

# Purdue University

## Weed control programs with Instigate

Trial ID: 13S-THP-CTC-03      Protocol ID: 13S-THP-CTC-03  
 Location: Throckmorton      Study Director:  
 Project ID: USA-13-004      Investigator: Dr. Bill Johnson  
 Sponsor Contact: DuPont - Helen Flanigan

### General Trial Information

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

**Discipline:** H herbicide  
**Trial Status:** E established  
**Initiation Date:** Mar-28-2013

### Trial Location

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

### Personnel

**Study Director:** Bill Johnson  
**Investigator:** Dr. Bill Johnson      **Title:** Professor  
**Affiliation:** Purdue University  
**Address:** 915 W State Street  
**Location:** West Lafayette, IN, USA  
**Postal Code:** 47907      **E-mail:** wgj@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 DKC61-21      **Description:** RR/LL  
**BBCH Scale:** BCOR      **Planting Date:** May-9-2013  
**Planting Method:** SEEDED seeded      **Rate, Unit:** 32000 S/A  
**Depth, Unit:** 1.5 IN  
**Row Spacing, Unit:** 30 IN  
  
**Soil Moisture:** DRY dry      **Soil Temperature, Unit:** 69 F  
**Emergence Date:** May-18-2013

### Pest Description

**Pest 1 Type:** W    **Code:** SETFA *Setaria faberi*  
**Common Name:** Giant foxtail

**Pest 2 Type:** W    **Code:** AMBTR *Ambrosia trifida*  
**Common Name:** Giant ragweed

**Pest 3 Type:** W    **Code:** ABUTH *Abutilon theophrasti*  
**Common Name:** Velvetleaf

**Pest 4 Type:** W    **Code:** IPOHE *Ipomoea hederacea*  
**Common Name:** Ivyleaf morningglory

**Pest 5 Type:** W    **Code:** CHEAL *Chenopodium album*  
**Common Name:** Common lambsquarters

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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 FT <sup>2</sup>	Tillage Type: CONTIL conventional-till
Replications: 4	Study Design: RACOB� Randomized Complete Block (RCB)
	Untreated Arrangement: INCLUDED single control randomized in each block

Soil Description	
Description Name: TPAC - Field 4B	
% OM: 2.9	Texture: SIL silt loam
pH: 6.2	Soil Name: Toronto-Millbrook
CEC: 13.3	

Application Description		
	A	B
Application Date:	May-9-2013	Jun-4-2013
Time of Day:	AM	8 AM
Application Method:	SPRAY	SPRAY
Application Timing:	ATPLAN	MIPOWE
Application Placement:	SOIL	FOLIAR
Applied By:	MW	MW
Air Temperature, Unit:	73 F	61 F
% Relative Humidity:	49	65
Wind Velocity, Unit:	6.3 MPH	2.5 MPH
Wind Direction:	SW	E
Dew Presence (Y/N):	Y yes	Y yes
Soil Temperature, Unit:	69 F	59 F
Soil Moisture:	DRY	WET
% Cloud Cover:	95	5

Crop Stage At Each Application		
	A	B
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:		BBCH
Stage Majority, Percent:		V3

Pest Stage At Each Application		
	A	B
Pest 1 Code, Type, Scale:	SETFA W	SETFA W
Height Minimum, Maximum:		1 5
Density, Unit:		12 FT <sup>2</sup>
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W
Height Minimum, Maximum:		1 6
Density, Unit:		13 YD <sup>2</sup>
Pest 3 Code, Type, Scale:	ABUTH W	ABUTH W
Height Minimum, Maximum:		1 4
Density, Unit:		3 YD <sup>2</sup>
Pest 4 Code, Type, Scale:	IPOHE W	IPOHE W
Height, Unit:		1.5 IN
Density, Unit:		3 YD <sup>2</sup>
Pest 5 Code, Type, Scale:	CHEAL W	CHEAL W
Height, Unit:		1 IN
Density, Unit:		2 YD <sup>2</sup>

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## Application Equipment

	A	B
<b>Appl. Equipment:</b>	CO2 FORD	CO2 FORD
<b>Equipment Type:</b>	SPTRMO	SPTRMO
<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>Boom Height, Unit:</b>	20 IN	20 IN
<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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## Weed control programs with Instigate

Trial ID: 13S-THP-CTC-03      Protocol ID: 13S-THP-CTC-03  
 Location: Throckmorton      Study Director:  
 Project ID: USA-13-004      Investigator: Dr. Bill Johnson  
 Sponsor Contact: DuPont - Helen Flanigan

