

# Purdue University

## Pre / Post weed control programs for corn

Trial ID: 14S-THP-CTC-07      Protocol ID: 14S-THP-CTC-07  
 Location: Throckmorton      Study Director:  
 Project ID:      Investigator: Dr. Bill Johnson  
                                  Sponsor Contact:

### General Trial Information

**Investigator:** Dr. Bill Johnson    **Title:** Professor

**Discipline:** H herbicide  
**Trial Status:** E established

### Trial Location

**City:** Lafayette  
**State/Prov.:** IN  
**Postal Code:** 47909  
**Country:** USA

### Personnel

**Investigator:** Dr. Bill Johnson      **Title:** Professor  
**Affiliation:** Purdue University  
**Address:** 915 W State Street  
**Location:** West Lafayette, IN, USA  
**Postal Code:** 47907      **E-mail:** wj@purdue.edu  
**Phone No.:** 765-494-4656    **Mobile No.:** 765-404-9801

### Cooperator/Landowner

**Cooperator:** Throckmorton Purdue Ag Center      **Role:** Purdue Ag Center  
**Organization:** Purdue University  
**Address 1:** 8343 US 231 S  
  
**City:** Lafayette      **Phone No.:** 765-538-3422  
**State/Prov.:** IN      **Fax No.:** 765-538-3423  
**Postal Code:** 47909      **E-mail:** jayyoung@purdue.edu  
**Country:** USA      United States

### Crop Description

**Crop 1:** ZEAMD Zea mays indentata    Dent corn  
**Variety:** Dekalb DKC 62-08      **Description:** HXX, LL, RR2  
**BBCH Scale:** BCOR      **Planting Date:** May-5-2014  
**Planting Method:** SEEDED    seeded      **Rate, Unit:** 33000 S/A  
**Depth, Unit:** 1.5    IN  
**Row Spacing, Unit:** 30    IN  
**Seed Bed:** FINE    fine  
**Soil Moisture:** DRY    dry      **Emergence Date:** May-12-2014

### Pest Description

**Pest 1 Type:** W    **Code:** AMBTR Ambrosia trifida  
**Common Name:** Giant ragweed  
  
**Pest 2 Type:** W    **Code:** SETFA Setaria faberi  
**Common Name:** Giant foxtail  
  
**Pest 3 Type:** W    **Code:** CHEAL Chenopodium album  
**Common Name:** Common lambsquarters  
  
**Pest 4 Type:** W    **Code:** ABUTH Abutilon theophrasti  
**Common Name:** Velvetleaf

### Site and Design

**Plot Width, Unit:** 10 FT      **Site Type:** FIELD    field  
**Plot Length, Unit:** 30 FT    **Experimental Unit:** 1    PLOT plot  
**Plot Area, Unit:** 300 FT2    **Tillage Type:** CONTIL    conventional-till  
**Replications:** 4      **Study Design:** RACOB    Randomized Complete Block (RCB)  
**Untreated Arrangement:** INCLUDED    single control randomized in each block

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## Soil Description

**Description Name:** TPAC -Field 4A  
**% OM:** 3.1     **Texture:** SIL     silt loam  
**pH:** 6     **Soil Name:** Toronto-Millbrook  
**CEC:** 11.1

## Application Description

	A	B
<b>Application Date:</b>	May-6-2014	Jun-6-2014
<b>Time of Day:</b>	AM	AM
<b>Application Method:</b>	SPRAY	SPRAY
<b>Application Timing:</b>	ATPLAN	MIPOCR
<b>Application Placement:</b>	SOIL	FOLIAR
<b>Air Temperature, Unit:</b>	75.1 F	72 F
<b>% Relative Humidity:</b>	32.5	66
<b>Wind Velocity, Unit:</b>	9.6 mph	4.5 MPH
<b>Wind Direction:</b>	SW	S
<b>Dew Presence (Y/N):</b>	N no	Y yes
<b>Soil Temperature, Unit:</b>	67.5 F	70 F
<b>Soil Moisture:</b>	Dry	MOIST
<b>% Cloud Cover:</b>	10	0

## Crop Stage At Each Application

	A	B
<b>Crop 1 Code, BBCH Scale:</b>	ZEAMD BCOR	ZEAMD BCOR
<b>Stage Scale Used:</b>		BBCH
<b>Height, Unit:</b>		12 IN

