz/a	POST	B					
	HERB AATREX	4	L	1 qt/a	POST	B					
	HERB ROUNDUP POWERMAX	5.5	SL	32 oz/a	POST	B					
	ADJ AGRIDEX		L	0.5 % v/v	POST	B					
7	HERB ACURON	3.43274999	ZC	2.5 qt/a	PRE	A	107	201	312	405	
	HERB ROUNDUP POWERMAX	5.5	SL	32 oz/a	POST	B					
8	HERB SOLSTICE	4	SC	3.15 oz/a	POST	B	108	202	303	411	
	HERB AATREX	4	L	1 qt/a	POST	B					
	HERB ROUNDUP POWERMAX	5.5	SL	32 oz/a	POST	B					
	ADJ AGRIDEX		L	0.5 % v/v	POST	B					
9	HERB SOLSTICE	4	SC	2.5 oz/a	POST	B	109	212	304	410	
	HERB ANTHEM MAXX	4.3	SE	2 oz/a	POST	B					
	HERB ROUNDUP POWERMAX	5.5	SL	32 oz/a	POST	B					
	ADJ AGRIDEX		L	0.5 % v/v	POST	B					
10	HERB SOLSTICE	4	SC	2.5 oz/a	POST	B	110	207	305	408	
	HERB ANTHEM MAXX	4.3	SE	2 oz/a	POST	B					
	HERB AATREX	4	L	1 qt/a	POST	B					
	HERB ROUNDUP POWERMAX	5.5	SL	32 oz/a	POST	B					
	ADJ AGRIDEX		L	0.5 % v/v	POST	B					
11	HERB HALEX GT	4.375	CS	3.6 pt/a	POST	B	111	205	308	401	
	ADJ AGRIDEX	100	SL	1 % v/v	POST	B					
12	HERB ACURON	3.43274999	ZC	2.5 qt/a	POST	B	112	204	302	404	
	HERB ROUNDUP POWERMAX	5.5	SL	32 oz/a	POST	B					
	ADJ AGRIDEX	100	SL	0.5 % v/v	POST	B					

Sort Order: Replicate 1

# University of Tennessee

## ANTHEM MAXX / SOLSTICE - CORN PRE/POST PROGRAM

Trial ID: JCRFMC16      Location: Jackson, TN      Trial Year: 2016  
 Protocol ID: JCRFMC16      Investigator: Dr. Larry Steckel  
 Project ID:      Study Director:  
 Sponsor Contact: R. Mitchell

### General Trial Information

**Investigator:** Dr. Larry Steckel

**Conducted Under GLP:** No  
**Conducted Under GEP:** No

**Investigator:** Dr. Larry Steckel

### Crop Description

**Crop 1:** ZEAMX      Zea mays      **Corn**  
**Variety:** PIONEER 1197 HR      **BBCH Scale:** BCOR  
**Description:** Herculex/LL/RR  
**Planting Date:** 3-28-16  
**Planting Method:** PLANTD planted  
**Planting Equipment:** FE      Field Equipment  
**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Spacing Within Row, Unit:** 7 IN  
**Soil Temperature, Unit:** 58 F  
**Soil Moisture:** SLIWET slightly wet, moist  
**Seed Bed:** MEDIUM medium

### Pest Description

**Pest 1 Type:** W      **Code:** AMAPA *Amaranthus palmeri*  
**Common Name:** Palmer amaranth

**Pest 2 Type:** W      **Code:** ANNGR Annual Grasses

### Site and Design

**Treated Plot Width:** 10 FT      **Site Type:** FIELD field  
**Treated Plot Length:** 30 FT  
**Treated Plot Area:** 300 FT<sup>2</sup>      **Treatments:** 12      **Tillage Type:** NOTILL no-till  
**Replications:** 4      **Study Design:** RACOB L Randomized Complete Block (RCB)

### Field Prep./Maintenance:

Mar 7 - Roundup 32 oz/A + Clarity 8 oz/A  
 Mar 18 - Gramoxone SL 48 oz/A + NIS 0.25%  
 Mar 29 - Karate 2 oz/A  
 Apr 12 - Karate 2 oz/A  
 May 6 - Fertilized 180 lbs N/A using UAN