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 Unit	Growth Stage	Appl Code	Appl Description	Amt to Measure	Product	Rep 1	2	3	4
1	Untreated Check													101	405	702	805
2	Resolve (25 SG)	25 %		WG	0.25 oz ai/a		1 oz wt/a		ATPLAN	A		0.9361 g/mx		102	404	602	804
	Mesotrione (50 WG)	50 %		WG	2.5 oz ai/a		5 oz wt/a		ATPLAN	A		4.681 g/mx					
	Atrazine	4 LBAE/GAL		F	1 lb ai/a		1 qt/a		ATPLAN	A		31.25 ml/mx					
	Abundit (3 SL)	3 LBAE/GAL		SL	0.75 lb ae/a		32 fl oz/a		MIPOWE	B	28-35 DAT	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	0.42 lb ai/a		2.47 qt/100 gal		MIPOWE	B	28-35 DAT	15.44 ml/mx					
3	Resolve (25 SG)	25 %		WG	0.25 oz ai/a		1 oz wt/a		ATPLAN	A		0.9361 g/mx		104	502	704	901
	Mesotrione (50 WG)	50 %		WG	2.5 oz ai/a		5 oz wt/a		ATPLAN	A		4.681 g/mx					
	Atrazine	4 LBAE/GAL		F	1 lb ai/a		1 qt/a		ATPLAN	A		31.25 ml/mx					
	Resolve (25 SG)	25 %		WG	0.3 oz ai/a		1.2 oz wt/a		MIPOWE	B	28-35 DAT	1.123 g/mx					
	Mesotrione (50 WG)	50 %		WG	1.25 oz ai/a		2.5 oz wt/a		MIPOWE	B	28-35 DAT	2.34 g/mx					
	Isoxadifen (50 WG)	50 %		WG	0.15 oz ai/a		0.3 oz wt/a		MIPOWE	B	28-35 DAT	0.2808 g/mx					
	Abundit (3 SL)	3 LBAE/GAL		SL	0.75 lb ae/a		32 fl oz/a		MIPOWE	B	28-35 DAT	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	0.42 lb ai/a		2.47 qt/100 gal		MIPOWE	B	28-35 DAT	15.44 ml/mx					
4	Resolve (25 SG)	25 %		WG	0.25 oz ai/a		1 oz wt/a		ATPLAN	A		0.9361 g/mx		105	402	605	904
	Mesotrione (50 WG)	50 %		WG	2.5 oz ai/a		5 oz wt/a		ATPLAN	A		4.681 g/mx					
	Cinch ATZ (5.5 SC)	5.5 LBAE/GAL		SC	2.06 lb ai/a		3 pt/a		ATPLAN	A		46.81 ml/mx					
	Abundit (3 SL)	3 LBAE/GAL		SL	0.75 lb ae/a		32 fl oz/a		MIPOWE	B	28-35 DAT	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	0.42 lb ai/a		2.47 qt/100 gal		MIPOWE	B	28-35 DAT	15.44 ml/mx					
5	Resolve (25 SG)	25 %		WG	0.25 oz ai/a		1 oz wt/a		ATPLAN	A		0.9361 g/mx		201	505	705	905
	Mesotrione (50 WG)	50 %		WG	2.5 oz ai/a		5 oz wt/a		ATPLAN	A		4.681 g/mx					
	Cinch ATZ (5.5 SC)	5.5 LBAE/GAL		SC	2.75 lb ai/a		4 pt/a		ATPLAN	A		62.49 ml/mx					
6	Resolve (25 SG)	25 %		WG	0.25 oz ai/a		1 oz wt/a		ATPLAN	A		0.9361 g/mx		202	501	802	1005
	Mesotrione (50 WG)	50 %		WG	2.5 oz ai/a		5 oz wt/a		ATPLAN	A		4.681 g/mx					
	Breakfree ATZ (5.25 SC)	5.25 LBAE/GAL		SC	1.97 lb ai/a		3 pt/a		ATPLAN	A		46.9 ml/mx					
	Abundit (3 SL)	3 LBAE/GAL		SL	0.75 lb ae/a		32 fl oz/a		MIPOWE	B	28-35 DAT	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	0.42 lb ai/a		2.47 qt/100 gal		MIPOWE	B	28-35 DAT	15.44 ml/mx					
7	Resolve (25 SG)	25 %		WG	0.25 oz ai/a		1 oz wt/a		ATPLAN	A		0.9361 g/mx		204	401	601	902
	Mesotrione (50 WG)	50 %		WG	2.5 oz ai/a		5 oz wt/a		ATPLAN	A		4.681 g/mx					
	Breakfree ATZ (5.25 SC)	5.25 LBAE/GAL		SC	2.62 lb ai/a		4 pt/a		ATPLAN	A		62.37 ml/mx					
8	Resolve (25 SG)	25 %		WG	0.22 oz ai/a		0.88 oz wt/a		ATPLAN	A		0.8238 g/mx		205	305	604	1004
	Mesotrione (50 WG)	50 %		WG	2.2 oz ai/a		4.4 oz wt/a		ATPLAN	A		4.119 g/mx					
	Cinch ATZ (5.5 SC)	5.5 LBAE/GAL		SC	2.06 lb ai/a		3 pt/a		ATPLAN	A		46.81 ml/mx					
	Abundit (3 SL)	3 LBAE/GAL		SL	0.75 lb ae/a		32 fl oz/a		MIPOWE	B	28-35 DAT	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	0.42 lb ai/a		2.47 qt/100 gal		MIPOWE	B	28-35 DAT	15.44 ml/mx					
9	Resolve (25 SG)	25 %		WG	0.25 oz ai/a		1 oz wt/a		ATPLAN	A		0.9361 g/mx		301	304	701	1001
	Mesotrione (50 WG)	50 %		WG	2.5 oz ai/a		5 oz wt/a		ATPLAN	A		4.681 g/mx					
	Atrazine	4 LBAE/GAL		F	1 lb ai/a		1 qt/a		ATPLAN	A		31.25 ml/mx					
	Simazine 90 DF (90 WG)	90 %		WG	1.5 lb ai/a		1.67 lb/a		ATPLAN	A		24.96 g/mx					
	Abundit (3 SL)	3 LBAE/GAL		SL	0.75 lb ae/a		32 fl oz/a		MIPOWE	B	28-35 DAT	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	0.42 lb ai/a		2.47 qt/100 gal		MIPOWE	B	28-35 DAT	15.44 ml/mx					
10	Resolve (25 SG)	25 %		WG	0.25 oz ai/a		1 oz wt/a		ATPLAN	A		0.9361 g/mx		302	504	801	1002
	Isoxaflutole (75 SG)	75 %		WG	0.5 oz ai/a		0.67 oz wt/a		ATPLAN	A		0.6241 g/mx					
	Cinch ATZ (5.5 SC)	5.5 LBAE/GAL		SC	2.06 lb ai/a		3 pt/a		ATPLAN	A		46.81 ml/mx					
	Abundit (3 SL)	3 LBAE/GAL		SL	0.75 lb ae/a		32 fl oz/a		MIPOWE	B	28-35 DAT	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	0.42 lb ai/a		2.47 qt/100 gal		MIPOWE	B	28-35 DAT	15.44 ml/mx					
11	Resolve (25 SG)	25 %		WG	0.3 oz ai/a		1.2 oz wt/a		MIPOWE	B	28-35 DAT	1.123 g/mx		103	403	606	1006
	Mesotrione (50 WG)	50 %		WG	1.25 oz ai/a		2.5 oz wt/a		MIPOWE	B	28-35 DAT	2.34 g/mx					
	Isoxadifen (50 WG)	50 %		WG	0.15 oz ai/a		0.3 oz wt/a		MIPOWE	B	28-35 DAT	0.2808 g/mx					
	Atrazine	4 LBAE/GAL		F	1 lb ai/a		1 qt/a		MIPOWE	B	28-35 DAT	31.25 ml/mx					
	Abundit (3 SL)	3 LBAE/GAL		SL	0.75 lb ae/a		32 fl oz/a		MIPOWE	B	28-35 DAT	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL		SL	0.42 lb ai/a		2.47 qt/100 gal		MIPOWE	B	28-35 DAT	15.44 ml/mx					