## Pest Stage At Each Application

	A	B
<b>Pest 1 Code, Type, Scale:</b>	AMBTR W	AMBTR W
<b>Height, Unit:</b>		4 IN
<b>Height Minimum, Maximum:</b>		3 5
<b>Density, Unit:</b>		2 FT2
<b>Pest 2 Code, Type, Scale:</b>	SETFA W	SETFA W
<b>Height, Unit:</b>		2 IN
<b>Height Minimum, Maximum:</b>		1 2
<b>Density, Unit:</b>		3 YD2
<b>Pest 3 Code, Type, Scale:</b>	CHEAL W	CHEAL W
<b>Height, Unit:</b>		1.5 IN
<b>Height Minimum, Maximum:</b>		1 2
<b>Density, Unit:</b>		1 YD2
<b>Pest 4 Code, Type, Scale:</b>	ABUTH W	ABUTH W
<b>Height, Unit:</b>		1 IN
<b>Height Minimum, Maximum:</b>		1 2
<b>Density, Unit:</b>		1 YD2

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## Application Equipment

	A	B
<b>Appl. Equipment:</b>	CO2 FORD	CO2 FORD
<b>Equipment Type:</b>	SPTRMO	SPTRMO
<b>Operation Pressure, Unit:</b>	25 PSI	25 PSI
<b>Nozzle Type:</b>	FLAT FAN	FLAT FAN
<b>Nozzle Size:</b>	XR 100 02	XR 100 02
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN
<b>Nozzles/Row:</b>	6	6
<b>Boom Length, Unit:</b>	10 FT	10 FT
<b>Ground Speed, Unit:</b>	2.1 MPH	2.1 MPH
<b>Carrier:</b>	MEIGS	MEIGS
<b>Spray Volume, Unit:</b>	20 gal/ac	20 gal/ac
<b>Mix Size, Unit:</b>	2.5 liters	2.5 liters
<b>Propellant:</b>	CO2	CO2

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Reps: 4

Plots: 10 by 30 feet

Spray vol: 20 gal/ac

Mix size: 2.5 liters (min 2.0856)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	Appl Description	Amt to Measure	Product	Rep 1	Rep 2	Rep 3	Rep 4
1	Untreated Check												101	402	603	801
2	Lexar EZ (3.7 SC)	3.7	LB/GAL	SL	2.08 lb ai/a	2.25	qt/a	ATPLAN	A		70.26 ml/mx		102	303	503	902
	Halex GT (4.39 SC)	4.39	LBA/GAL	SC	1.98 lb ai/a	3.6	pt/a	MIPOCR	B	10" corn	56.37 ml/mx					
	Atrazine	4	LBA/GAL	F	0.5 lb ai/a	1	pt/a	MIPOCR	B	10" corn	15.62 ml/mx					
	NIS	100	%	SL	0.25 % v/v	0.25	% v/v	MIPOCR	B	10" corn	6.249 ml/mx					
	AMS - Liquid	3.4	LB/GAL	SL	8.5 lb ai/100 gal	10	qt/100 gal	MIPOCR	B	10" corn	62.49 ml/mx					
3	Bicep II Magnum (5.5 SC)	5.5	LB/GAL	SC	2.08 lb ai/a	1.5	qt/a	ATPLAN	A		47.27 ml/mx		103	401	601	1001
	Halex GT (4.39 SC)	4.39	LBA/GAL	SC	1.98 lb ai/a	3.6	pt/a	MIPOCR	B	10" corn	56.37 ml/mx					
	Atrazine	4	LBA/GAL	F	0.5 lb ai/a	1	pt/a	MIPOCR	B	10" corn	15.62 ml/mx					
	NIS	100	%	SL	0.25 % v/v	0.25	% v/v	MIPOCR	B	10" corn	6.249 ml/mx					
	AMS - Liquid	3.4	LB/GAL	SL	8.5 lb ai/100 gal	10	qt/100 gal	MIPOCR	B	10" corn	62.49 ml/mx					
4	Bicep II Magnum (5.5 SC)	5.5	LB/GAL	SC	2.08 lb ai/a	1.5	qt/a	ATPLAN	A		47.27 ml/mx		201	302	702	901
	Halex GT (4.39 SC)	4.39	LBA/GAL	SC	1.98 lb ai/a	3.6	pt/a	MIPOCR	B	10" corn	56.37 ml/mx					
	Clarity (4 SL)	4	LBAE/GAL	SL	0.25 lb ae/a	8	oz/a	MIPOCR	B	10" corn	7.812 ml/mx					
	NIS	100	%	SL	0.25 % v/v	0.25	% v/v	MIPOCR	B	10" corn	6.249 ml/mx					
	AMS - Liquid	3.4	LB/GAL	SL	8.5 lb ai/100 gal	10	qt/100 gal	MIPOCR	B	10" corn	62.49 ml/mx					
5	Bicep II Magnum (5.5 SC)	5.5	LB/GAL	SC	2.08 lb ai/a	1.5	qt/a	ATPLAN	A		47.27 ml/mx		202	502	701	803
	Callisto GT (4.18 SC)	4.18	LBA/GAL	SC	1.04 lb ai/a	2	pt/a	MIPOCR	B	10" corn	31.1 ml/mx					
	Atrazine	4	LBA/GAL	F	0.5 lb ai/a	1	pt/a	MIPOCR	B	10" corn	15.62 ml/mx					
	NIS	100	%	SL	0.25 % v/v	0.25	% v/v	MIPOCR	B	10" corn	6.249 ml/mx					
	AMS - Liquid	3.4	LB/GAL	SL	8.5 lb ai/100 gal	10	qt/100 gal	MIPOCR	B	10" corn	62.49 ml/mx					
6	Keystone NXT (5.6 SC)	5.6	LBA/GAL	SC	3.36 lb ai/a	2.4	qt/a	ATPLAN	A		74.99 ml/mx		203	403	703	903
	Hornet (85.6 WG)	85.6	%	WG	2.57 oz ai/a	3	oz/a	ATPLAN	A		2.811 g/mx					
	Durango DMA (4 SL)	4	LBAE/GAL	SL	0.75 lb ae/a	1.5	pt/a	MIPOCR	B	10" corn	23.43 ml/mx					
	AMS - Liquid	3.4	LB/GAL	SL	8.5 lb ai/100 gal	10	qt/100 gal	MIPOCR	B	10" corn	62.49 ml/mx					
7	Corvus (2.63 SC)	2.63	LBA/GAL	SC	1.84 oz ai/a	5.6	oz/a	ATPLAN	A		5.465 ml/mx		301	501	602	802
	Atrazine	4	LBA/GAL	F	1.5 lb ai/a	3	pt/a	ATPLAN	A		46.87 ml/mx					
	Halex GT (4.39 SC)	4.39	LBA/GAL	SC	1.98 lb ai/a	3.6	pt/a	MIPOCR	B	10" corn	56.37 ml/mx					
	Atrazine	4	LBA/GAL	F	0.5 lb ai/a	1	pt/a	MIPOCR	B	10" corn	15.62 ml/mx					
	NIS	100	%	SL	0.25 % v/v	0.25	% v/v	MIPOCR	B	10" corn	6.249 ml/mx					
	AMS - Liquid	3.4	LB/GAL	SL	8.5 lb ai/100 gal	10	qt/100 gal	MIPOCR	B	10" corn	62.49 ml/mx					