### Application Description

	A	B
<b>Application Date:</b>	3-29-16	4-28-16
<b>Appl. Start Time:</b>	9:15 AM	7:38 AM
<b>Appl. Stop Time:</b>	9:20 AM	7:54 AM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	PRE	POST
<b>Application Placement:</b>	BROSOL	BROFOL
<b>Applied By:</b>	GM	GM
<b>Air Temperature, Unit:</b>	57 F	69 F
<b>% Relative Humidity:</b>	57	79
<b>Wind Velocity, Unit:</b>	6 MPH	2.5 MPH
<b>Wind Direction:</b>	SW	SW
<b>Dew Presence (Y/N):</b>	N no	Y yes
<b>Soil Temperature, Unit:</b>	52 F	64 F
<b>Soil Moisture:</b>	SLIWET	NORMAL
<b>% Cloud Cover:</b>	10	0



# University of Tennessee

## ANTHEM MAXX / SOLSTICE - CORN PRE/POST PROGRAM

Trial ID: JCRFMC16      Location: Jackson, TN      Trial Year: 2016  
 Protocol ID: JCRFMC16      Investigator: Dr. Larry Steckel  
 Project ID:      Study Director:  
 Sponsor Contact: R. Mitchell

### Crop Stage At Each Application

	A	B
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMX BCOR	ZEAMX BCOR
<b>Stage Scale Used:</b>	--	4LF
<b>Height, Unit:</b>		6 IN
<b>Height Minimum, Maximum:</b>		5 7

### Pest Stage At Each Application

	A	B
<b>Pest 1 Code, Type, Scale:</b>	AMAPA W --	AMAPA W 4+LF
<b>Height, Unit:</b>		2 IN
<b>Height Minimum, Maximum:</b>		2 3
<b>Pest 2 Code, Type, Scale:</b>	ANNGR W --	ANNGR W 2+LF
<b>Height, Unit:</b>		2 IN
<b>Height Minimum, Maximum:</b>		2 3

### Application Equipment

	A	B
<b>Appl. Equipment:</b>	BACKPACK	BACKPACK
<b>Equipment Type:</b>	BACCAI	BACCAI
<b>Operation Pressure, Unit:</b>	36 PSI	36 PSI
<b>Nozzle Type:</b>	AIXR	AIXR
<b>Nozzle Size:</b>	110025	110025
<b>Nozzle Spacing, Unit:</b>	19 IN	19 IN
<b>Nozzles/Row:</b>	2	2
<b>Boom Length, Unit:</b>	6.33 FT	6.33 FT
<b>Boom Height, Unit:</b>	16 IN	16 IN
<b>Ground Speed, Unit:</b>	4 MPH	4 MPH
<b>Carrier:</b>	WATER	WATER
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA
<b>Mix Size, Unit:</b>	0.528 gallons	0.528 gallons
<b>Propellant:</b>	COMCO2	COMCO2
<b>Tank Mix (Y/N):</b>	Y yes	Y yes

## University of Tennessee

### WEED CONTROL PROGRAMS IN CORN / DIFLEXX DUO/ MPOST/ EFFICACY / TOLERANCE IN FIELD CORN

Trial ID: JCRBAY-16                      Location: Jackson, TN    Trial Year: 2016  
 Protocol ID: HP16USAWMV              Investigator: Dr. Larry Steckel  
 Project ID:                                  Study Director: Larry Steckel  
    Sponsor Contact: Jones/Bayer