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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	Other Rate	Other Rate	Other Unit	Growth Stage	Appl Code	Appl Description	Amt to Measure	Product	Rep 1	Rep 2	Rep 3	Rep 4
12	Lumax (3.95 SC)	3.95 LBA/GAL	SC	SC	2.96 lb ai/a	3 qt/a			ATPLAN	A		93.66 ml/mx		106	306	706	903
	Abundit (3 SL)	3 LBAE/GAL	SL	SL	0.75 lb ae/a	32 fl oz/a			MIPOWE	B	28-35 DAT	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL	SL	0.42 lb ai/a	2.47 qt/100 gal			MIPOWE	B	28-35 DAT	15.44 ml/mx					
13	Corvus (2.63 SC)	2.63 LBA/GAL	SC	SC	0.115 lb ai/a	5.6 fl oz/a			ATPLAN	A		5.465 ml/mx		203	506	603	906
	Atrazine	4 LBA/GAL	F	F	1 lb ai/a	1 qt/a			ATPLAN	A		31.25 ml/mx					
	Abundit (3 SL)	3 LBAE/GAL	SL	SL	0.75 lb ae/a	32 fl oz/a			MIPOWE	B	28-35 DAT	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL	SL	0.42 lb ai/a	2.47 qt/100 gal			MIPOWE	B	28-35 DAT	15.44 ml/mx					
14	Lexar (3.7 SC)	3.7 LB/GAL	SL	SL	3.24 lb ai/a	3.5 qt/a			ATPLAN	A		109.4 ml/mx		206	406	803	806
	Abundit (3 SL)	3 LBAE/GAL	SL	SL	0.75 lb ae/a	32 fl oz/a			MIPOWE	B	28-35 DAT	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL	SL	0.42 lb ai/a	2.47 qt/100 gal			MIPOWE	B	28-35 DAT	15.44 ml/mx					
15	Resolve (25 SG)	25 %	WG	WG	0.25 oz ai/a	1 oz wt/a			ATPLAN	A		0.9361 g/mx		303	503	703	1003
	Isoxaflutole (75 SG)	75 %	WG	WG	0.5 oz ai/a	0.67 oz wt/a			ATPLAN	A		0.6241 g/mx					
	Atrazine	4 LBA/GAL	F	F	1 lb ai/a	2 pt/a			ATPLAN	A		31.25 ml/mx					
	Resolve (25 SG)	25 %	WG	WG	0.3 oz ai/a	1.2 oz wt/a			MIPOWE	B	28-35 DAT	1.123 g/mx					
	Mesotrione (50 WG)	50 %	WG	WG	1.25 oz ai/a	2.5 oz wt/a			MIPOWE	B	28-35 DAT	2.34 g/mx					
	Isoxadifen (50 WG)	50 %	WG	WG	0.15 oz ai/a	0.3 oz wt/a			MIPOWE	B	28-35 DAT	0.2808 g/mx					
	Abundit (3 SL)	3 LBAE/GAL	SL	SL	0.75 lb ae/a	32 fl oz/a			MIPOWE	B	28-35 DAT	31.25 ml/mx					
	AMS - Liquid	3.4 LB/GAL	SL	SL	0.42 lb ai/a	2.47 qt/100 gal			MIPOWE	B	28-35 DAT	15.44 ml/mx					

Sort Order: Treatment

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## Weed control programs with Instigate

Trial ID: 13S-THP-CTC-03      Protocol ID: 13S-THP-CTC-03  
 Location: Throckmorton      Study Director:  
 Project ID: USA-13-004      Investigator: Dr. Bill Johnson  
 Sponsor Contact: DuPont - Helen Flanigan