Sort Order: Treatment

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 Location: Throckmorton      Study Director:  
 Project ID:      Investigator: Dr. Bill Johnson  
                                  Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	AMBTR	SETFA	AMBTR	SETFA	AMBTR
Pest Scientific Name	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>
Pest Name	Giant ragweed	Giant foxtail	Giant ragweed	Giant foxtail	Giant ragweed
Crop Code	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays inden>	Zea mays inden>	Zea mays inden>	Zea mays inden>	Zea mays inden>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Rating Date	Jun-2-2014	Jun-2-2014	Jun-19-2014	Jun-19-2014	Jul-3-2014
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT
Number of Subsamples	1	1	1	1	1
Crop Stage Majority	V4	V4	V6	V6	V8
Pest Stage Majority	4	2	3-48	1-8	2-22
Pest Density, Unit	4 FT2	5 FT2	2 FT2	2 FT2	3 FT2
Days After First/Last Applic.	27 27	27 27	44 13	44 13	58 27
Plant-Eval Interval	28 DP-1	28 DP-1	45 DP-1	45 DP-1	59 DP-1
Days After Emergence	21 DE-1	21 DE-1	38 DE-1	38 DE-1	52 DE-1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot	1	2	3
1 Untreated Check		101	0.0	0.0	0.0
		402	0.0	0.0	0.0
		603	0.0	0.0	0.0
		801	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0
2 Lexar EZ (3.7 SC)	2.08 lb ai/a	A 102	85.0	95.0	93.0
Halex GT (4.39 SC)	1.98 lb ai/a	B 303	75.0	97.0	83.0
Atrazine	0.5 lb ai/a	B 503	75.0	95.0	95.0
NIS	0.25 % v/v	B 902	85.0	97.0	95.0
AMS - Liquid	8.5 lb ai/100 gal B				
		Mean =	80.0	96.0	91.5
3 Bicep II Magnum (5.5 SC)	2.08 lb ai/a	A 103	0.0	97.0	97.0
Halex GT (4.39 SC)	1.98 lb ai/a	B 401	50.0	90.0	97.0
Atrazine	0.5 lb ai/a	B 601	0.0	80.0	93.0
NIS	0.25 % v/v	B 1001	65.0	95.0	93.0
AMS - Liquid	8.5 lb ai/100 gal B				
		Mean =	28.8	90.5	95.0
4 Bicep II Magnum (5.5 SC)	2.08 lb ai/a	A 201	0.0	90.0	98.0
Halex GT (4.39 SC)	1.98 lb ai/a	B 302	0.0	97.0	85.0
Clarity (4 SL)	0.25 lb ae/a	B 702	0.0	95.0	90.0
NIS	0.25 % v/v	B 901	0.0	95.0	97.0
AMS - Liquid	8.5 lb ai/100 gal B				
		Mean =	0.0	94.3	92.5
5 Bicep II Magnum (5.5 SC)	2.08 lb ai/a	A 202	0.0	95.0	90.0
Callisto GT (4.18 SC)	1.04 lb ai/a	B 502	15.0	85.0	99.0
Atrazine	0.5 lb ai/a	B 701	70.0	95.0	96.0
NIS	0.25 % v/v	B 803	0.0	97.0	96.0
AMS - Liquid	8.5 lb ai/100 gal B				
		Mean =	21.3	93.0	95.3