Trt No. Type	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	Appl Code	Rep 1	2	3	4	Notes
1	CHK NONTREATED							101	210	309	404	
2	HERB DIFLEXX DUO		L	24 oz/a		POST	A	102	207	302	409	
	HERB AATREX	4	L	16 oz/a		POST	A					
	ADJ COC	100	EC	1 % v/v		POST	A					
	FERT AMS		WG	8.5 lb/100 gal		POST	A					
3	HERB DIFLEXX DUO		L	24 oz/a		POST	A	103	208	303	406	
	HERB ROUNDUP WEATHERMAX	5.5	SC	32 oz/a		POST	A					
	HERB AATREX	4	L	16 oz/a		POST	A					
	FERT AMS		WG	8.5 lb/100 gal		POST	A					
4	HERB DIFLEXX DUO		L	24 oz/a		POST	A	104	206	308	405	
	HERB LIBERTY 280	2.34	SL	22 oz/a		POST	A					
	HERB AATREX	4	L	16 oz/a		POST	A					
	FERT AMS		WG	8.5 lb/100 gal		POST	A					
5	HERB CAPRENO	3.45	SL	3 oz/a		POST	A	105	209	304	410	
	HERB ROUNDUP WEATHERMAX	5.5	SC	32 oz/a		POST	A					
	HERB AATREX	4	L	16 oz/a		POST	A					
	FERT AMS		WG	8.5 lb/100 gal		POST	A					
6	HERB HALEX GT	4.375	CS	3.6 pt/a		POST	A	106	201	310	401	
	HERB AATREX	4	L	16 oz/a		POST	A					
	ADJ NIS	100	SL	0.25 % v/v		POST	A					
	FERT AMS		WG	8.5 lb/100 gal		POST	A					
7	HERB ARMEZON	2.8	SL	0.57 oz/a		POST	A	107	205	307	408	
	HERB OUTLOOK	6	SC	14 oz/a		POST	A					
	HERB AATREX	4	L	16 oz/a		POST	A					
	ADJ NIS	100	SL	0.25 % v/v		POST	A					
	FERT AMS		WG	8.5 lb/100 gal		POST	A					
8	HERB ARMEZON	2.8	SL	0.57 oz/a		POST	A	108	204	305	402	
	HERB STATUS	56	WG	3 oz/a		POST	A					
	HERB AATREX	4	L	16 oz/a		POST	A					
	ADJ NIS	100	SL	0.25 % v/v		POST	A					
	FERT AMS		WG	8.5 lb/100 gal		POST	A					
9	HERB ARMEZON	2.8	SL	0.57 oz/a		POST	A	109	202	301	407	
	HERB OUTLOOK	6	SC	14 oz/a		POST	A					
	HERB ROUNDUP WEATHERMAX	5.5	SC	32 oz/a		POST	A					
	HERB AATREX	4	L	16 oz/a		POST	A					
	FERT AMS		WG	8.5 lb/100 gal		POST	A					
10	HERB ARMEZON	2.8	SL	0.57 oz/a		POST	A	110	203	306	403	
	HERB STATUS	56	WG	3 oz/a		POST	A					
	HERB ROUNDUP WEATHERMAX	5.5	SC	32 oz/a		POST	A					
	HERB AATREX	4	L	16 oz/a		POST	A					
	FERT AMS		WG	8.5 lb/100 gal		POST	A					

Sort Order: Replicate 1

# University of Tennessee

## WEED CONTROL PROGRAMS IN CORN / DIFLEXX DUO/ MPOST/ EFFICACY / TOLERANCE IN FIELD CORN

Trial ID: JCRBAY-16      Location: Jackson, TN      Trial Year: 2016  
 Protocol ID: HP16USAWMV      Investigator: Dr. Larry Steckel  
 Project ID:      Study Director: Larry Steckel  
                                  Sponsor Contact: Jones/Bayer

### General Trial Information

**Study Director:** Larry Steckel  
**Investigator:** Dr. Larry Steckel

### Trial Location

**Country:** USA United States

**Conducted Under GLP:** No  
**Conducted Under GEP:** No

**Keywords:** DEMO EFFICACY COMBTILITY

**Objectives:**  
 Please Read:

1.