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	SETFA	AMBTR	CHEAL	ABUTH	IPOHE			
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium ai>	Abutilon theop>	Ipomoea hедера>			
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Velvetleaf	Ivyleaf mornin>			
Crop Code						ZEAMX		
BBCB Scale						BCOR		
Crop Scientific Name						Zea mays		
Crop Name						Corn		
Rating Date	May-29-2013	May-29-2013	May-29-2013	May-29-2013	May-29-2013	May-29-2013		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYCHL		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Crop Stage Majority	V2	V2	V2	V2	V2	V2		
Pest Stage Majority	2.5 IN	3 IN	0.5 IN	0.5 IN	1 IN			
Pest Density, Unit	20 FT2	6 YD2	2 YD2	3 YD2	1 YD2			
Assessed By	MW	MW	MW	MW	MW	MW		
Days After First/Last Applic.	20 20	20 20	20 20	20 20	20 20	20 20		
Plant-Eval Interval	20 DP-1	20 DP-1	20 DP-1	20 DP-1	20 DP-1	20 DP-1		
Days After Emergence	11 DE-1	11 DE-1	11 DE-1	11 DE-1	11 DE-1	11 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6
1 Untreated Check		101	0.0	0.0	0.0	0.0	0.0	0.0
		405	0.0	0.0	0.0	0.0	0.0	0.0
		702	0.0	0.0	0.0	0.0	0.0	0.0
		805	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0	0.0	0.0
2 Resolve (25 SG)	0.25 oz ai/a A	102	80.0	80.0	99.0	99.0	99.0	3.0
Mesotrione (50 WG)	2.5 oz ai/a A	404	90.0	60.0	99.0	99.0	80.0	0.0
Atrazine	1 lb ai/a A	602	95.0	50.0	99.0	99.0	99.0	0.0
Abundit (3 SL)	0.75 lb ae/a B	804	90.0	85.0	99.0	99.0	99.0	3.0
AMS - Liquid	0.42 lb ai/a B							
		Mean =	88.8	68.8	99.0	99.0	94.3	1.5
3 Resolve (25 SG)	0.25 oz ai/a A	104	60.0	70.0	99.0	99.0	99.0	0.0
Mesotrione (50 WG)	2.5 oz ai/a A	502	95.0	60.0	99.0	99.0	99.0	0.0
Atrazine	1 lb ai/a A	704	70.0	60.0	99.0	99.0	99.0	3.0
Resolve (25 SG)	0.3 oz ai/a B	901	99.0	40.0	99.0	99.0	99.0	5.0
Mesotrione (50 WG)	1.25 oz ai/a B							
Isoxadifen (50 WG)	0.15 oz ai/a B							
Abundit (3 SL)	0.75 lb ae/a B							
AMS - Liquid	0.42 lb ai/a B							
		Mean =	81.0	57.5	99.0	99.0	99.0	2.0
4 Resolve (25 SG)	0.25 oz ai/a A	105	70.0	50.0	99.0	99.0	65.0	0.0
Mesotrione (50 WG)	2.5 oz ai/a A	402	97.0	40.0	99.0	99.0	90.0	3.0
Cinch ATZ (5.5 SC)	2.06 lb ai/a A	605	85.0	75.0	99.0	99.0	99.0	3.0
Abundit (3 SL)	0.75 lb ae/a B	904	85.0	60.0	99.0	99.0	99.0	3.0
AMS - Liquid	0.42 lb ai/a B							
		Mean =	84.3	56.3	99.0	99.0	88.3	2.3
5 Resolve (25 SG)	0.25 oz ai/a A	201	97.0	20.0	99.0	99.0	99.0	3.0
Mesotrione (50 WG)	2.5 oz ai/a A	505	97.0	70.0	99.0	99.0	99.0	5.0
Cinch ATZ (5.5 SC)	2.75 lb ai/a A	705	99.0	40.0	99.0	99.0	99.0	5.0
		905	99.0	40.0	99.0	99.0	99.0	3.0
		Mean =	98.0	42.5	99.0	99.0	99.0	4.0

# Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	SETFA	AMBTR	CHEAL	ABUTH	IPHOE			
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Abutilon theop>	Ipomoea hedera>			
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Velvetleaf	Ivyleaf mornin>			
Crop Code						ZEAMX		
BBCH Scale						BCOR		
Crop Scientific Name						Zea mays		
Crop Name						Corn		
Rating Date	May-29-2013	May-29-2013	May-29-2013	May-29-2013	May-29-2013	May-29-2013		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYCHL		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Crop Stage Majority	V2	V2	V2	V2	V2	V2		
Pest Stage Majority	2.5 IN	3 IN	0.5 IN	0.5 IN	1 IN			
Pest Density, Unit	20 FT2	6 YD2	2 YD2	3 YD2	1 YD2			
Assessed By	MW	MW	MW	MW	MW	MW		
Days After First/Last Applic.	20 20	20 20	20 20	20 20	20 20	20 20		
Plant-Eval Interval	20 DP-1	20 DP-1	20 DP-1	20 DP-1	20 DP-1	20 DP-1		
Days After Emergence	11 DE-1	11 DE-1	11 DE-1	11 DE-1	11 DE-1	11 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	1	2	3	4	5	6
6 Resolve (25 SG)	0.25 oz ai/a A	202	99.0	60.0	99.0	99.0	99.0	3.0
Mesotrione (50 WG)	2.5 oz ai/a A	501	97.0	90.0	99.0	99.0	90.0	0.0
Breakfree ATZ (5.25 SC)	1.97 lb ai/a A	802	97.0	70.0	99.0	99.0	99.0	0.0
Abundit (3 SL)	0.75 lb ae/a B	1005	97.0	85.0	99.0	99.0	99.0	5.0
AMS - Liquid	0.42 lb ai/a B							
Mean =			97.5	76.3	99.0	99.0	96.8	2.0
7 Resolve (25 SG)	0.25 oz ai/a A	204	97.0	60.0	99.0	99.0	99.0	0.0
Mesotrione (50 WG)	2.5 oz ai/a A	401	97.0	60.0	99.0	70.0	99.0	0.0
Breakfree ATZ (5.25 SC)	2.62 lb ai/a A	601	99.0	65.0	99.0	99.0	99.0	3.0
		902	99.0	60.0	99.0	99.0	99.0	3.0
Mean =			98.0	61.3	99.0	91.8	99.0	1.5
8 Resolve (25 SG)	0.22 oz ai/a A	205	90.0	50.0	99.0	97.0	90.0	5.0
Mesotrione (50 WG)	2.2 oz ai/a A	305	97.0	80.0	99.0	99.0	95.0	3.0
Cinch ATZ (5.5 SC)	2.06 lb ai/a A	604	85.0	85.0	99.0	99.0	85.0	5.0
Abundit (3 SL)	0.75 lb ae/a B	1004	90.0	80.0	99.0	99.0	99.0	3.0
AMS - Liquid	0.42 lb ai/a B							
Mean =			90.5	73.8	99.0	98.5	92.3	4.0
9 Resolve (25 SG)	0.25 oz ai/a A	301	95.0	70.0	99.0	99.0	85.0	0.0
Mesotrione (50 WG)	2.5 oz ai/a A	304	85.0	95.0	99.0	99.0	70.0	0.0
Atrazine	1 lb ai/a A	701	85.0	55.0	99.0	99.0	99.0	0.0
Simazine 90 DF (90 WG)	1.5 lb ai/a A	1001	90.0	45.0	99.0	99.0	99.0	0.0
Abundit (3 SL)	0.75 lb ae/a B							
AMS - Liquid	0.42 lb ai/a B							
Mean =			88.8	66.3	99.0	99.0	88.3	0.0
10 Resolve (25 SG)	0.25 oz ai/a A	302	97.0	50.0	99.0	99.0	99.0	0.0
Isoxaflutole (75 SG)	0.5 oz ai/a A	504	95.0	65.0	99.0	99.0	99.0	3.0
Cinch ATZ (5.5 SC)	2.06 lb ai/a A	801	97.0	65.0	99.0	99.0	90.0	0.0
Abundit (3 SL)	0.75 lb ae/a B	1002	97.0	40.0	99.0	99.0	99.0	3.0
AMS - Liquid	0.42 lb ai/a B							
Mean =			96.5	55.0	99.0	99.0	96.8	1.5
11 Resolve (25 SG)	0.3 oz ai/a B	103	0.0	0.0	0.0	0.0	0.0	0.0
Mesotrione (50 WG)	1.25 oz ai/a B	403	40.0	0.0	60.0	60.0	50.0	0.0
Isoxadifen (50 WG)	0.15 oz ai/a B	606	50.0	0.0	50.0	70.0	60.0	0.0
Atrazine	1 lb ai/a B	1006	0.0	0.0	0.0	0.0	0.0	0.0
Abundit (3 SL)	0.75 lb ae/a B							
AMS - Liquid	0.42 lb ai/a B							
Mean =			22.5	0.0	27.5	32.5	27.5	0.0