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	AMBTR	SETFA	AMBTR	SETFA	AMBTR				
Pest Scientific Name	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>				
Pest Name	Giant ragweed	Giant foxtail	Giant ragweed	Giant foxtail	Giant ragweed				
Crop Code	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD				
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR				
Crop Scientific Name	Zea mays inden>	Zea mays inden>	Zea mays inden>	Zea mays inden>	Zea mays inden>				
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn				
Rating Date	Jun-2-2014	Jun-2-2014	Jun-19-2014	Jun-19-2014	Jul-3-2014				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%				
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT				
Number of Subsamples	1	1	1	1	1				
Crop Stage Majority	V4	V4	V6	V6	V8				
Pest Stage Majority	4	2	3-48	1-8	2-22				
Pest Density, Unit	4 FT2	5 FT2	2 FT2	2 FT2	3 FT2				
Days After First/Last Applic.	27 27	27 27	44 13	44 13	58 27				
Plant-Eval Interval	28 DP-1	28 DP-1	45 DP-1	45 DP-1	59 DP-1				
Days After Emergence	21 DE-1	21 DE-1	38 DE-1	38 DE-1	52 DE-1				
Trt No.	Treatment	Rate	Appl Code	Plot	1	2	3	4	5
6	Keystone NXT (5.6 SC)	3.36 lb ai/a	A	203	65.0	97.0	45.0	99.0	70.0
	Hornet (85.6 WG)	2.57 oz ai/a	A	403	60.0	97.0	65.0	99.0	99.0
	Durango DMA (4 SL)	0.75 lb ae/a	B	703	50.0	97.0	50.0	99.0	80.0
	AMS - Liquid	8.5 lb ai/100 gal	B	903	75.0	97.0	85.0	99.0	95.0
				Mean =	62.5	97.0	61.3	99.0	86.0
7	Corvus (2.63 SC)	1.84 oz ai/a	A	301	80.0	97.0	85.0	99.0	90.0
	Atrazine	1.5 lb ai/a	A	501	85.0	90.0	97.0	99.0	99.0
	Halex GT (4.39 SC)	1.98 lb ai/a	B	602	80.0	95.0	98.0	99.0	99.0
	Atrazine	0.5 lb ai/a	B	802	50.0	97.0	93.0	99.0	95.0
	NIS	0.25 % v/v	B						
	AMS - Liquid	8.5 lb ai/100 gal	B						
				Mean =	73.8	94.8	93.3	99.0	95.8