### Contacts

**Study Director:** Larry Steckel

**Investigator:** Dr. Larry Steckel

### Crop Description

**Crop 1:** ZEAMD      Zea mays indentata      Dent corn  
**Variety:** PIONEER 1197 HR      **BBCH Scale:** BCOR  
**Description:** Herculex/LL/RR

**Planting Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
**Spacing Within Row, Unit:** 7 IN  
**Soil Temperature, Unit:** 58 F  
**Soil Moisture:** SLIWET slightly wet, moist  
**Seed Bed:** M

**Planting Date:** 3-28-16  
**Planting Method:** PLANTD planted  
**Planting Equipment:** FE      Field Equipment

### Pest Description

**Pest 1 Type:** W      **Code:** AMAPA Amaranthus palmeri  
**Common Name:** Palmer amaranth

**Pest 2 Type:** W      **Code:** ANNGR Annual Grasses

### Site and Design

**Treated Plot Width:** 10 FT      **Site Type:** FIELD field  
**Treated Plot Length:** 30 FT  
**Treated Plot Area:** 300 FT<sup>2</sup>      **Treatments:** 10      **Tillage Type:** NOTILL no-till  
**Replications:** 4      **Study Design:** RACOB� Randomized Complete Block (RCB)

### Field Prep./Maintenance:

Mar 7 - Roundup 32 oz/A + Clarity 8 oz/A  
 Mar 18 - Gramoxone SL 48 oz/A + NIS 0.25%  
 Mar 29 - Karate 2 oz/A  
 Apr 12 - Karate 2 oz/A  
 May 6 - Fertilized 180 lbs N/A using UAN

# University of Tennessee

## WEED CONTROL PROGRAMS IN CORN / DIFLEX DUO/ MPOST/ EFFICACY / TOLERANCE IN FIELD CORN

Trial ID: JCRBAY-16                      Location: Jackson, TN   Trial Year: 2016  
 Protocol ID: HP16USAWMV              Investigator: Dr. Larry Steckel  
 Project ID:                                  Study Director: Larry Steckel  
    Sponsor Contact: Jones/Bayer

### Application Description

	A
Application Date:	4-28-16
Appl. Start Time:	7:55 AM
Appl. Stop Time:	8:07 AM
Application Method:	SPRAY
Application Timing:	POST
Application Placement:	BROFOL
Applied By:	GM
Air Temperature, Unit:	70 F
% Relative Humidity:	80
Wind Velocity, Unit:	2.5 MPH
Wind Direction:	SW
Dew Presence (Y/N):	Y yes
Soil Temperature, Unit:	64 F
Soil Moisture:	NORMAL
% Cloud Cover:	0

### Crop Stage At Each Application

	A
Crop 1 Code, BBCH Scale:	ZEAMD BCOR
Stage Scale Used:	BBCH
Stage Majority, Percent:	14
Height, Unit:	6 IN
Height Minimum, Maximum:	5 7

### Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale:	AMAPA W 4+L
Height, Unit:	2 IN
Height Minimum, Maximum:	2 3
Pest 2 Code, Type, Scale:	ANNGR W 2LF
Height, Unit:	2 IN
Height Minimum, Maximum:	2 3

## University of Tennessee

### WEED CONTROL PROGRAMS IN CORN / DIFLEXX DUO/ MPOST/ EFFICACY / TOLERANCE IN FIELD CORN

Trial ID: JCRBAY-16                      Location: Jackson, TN    Trial Year: 2016  
 Protocol ID: HP16USAWMV            Investigator: Dr. Larry Steckel  
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#### Application Equipment

	A
<b>Appl. Equipment:</b>	BACKPACK
<b>Equipment Type:</b>	BACCAI
<b>Operation Pressure, Unit:</b>	36    PSI
<b>Nozzle Type:</b>	AIXR
<b>Nozzle Size:</b>	110025
<b>Nozzle Spacing, Unit:</b>	19    IN
<b>Nozzles/Row:</b>	2
<b>Boom Length, Unit:</b>	6.33 FT
<b>Boom Height, Unit:</b>	16    IN
<b>Ground Speed, Unit:</b>	4    MPH
<b>Carrier:</b>	WATER
<b>Spray Volume, Unit:</b>	15    GAL/AC
<b>Mix Size, Unit:</b>	0.528 gallons
<b>Propellant:</b>	COMCO2
<b>Tank Mix (Y/N):</b>	Y yes