# Purdue University

Pest Type	W Weed					
Pest Code	SETFA	AMBTR	CHEAL	ABUTH	IPOHE	
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Abutilon theop>	Ipomoea heder>	
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Velvetleaf	Ivyleaf mornin>	
Crop Code						ZEAMX
BBCH Scale						BCOR
Crop Scientific Name						Zea mays
Crop Name						Corn
Rating Date	May-29-2013	May-29-2013	May-29-2013	May-29-2013	May-29-2013	May-29-2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYCHL
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Crop Stage Majority	V2	V2	V2	V2	V2	V2
Pest Stage Majority	2.5 IN	3 IN	0.5 IN	0.5 IN	1 IN	
Pest Density, Unit	20 FT2	6 YD2	2 YD2	3 YD2	1 YD2	
Assessed By	MW	MW	MW	MW	MW	MW
Days After First/Last Applic.	20 20	20 20	20 20	20 20	20 20	20 20
Plant-Eval Interval	20 DP-1	20 DP-1				
Days After Emergence	11 DE-1	11 DE-1				
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	1	2	3	4
12 Lumax (3.95 SC)	2.96 lb ai/a A	106	95.0	50.0	99.0	99.0
Abundit (3 SL)	0.75 lb ae/a B	306	99.0	70.0	99.0	99.0
AMS - Liquid	0.42 lb ai/a B	706	99.0	50.0	99.0	99.0
		903	97.0	50.0	99.0	99.0
		Mean =	97.5	55.0	99.0	99.0
13 Corvus (2.63 SC)	0.115 lb ai/a A	203	95.0	50.0	99.0	99.0
Atrazine	1 lb ai/a A	506	99.0	75.0	99.0	99.0
Abundit (3 SL)	0.75 lb ae/a B	603	95.0	50.0	99.0	99.0
AMS - Liquid	0.42 lb ai/a B	906	99.0	30.0	99.0	99.0
		Mean =	97.0	51.3	99.0	99.0
14 Lexar (3.7 SC)	3.24 lb ai/a A	206	95.0	60.0	99.0	99.0
Abundit (3 SL)	0.75 lb ae/a B	406	99.0	80.0	99.0	99.0
AMS - Liquid	0.42 lb ai/a B	803	95.0	70.0	99.0	99.0
		806	99.0	60.0	99.0	99.0
		Mean =	97.0	67.5	99.0	99.0
15 Resolve (25 SG)	0.25 oz ai/a A	303	95.0	40.0	99.0	99.0
Isoxaflutole (75 SG)	0.5 oz ai/a A	503	97.0	30.0	99.0	99.0
Atrazine	1 lb ai/a A	703	95.0	70.0	99.0	99.0
Resolve (25 SG)	0.3 oz ai/a B	1003	95.0	50.0	99.0	99.0
Mesotrione (50 WG)	1.25 oz ai/a B					
Isoxadifen (50 WG)	0.15 oz ai/a B					
Abundit (3 SL)	0.75 lb ae/a B					
AMS - Liquid	0.42 lb ai/a B					
		Mean =	95.5	47.5	99.0	99.0
						82.3
						1.3