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Trt No.	Treatment Name	Rate	Unit	Appl Code	Plot	6	7	8	9	10
1	Untreated Check				101	0.0	0.0	0.0	0.0	18.950
					402	0.0	0.0	0.0	0.0	16.730
					603	0.0	0.0	0.0	0.0	11.090
					801	0.0	0.0	0.0	0.0	17.080
					Mean =	0.0	0.0	0.0	0.0	15.963
2	Lexar EZ (3.7 SC)	2.08 lb ai/a		A	102	99.0	0.0	99.0	96.0	17.490
	Halex GT (4.39 SC)	1.98 lb ai/a		B	303	99.0	0.0	99.0	96.0	17.730
	Atrazine	0.5 lb ai/a		B	503	98.0	0.0	99.0	99.0	16.140
	NIS	0.25 % v/v		B	902	99.0	0.0	99.0	99.0	16.910
	AMS - Liquid	8.5 lb ai/100 gal		B						
					Mean =	98.8	0.0	99.0	97.5	17.068
3	Bicep II Magnum (5.5 SC)	2.08 lb ai/a		A	103	99.0	0.0	97.0	95.0	17.600
	Halex GT (4.39 SC)	1.98 lb ai/a		B	401	99.0	0.0	97.0	97.0	17.450
	Atrazine	0.5 lb ai/a		B	601	99.0	3.0	98.0	96.0	16.910
	NIS	0.25 % v/v		B	1001	95.0	6.0	98.0	90.0	17.400
	AMS - Liquid	8.5 lb ai/100 gal		B						
					Mean =	98.0	2.3	97.5	94.5	17.340
4	Bicep II Magnum (5.5 SC)	2.08 lb ai/a		A	201	99.0	0.0	95.0	99.0	17.610
	Halex GT (4.39 SC)	1.98 lb ai/a		B	302	95.0	4.0	98.0	99.0	19.930
	Clarity (4 SL)	0.25 lb ae/a		B	702	99.0	0.0	98.0	97.0	16.430
	NIS	0.25 % v/v		B	901	98.0	6.0	95.0	96.0	16.930
	AMS - Liquid	8.5 lb ai/100 gal		B						
					Mean =	97.8	2.5	96.5	97.8	17.725
5	Bicep II Magnum (5.5 SC)	2.08 lb ai/a		A	202	99.0	0.0	95.0	99.0	18.490
	Callisto GT (4.18 SC)	1.04 lb ai/a		B	502	99.0	0.0	94.0	99.0	17.530
	Atrazine	0.5 lb ai/a		B	701	99.0	0.0	94.0	99.0	16.890
	NIS	0.25 % v/v		B	803	99.0	5.0	95.0	99.0	17.580
	AMS - Liquid	8.5 lb ai/100 gal		B						
					Mean =	99.0	1.3	94.5	99.0	17.623

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Pest Type	W Weed		W Weed		W Weed				
Pest Code	SETFA		SETFA		AMBTR				
Pest Scientific Name	Setaria faberi		Setaria faberi		Ambrosia trifi>				
Pest Name	Giant foxtail		Giant foxtail		Giant ragweed				
Crop Code	ZEAMD		ZEAMD		ZEAMD				
BBCH Scale	BCOR		BCOR		BCOR				
Crop Scientific Name	Zea mays inden>		Zea mays inden>		Zea mays inden>				
Crop Name	Dent corn		Dent corn		Dent corn				
Rating Date	Jul-3-2014		Jul-3-2014		Jul-17-2014				
Rating Type	CONTRO		PHYSTU		CONTRO				
Rating Unit	%		%		%				
Sample Size, Unit	1 PLOT		1 PLOT		1 PLOT				
Number of Subsamples	1		1		1				
Crop Stage Majority	V8		V8						
Pest Stage Majority	2-72		40		7 FT				
Pest Density, Unit	2 FT2		10 FT2		5 YD2				
Days After First/Last Applic.	58 27		58 27		72 41				
Plant-Eval Interval	59 DP-1		59 DP-1		73 DP-1				
Days After Emergence	52 DE-1		52 DE-1		66 DE-1				
Trt No.	Treatment	Rate	Appl Code	Plot	6	7	8	9	10
6	Keystone NXT (5.6 SC)	3.36 lb ai/a	A	203	40.0	0.0	95.0	75.0	17.860
	Hornet (85.6 WG)	2.57 oz ai/a	A	403	20.0	0.0	95.0	80.0	16.570
	Durango DMA (4 SL)	0.75 lb ae/a	B	703	30.0	6.0	94.0	70.0	16.390
	AMS - Liquid	8.5 lb ai/100 gal	B	903	75.0	0.0	95.0	84.0	16.960
				Mean =	41.3	1.5	94.8	77.3	16.945
7	Corvus (2.63 SC)	1.84 oz ai/a	A	301	99.0	0.0	99.0	99.0	17.640
	Atrazine	1.5 lb ai/a	A	501	99.0	0.0	99.0	97.0	16.660
	Halex GT (4.39 SC)	1.98 lb ai/a	B	602	99.0	3.0	99.0	99.0	17.020
	Atrazine	0.5 lb ai/a	B	802	99.0	0.0	98.0	95.0	16.510
	NIS	0.25 % v/v	B						
	AMS - Liquid	8.5 lb ai/100 gal	B						
				Mean =	99.0	0.8	98.8	97.5	16.958

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Pest Type					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop Code					ZEAMD
BBCH Scale					BCOR
Crop Scientific Name					Zea mays inden>
Crop Name					Dent corn
Rating Date					Oct-30-2014
Rating Type					YIELD
Rating Unit					bu/ac
Sample Size, Unit					
Number of Subsamples					1
Crop Stage Majority					
Pest Stage Majority					
Pest Density, Unit					
Days After First/Last Applic.					177 146
Plant-Eval Interval					178 DP-1
Days After Emergence					171 DE-1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code Plot			11
1 Untreated Check			101		63.20
			402		19.10
			603		18.80
			801		21.80
			Mean =		30.73
2 Lexar EZ (3.7 SC)	2.08 lb ai/a	A	102		231.20
Halex GT (4.39 SC)	1.98 lb ai/a	B	303		259.20
Atrazine	0.5 lb ai/a	B	503		245.10
NIS	0.25 % v/v	B	902		238.30
AMS - Liquid	8.5 lb ai/100 gal	B			
			Mean =		243.45
3 Bicep II Magnum (5.5 SC)	2.08 lb ai/a	A	103		265.00
Halex GT (4.39 SC)	1.98 lb ai/a	B	401		295.50
Atrazine	0.5 lb ai/a	B	601		268.80
NIS	0.25 % v/v	B	1001		255.40
AMS - Liquid	8.5 lb ai/100 gal	B			
			Mean =		271.18
4 Bicep II Magnum (5.5 SC)	2.08 lb ai/a	A	201		264.10
Halex GT (4.39 SC)	1.98 lb ai/a	B	302		273.70
Clarity (4 SL)	0.25 lb ae/a	B	702		230.40
NIS	0.25 % v/v	B	901		222.70
AMS - Liquid	8.5 lb ai/100 gal	B			
			Mean =		247.73
5 Bicep II Magnum (5.5 SC)	2.08 lb ai/a	A	202		232.50
Callisto GT (4.18 SC)	1.04 lb ai/a	B	502		219.90
Atrazine	0.5 lb ai/a	B	701		241.70
NIS	0.25 % v/v	B	803		244.80
AMS - Liquid	8.5 lb ai/100 gal	B			
			Mean =		234.73

# Purdue University

Pest Type					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop Code					ZEAMD
BBCH Scale					BCOR
Crop Scientific Name					Zea mays inden>
Crop Name					Dent corn
Rating Date					Oct-30-2014
Rating Type					YIELD
Rating Unit					bu/ac
Sample Size, Unit					
Number of Subsamples					1
Crop Stage Majority					
Pest Stage Majority					
Pest Density, Unit					
Days After First/Last Applic.					177 146
Plant-Eval Interval					178 DP-1
Days After Emergence					171 DE-1
Trt No.	Treatment Name	Rate	Appl Code	Plot	
		Rate Unit			11
6	Keystone NXT (5.6 SC)	3.36 lb ai/a	A	203	261.20
	Hornet (85.6 WG)	2.57 oz ai/a	A	403	269.90
	Durango DMA (4 SL)	0.75 lb ae/a	B	703	212.50
	AMS - Liquid	8.5 lb ai/100 gal	B	903	236.30
				Mean =	244.98
7	Corvus (2.63 SC)	1.84 oz ai/a	A	301	262.50
	Atrazine	1.5 lb ai/a	A	501	247.30
	Halex GT (4.39 SC)	1.98 lb ai/a	B	602	248.60
	Atrazine	0.5 lb ai/a	B	802	256.60
	NIS	0.25 % v/v	B		
	AMS - Liquid	8.5 lb ai/100 gal	B		
				Mean =	253.75

# Purdue University

## Pre / Post weed control programs for corn

Trial ID: 14S-THP-CTC-07      Protocol ID: 14S-THP-CTC-07  
 Location: Throckmorton      Study Director:  
 Project ID:      Investigator: Dr. Bill Johnson  
                                  Sponsor Contact:

### Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

### Pest Code

AMBTR, Ambrosia trifida, = US

SETFA, Setaria faberi, = US

### Crop Code

ZEAMD, BCOR, Zea mays indentata, = US

### Rating Type

CONTRO = control / burndown or knockdown

PHYSTU = phytotoxicity - stunting

MOICON = moisture content

YIELD = yield

### Rating Unit

% = percent

bu/ac = bushels per acre

PLOT = total plot

### Pest Stage Majority

40 = V  Vegetative reproductive organs begin to develop (rhizomes, stolons, tubers, runners, bulbs)