# Purdue University

Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code		SETFA	AMBTR	ABUTH	IPOHE	CHEAL		
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Abutilon theop>	Ipomoea heder>	Chenopodium ai>		
Pest Name		Giant foxtail	Giant ragweed	Velvetleaf	Ivyleaf mornin>	Common lambsqu>		
Crop Code	ZEAMX							
BBCB Scale	BCOR							
Crop Scientific Name	Zea mays							
Crop Name	Corn							
Rating Date	May-29-2013	Jun-3-2013	Jun-3-2013	Jun-3-2013	Jun-3-2013	Jun-3-2013		
Rating Type	PHYLCU	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Crop Stage Majority	V2	V4	V4	V4	V4	V4		
Pest Stage Majority		3 IN	5 IN	2 IN	2 IN	2 IN		
Pest Density, Unit		10 FT2	5 YD2	1 YD2	2 YD2	2 FT2		
Assessed By	MW	MW	MW	MW	MW	MW		
Days After First/Last Applic.	20 20	25 25	25 25	25 25	25 25	25 25		
Plant-Eval Interval	20 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1		
Days After Emergence	11 DE-1	16 DE-1	16 DE-1	16 DE-1	16 DE-1	16 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	7	8	9	10	11	12
1 Untreated Check		101	0.0	0.0	0.0	0.0	0.0	0.0
		405	0.0	0.0	0.0	0.0	0.0	0.0
		702	0.0	0.0	0.0	0.0	0.0	0.0
		805	0.0	0.0	0.0	0.0	0.0	0.0
		Mean =	0.0	0.0	0.0	0.0	0.0	0.0
2 Resolve (25 SG)	0.25 oz ai/a A	102	0.0	80.0	95.0	99.0	95.0	99.0
Mesotrione (50 WG)	2.5 oz ai/a A	404	0.0	90.0	90.0	99.0	95.0	99.0
Atrazine	1 lb ai/a A	602	0.0	95.0	70.0	99.0	90.0	99.0
Abundit (3 SL)	0.75 lb ae/a B	804	0.0	70.0	95.0	99.0	90.0	99.0
AMS - Liquid	0.42 lb ai/a B							
		Mean =	0.0	83.8	87.5	99.0	92.5	99.0
3 Resolve (25 SG)	0.25 oz ai/a A	104	0.0	60.0	95.0	99.0	95.0	99.0
Mesotrione (50 WG)	2.5 oz ai/a A	502	0.0	80.0	85.0	99.0	85.0	99.0
Atrazine	1 lb ai/a A	704	0.0	60.0	85.0	99.0	99.0	99.0
Resolve (25 SG)	0.3 oz ai/a B	901	0.0	99.0	30.0	99.0	99.0	99.0
Mesotrione (50 WG)	1.25 oz ai/a B							
Isoxadifen (50 WG)	0.15 oz ai/a B							
Abundit (3 SL)	0.75 lb ae/a B							
AMS - Liquid	0.42 lb ai/a B							
		Mean =	0.0	74.8	73.8	99.0	94.5	99.0
4 Resolve (25 SG)	0.25 oz ai/a A	105	0.0	70.0	85.0	99.0	85.0	99.0
Mesotrione (50 WG)	2.5 oz ai/a A	402	0.0	95.0	85.0	99.0	99.0	99.0
Cinch ATZ (5.5 SC)	2.06 lb ai/a A	605	0.0	85.0	85.0	99.0	90.0	99.0
Abundit (3 SL)	0.75 lb ae/a B	904	1.0	80.0	85.0	99.0	70.0	99.0
AMS - Liquid	0.42 lb ai/a B							
		Mean =	0.3	82.5	85.0	99.0	86.0	99.0
5 Resolve (25 SG)	0.25 oz ai/a A	201	0.0	97.0	80.0	99.0	85.0	99.0
Mesotrione (50 WG)	2.5 oz ai/a A	505	0.0	95.0	90.0	99.0	95.0	99.0
Cinch ATZ (5.5 SC)	2.75 lb ai/a A	705	0.0	97.0	75.0	99.0	99.0	99.0
		905	0.0	99.0	70.0	99.0	85.0	99.0
		Mean =	0.0	97.0	78.8	99.0	91.0	99.0

# Purdue University

Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code		SETFA	AMBTR	ABUTH	IPOHE	CHEAL		
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Abutilon theop>	Ipomoea heder>	Chenopodium al>		
Pest Name		Giant foxtail	Giant ragweed	Velvetleaf	Ivyleaf mornin>	Common lambsqu>		
Crop Code	ZEAMX							
BBCH Scale	BCOR							
Crop Scientific Name	Zea mays							
Crop Name	Corn							
Rating Date	May-29-2013	Jun-3-2013	Jun-3-2013	Jun-3-2013	Jun-3-2013	Jun-3-2013		
Rating Type	PHYLCU	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Crop Stage Majority	V2	V4	V4	V4	V4	V4		
Pest Stage Majority		3 IN	5 IN	2 IN	2 IN	2 IN		
Pest Density, Unit		10 FT2	5 YD2	1 YD2	2 YD2	2 FT2		
Assessed By	MW	MW	MW	MW	MW	MW		
Days After First/Last Applic.	20 20	25 25	25 25	25 25	25 25	25 25		
Plant-Eval Interval	20 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1		
Days After Emergence	11 DE-1	16 DE-1	16 DE-1	16 DE-1	16 DE-1	16 DE-1		
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code Plot	7	8	9	10	11	12
6 Resolve (25 SG)	0.25 oz ai/a A	202	0.0	99.0	90.0	99.0	95.0	99.0
Mesotrione (50 WG)	2.5 oz ai/a A	501	1.0	97.0	95.0	95.0	95.0	99.0
Breakfree ATZ (5.25 SC)	1.97 lb ai/a A	802	0.0	97.0	95.0	99.0	99.0	99.0
Abundit (3 SL)	0.75 lb ae/a B	1005	0.0	99.0	95.0	99.0	95.0	80.0
AMS - Liquid	0.42 lb ai/a B							
Mean =			0.3	98.0	93.8	98.0	96.0	94.3
7 Resolve (25 SG)	0.25 oz ai/a A	204	0.0	97.0	85.0	99.0	85.0	99.0
Mesotrione (50 WG)	2.5 oz ai/a A	401	0.0	95.0	60.0	99.0	99.0	99.0
Breakfree ATZ (5.25 SC)	2.62 lb ai/a A	601	0.0	97.0	90.0	99.0	99.0	99.0
		902	0.0	99.0	90.0	99.0	95.0	99.0
Mean =			0.0	97.0	81.3	99.0	94.5	99.0
8 Resolve (25 SG)	0.22 oz ai/a A	205	0.0	90.0	70.0	99.0	75.0	99.0
Mesotrione (50 WG)	2.2 oz ai/a A	305	0.0	95.0	90.0	99.0	90.0	99.0
Cinch ATZ (5.5 SC)	2.06 lb ai/a A	604	0.0	80.0	90.0	99.0	90.0	99.0
Abundit (3 SL)	0.75 lb ae/a B	1004	0.0	90.0	90.0	99.0	85.0	80.0
AMS - Liquid	0.42 lb ai/a B							
Mean =			0.0	88.8	85.0	99.0	85.0	94.3
9 Resolve (25 SG)	0.25 oz ai/a A	301	0.0	95.0	90.0	99.0	85.0	99.0
Mesotrione (50 WG)	2.5 oz ai/a A	304	0.0	85.0	95.0	99.0	85.0	99.0
Atrazine	1 lb ai/a A	701	0.0	85.0	85.0	99.0	99.0	99.0
Simazine 90 DF (90 WG)	1.5 lb ai/a A	1001	0.0	90.0	90.0	99.0	90.0	80.0
Abundit (3 SL)	0.75 lb ae/a B							
AMS - Liquid	0.42 lb ai/a B							
Mean =			0.0	88.8	90.0	99.0	89.8	94.3
10 Resolve (25 SG)	0.25 oz ai/a A	302	0.0	97.0	70.0	99.0	90.0	99.0
Isoxaflutole (75 SG)	0.5 oz ai/a A	504	0.0	95.0	85.0	99.0	90.0	99.0
Cinch ATZ (5.5 SC)	2.06 lb ai/a A	801	0.0	95.0	85.0	99.0	99.0	99.0
Abundit (3 SL)	0.75 lb ae/a B	1002	0.0	97.0	40.0	99.0	70.0	80.0
AMS - Liquid	0.42 lb ai/a B							
Mean =			0.0	96.0	70.0	99.0	87.3	94.3
11 Resolve (25 SG)	0.3 oz ai/a B	103	0.0	0.0	0.0	0.0	0.0	0.0
Mesotrione (50 WG)	1.25 oz ai/a B	403	0.0	60.0	0.0	0.0	0.0	0.0
Isoxadifen (50 WG)	0.15 oz ai/a B	606	0.0	70.0	0.0	50.0	60.0	50.0
Atrazine	1 lb ai/a B	1006	0.0	0.0	0.0	0.0	0.0	0.0
Abundit (3 SL)	0.75 lb ae/a B							
AMS - Liquid	0.42 lb ai/a B							
Mean =			0.0	32.5	0.0	12.5	15.0	12.5

# Purdue University

Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	ABUTH	IPOHE	CHEAL
Pest Scientific Name		Setaria faberi	Ambrosia trifida	Abutilon theophrasti	Ipomoea hederacea	Chenopodium album
Pest Name		Giant foxtail	Giant ragweed	Velvetleaf	Ivyleaf morning	Common lambsquarters
Crop Code	ZEAMX					
BBCH Scale	BCOR					
Crop Scientific Name	Zea mays					
Crop Name	Corn					
Rating Date	May-29-2013	Jun-3-2013	Jun-3-2013	Jun-3-2013	Jun-3-2013	Jun-3-2013
Rating Type	PHYLCU	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Crop Stage Majority	V2	V4	V4	V4	V4	V4
Pest Stage Majority		3 IN	5 IN	2 IN	2 IN	2 IN
Pest Density, Unit		10 FT2	5 YD2	1 YD2	2 YD2	2 FT2
Assessed By	MW	MW	MW	MW	MW	MW
Days After First/Last Applic.	20 20	25 25	25 25	25 25	25 25	25 25
Plant-Eval Interval	20 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1
Days After Emergence	11 DE-1	16 DE-1	16 DE-1	16 DE-1	16 DE-1	16 DE-1
Trt Treatment	Rate	Appl				
No. Name	Rate Unit	Code Plot	7	8	9	10
12 Lumax (3.95 SC)	2.96 lb ai/a A	106	0.0	95.0	85.0	99.0
Abundit (3 SL)	0.75 lb ae/a B	306	1.0	99.0	90.0	99.0
AMS - Liquid	0.42 lb ai/a B	706	1.0	99.0	90.0	99.0
		903	0.0	99.0	85.0	99.0
		Mean =	0.5	98.0	87.5	99.0
13 Corvus (2.63 SC)	0.115 lb ai/a A	203	0.0	97.0	70.0	99.0
Atrazine	1 lb ai/a A	506	0.0	99.0	90.0	99.0
Abundit (3 SL)	0.75 lb ae/a B	603	0.0	99.0	85.0	99.0
AMS - Liquid	0.42 lb ai/a B	906	0.0	99.0	60.0	99.0
		Mean =	0.0	98.5	76.3	99.0
14 Lexar (3.7 SC)	3.24 lb ai/a A	206	0.0	97.0	95.0	99.0
Abundit (3 SL)	0.75 lb ae/a B	406	0.0	97.0	90.0	99.0
AMS - Liquid	0.42 lb ai/a B	803	1.0	95.0	95.0	99.0
		806	0.0	99.0	90.0	99.0
		Mean =	0.3	97.0	92.5	99.0
15 Resolve (25 SG)	0.25 oz ai/a A	303	0.0	95.0	60.0	99.0
Isoxaflutole (75 SG)	0.5 oz ai/a A	503	0.0	95.0	50.0	99.0
Atrazine	1 lb ai/a A	703	0.0	97.0	90.0	99.0
Resolve (25 SG)	0.3 oz ai/a B	1003	0.0	95.0	60.0	99.0
Mesotrione (50 WG)	1.25 oz ai/a B					
Isoxadifen (50 WG)	0.15 oz ai/a B					
Abundit (3 SL)	0.75 lb ae/a B					
AMS - Liquid	0.42 lb ai/a B					
		Mean =	0.0	95.5	65.0	99.0