FT2 = per square foot

YD2 = per square yard

### Plant-Eval Interval

28 DP-1 = 1 ZEAMD May-5-2014

45 DP-1 = 1 ZEAMD May-5-2014

59 DP-1 = 1 ZEAMD May-5-2014

73 DP-1 = 1 ZEAMD May-5-2014

178 DP-1 = 1 ZEAMD May-5-2014

# Purdue University

## Pre / Post weed control programs for corn

Trial ID: 14S-THP-CTC-07      Protocol ID: 14S-THP-CTC-07  
 Location: Throckmorton      Study Director:  
 Project ID:      Investigator: Dr. Bill Johnson  
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	AMBTR	SETFA	AMBTR	SETFA	AMBTR	SETFA			
Pest Scientific Name	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Setaria faberi	Ambrosia trifi>	Setaria faberi			
Pest Name	Giant ragweed	Giant foxtail	Giant ragweed	Giant foxtail	Giant ragweed	Giant foxtail			
Crop Code	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD			
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR			
Crop Scientific Name	Zea mays inden>	Zea mays inden>	Zea mays inden>	Zea mays inden>	Zea mays inden>	Zea mays inden>			
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn			
Rating Date	Jun-2-2014	Jun-2-2014	Jun-19-2014	Jun-19-2014	Jul-3-2014	Jul-3-2014			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%			
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT	1 PLOT			
Number of Subsamples	1	1	1	1	1	1			
Crop Stage Majority	V4	V4	V6	V6	V8	V8			
Pest Stage Majority	4	2	3-48	1-8	2-22	2-72			
Pest Density, Unit	4 FT2	5 FT2	2 FT2	2 FT2	3 FT2	2 FT2			
Days After First/Last Applic.	27 27	27 27	44 13	44 13	58 27	58 27			
Plant-Eval Interval	28 DP-1	28 DP-1	45 DP-1	45 DP-1	59 DP-1	59 DP-1			
Days After Emergence	21 DE-1	21 DE-1	38 DE-1	38 DE-1	52 DE-1	52 DE-1			
Trt No.	Treatment Name	Rate	Appl Code	1	2	3	4	5	6
		Rate Unit							
1	Untreated Check			0.0 b	0.0 b	0.0 c	0.0 b	0.0 b	0.0 c
2	Lexar EZ (3.7 SC)	2.08 lb ai/a	A	80.0 a	96.0 a	91.5 a	99.0 a	96.8 a	98.8 a
	Halex GT (4.39 SC)	1.98 lb ai/a	B						
	Atrazine	0.5 lb ai/a	B						
	NIS	0.25 % v/v	B						
	AMS - Liquid	8.5 lb ai/100 gal	B						
3	Bicep II Magnum (5.5 SC)	2.08 lb ai/a	A	28.8 b	90.5 a	95.0 a	99.0 a	97.8 a	98.0 a
	Halex GT (4.39 SC)	1.98 lb ai/a	B						
	Atrazine	0.5 lb ai/a	B						
	NIS	0.25 % v/v	B						
	AMS - Liquid	8.5 lb ai/100 gal	B						
4	Bicep II Magnum (5.5 SC)	2.08 lb ai/a	A	0.0 b	94.3 a	92.5 a	99.0 a	94.3 a	97.8 a
	Halex GT (4.39 SC)	1.98 lb ai/a	B						
	Clarity (4 SL)	0.25 lb ae/a	B						
	NIS	0.25 % v/v	B						
	AMS - Liquid	8.5 lb ai/100 gal	B						
5	Bicep II Magnum (5.5 SC)	2.08 lb ai/a	A	21.3 b	93.0 a	95.3 a	98.8 a	83.8 a	99.0 a
	Callisto GT (4.18 SC)	1.04 lb ai/a	B						
	Atrazine	0.5 lb ai/a	B						
	NIS	0.25 % v/v	B						
	AMS - Liquid	8.5 lb ai/100 gal	B						
6	Keystone NXT (5.6 SC)	3.36 lb ai/a	A	62.5 a	97.0 a	61.3 b	99.0 a	86.0 a	41.3 b
	Hornet (85.6 WG)	2.57 oz ai/a	A						
	Durango DMA (4 SL)	0.75 lb ae/a	B						
	AMS - Liquid	8.5 lb ai/100 gal	B						

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.



# Purdue University

Trt No.	Treatment Name	Rate	Unit	Appl Code	7	8	9	10	11
1	Untreated Check	0.0	a		0.0 a	0.0 d	0.0 c	15.963 a	30.73 b
2	Lexar EZ (3.7 SC)	2.08	lb ai/a	A	0.0 a	99.0 a	97.5 a	17.068 a	243.45 a
	Halex GT (4.39 SC)	1.98	lb ai/a	B					
	Atrazine	0.5	lb ai/a	B					
	NIS	0.25	% v/v	B					
	AMS - Liquid	8.5	lb ai/100 gal	B					
3	Bicep II Magnum (5.5 SC)	2.08	lb ai/a	A	2.3 a	97.5 b	94.5 a	17.340 a	271.18 a
	Halex GT (4.39 SC)	1.98	lb ai/a	B					
	Atrazine	0.5	lb ai/a	B					
	NIS	0.25	% v/v	B					
	AMS - Liquid	8.5	lb ai/100 gal	B					
4	Bicep II Magnum (5.5 SC)	2.08	lb ai/a	A	2.5 a	96.5 b	97.8 a	17.725 a	247.73 a
	Halex GT (4.39 SC)	1.98	lb ai/a	B					
	Clarity (4 SL)	0.25	lb ae/a	B					
	NIS	0.25	% v/v	B					
	AMS - Liquid	8.5	lb ai/100 gal	B					
5	Bicep II Magnum (5.5 SC)	2.08	lb ai/a	A	1.3 a	94.5 c	99.0 a	17.623 a	234.73 a
	Callisto GT (4.18 SC)	1.04	lb ai/a	B					
	Atrazine	0.5	lb ai/a	B					
	NIS	0.25	% v/v	B					
	AMS - Liquid	8.5	lb ai/100 gal	B					
6	Keystone NXT (5.6 SC)	3.36	lb ai/a	A	1.5 a	94.8 c	77.3 b	16.945 a	244.98 a
	Hornet (85.6 WG)	2.57	oz ai/a	A					
	Durango DMA (4 SL)	0.75	lb ae/a	B					
	AMS - Liquid	8.5	lb ai/100 gal	B					

# Purdue University

Pest Type		W Weed	W Weed		
Pest Code		SETFA	AMBTR		
Pest Scientific Name		Setaria faberi	Ambrosia trifi>		
Pest Name		Giant foxtail	Giant ragweed		
Crop Code	ZEAMD	ZEAMD	ZEAMD	ZEAMD	ZEAMD
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR
Crop Scientific Name	Zea mays inden>	Zea mays inden>	Zea mays inden>	Zea mays inden>	Zea mays inden>
Crop Name	Dent corn	Dent corn	Dent corn	Dent corn	Dent corn
Rating Date	Jul-3-2014	Jul-17-2014	Jul-17-2014	Oct-30-2014	Oct-30-2014
Rating Type	PHYSTU	CONTRO	CONTRO	MOICON	YIELD
Rating Unit	%	%	%	%	bu/ac
Sample Size, Unit	1 PLOT	1 PLOT	1 PLOT	1	1
Number of Subsamples	1	1	1	1	1
Crop Stage Majority	V8				
Pest Stage Majority		40	7 FT		
Pest Density, Unit		10 FT2	5 YD2		
Days After First/Last Applic.	58 27	72 41	72 41	177 146	177 146
Plant-Eval Interval	59 DP-1	73 DP-1	73 DP-1	178 DP-1	178 DP-1
Days After Emergence	52 DE-1	66 DE-1	66 DE-1	171 DE-1	171 DE-1
Trt Treatment	Rate	Appl			
No. Name	Rate Unit	Code	7	8	9
7 Corvus (2.63 SC)	1.84 oz ai/a	A	0.8 a	98.8 a	97.5 a
Atrazine	1.5 lb ai/a	A			
Halex GT (4.39 SC)	1.98 lb ai/a	B			
Atrazine	0.5 lb ai/a	B			
NIS	0.25 % v/v	B			
AMS - Liquid	8.5 lb ai/100 gal	B			
LSD (P=.05)			3.11	1.21	4.45
Standard Deviation			2.09	0.81	3.00
CV			177.75	0.98	3.72
Bartlett's X2			1.521	8.25	8.219
P(Bartlett's X2)			0.823	0.083	0.084
Replicate F			1.918	0.287	0.175
Replicate Prob(F)			0.1629	0.8339	0.9120
Treatment F			0.906	8104.115	586.303
Treatment Prob(F)			0.5123	0.0001	0.0001
					0.840
					0.5551
					0.0001

# Purdue University

## Pre / Post weed control programs for corn

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 Location: Throckmorton      Study Director:  
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### Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

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### Rating Type

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MOICON = moisture content

YIELD = yield

### Rating Unit

% = percent

bu/ac = bushels per acre

PLOT = total plot

### Pest Stage Majority

40 = V<sub>1</sub> Vegetative reproductive organs begin to develop (rhizomes, stolons, tubers, runners, bulbs)

FT2 = per square foot

YD2 = per square yard

### Plant-Eval Interval

28 DP-1 = 1 ZEAMD May-5-2014

45 DP-1 = 1 ZEAMD May-5-2014

59 DP-1 = 1 ZEAMD May-5-2014

73 DP-1 = 1 ZEAMD May-5-2014

178 DP-1 = 1 ZEAMD May-5-2014