# Purdue University

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPHOE
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea hедера>
Pest Name		Giant foxtail	Giant ragweed	Ivyleaf mornin>
Crop Code	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	Jun-3-2013	Jul-2-2013	Jul-2-2013	Jul-2-2013
Rating Type	PHYCHL	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Crop Stage Majority	V4			
Pest Stage Majority		24-48 IN	36-71 IN	24-36 IN
Pest Density, Unit		9 FT2	8 YD2	3 YD2
Assessed By	MW	BM/GT	BM/GT	BM/GT
Days After First/Last Applic.	25 25	54 28	54 28	54 28
Plant-Eval Interval	25 DP-1	54 DP-1	54 DP-1	54 DP-1
Days After Emergence	16 DE-1	45 DE-1	45 DE-1	45 DE-1
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	13	14
1 Untreated Check		101	0.0	0.0
		405	0.0	0.0
		702	0.0	0.0
		805	0.0	0.0
		Mean =	0.0	0.0
2 Resolve (25 SG)	0.25 oz ai/a A	102	5.0	60.0
Mesotrione (50 WG)	2.5 oz ai/a A	404	0.0	75.0
Atrazine	1 lb ai/a A	602	0.0	97.0
Abundit (3 SL)	0.75 lb ae/a B	804	0.0	60.0
AMS - Liquid	0.42 lb ai/a B			
		Mean =	1.3	73.0
3 Resolve (25 SG)	0.25 oz ai/a A	104	0.0	75.0
Mesotrione (50 WG)	2.5 oz ai/a A	502	7.0	90.0
Atrazine	1 lb ai/a A	704	0.0	75.0
Resolve (25 SG)	0.3 oz ai/a B	901	0.0	97.0
Mesotrione (50 WG)	1.25 oz ai/a B			
Isoxadifen (50 WG)	0.15 oz ai/a B			
Abundit (3 SL)	0.75 lb ae/a B			
AMS - Liquid	0.42 lb ai/a B			
		Mean =	1.8	84.3
4 Resolve (25 SG)	0.25 oz ai/a A	105	0.0	95.0
Mesotrione (50 WG)	2.5 oz ai/a A	402	0.0	97.0
Cinch ATZ (5.5 SC)	2.06 lb ai/a A	605	3.0	97.0
Abundit (3 SL)	0.75 lb ae/a B	904	0.0	97.0
AMS - Liquid	0.42 lb ai/a B			
		Mean =	0.8	96.5
5 Resolve (25 SG)	0.25 oz ai/a A	201	0.0	99.0
Mesotrione (50 WG)	2.5 oz ai/a A	505	0.0	95.0
Cinch ATZ (5.5 SC)	2.75 lb ai/a A	705	0.0	95.0
		905	3.0	97.0
		Mean =	0.8	96.5

# Purdue University

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOHE
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea hedera>
Pest Name		Giant foxtail	Giant ragweed	Ivyleaf mornin>
Crop Code	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	Jun-3-2013	Jul-2-2013	Jul-2-2013	Jul-2-2013
Rating Type	PHYCHL	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Crop Stage Majority	V4			
Pest Stage Majority		24-48 IN	36-71 IN	24-36 IN
Pest Density, Unit		9 FT2	8 YD2	3 YD2
Assessed By	MW	BM/GT	BM/GT	BM/GT
Days After First/Last Applic.	25 25	54 28	54 28	54 28
Plant-Eval Interval	25 DP-1	54 DP-1	54 DP-1	54 DP-1
Days After Emergence	16 DE-1	45 DE-1	45 DE-1	45 DE-1
Trt Treatment	Rate	Appl		
No. Name	Rate Unit	Code Plot	13	14
			15	16
6 Resolve (25 SG)	0.25 oz ai/a A	202	0.0	99.0
Mesotrione (50 WG)	2.5 oz ai/a A	501	5.0	97.0
Breakfree ATZ (5.25 SC)	1.97 lb ai/a A	802	0.0	97.0
Abundit (3 SL)	0.75 lb ae/a B	1005	0.0	95.0
AMS - Liquid	0.42 lb ai/a B			
	Mean =		1.3	97.0
7 Resolve (25 SG)	0.25 oz ai/a A	204	0.0	95.0
Mesotrione (50 WG)	2.5 oz ai/a A	401	7.0	85.0
Breakfree ATZ (5.25 SC)	2.62 lb ai/a A	601	5.0	97.0
		902	5.0	97.0
	Mean =		4.3	93.5
8 Resolve (25 SG)	0.22 oz ai/a A	205	5.0	99.0
Mesotrione (50 WG)	2.2 oz ai/a A	305	3.0	99.0
Cinch ATZ (5.5 SC)	2.06 lb ai/a A	604	3.0	97.0
Abundit (3 SL)	0.75 lb ae/a B	1004	10.0	97.0
AMS - Liquid	0.42 lb ai/a B			
	Mean =		5.3	98.0
9 Resolve (25 SG)	0.25 oz ai/a A	301	0.0	90.0
Mesotrione (50 WG)	2.5 oz ai/a A	304	0.0	50.0
Atrazine	1 lb ai/a A	701	0.0	85.0
Simazine 90 DF (90 WG)	1.5 lb ai/a A	1001	5.0	85.0
Abundit (3 SL)	0.75 lb ae/a B			
AMS - Liquid	0.42 lb ai/a B			
	Mean =		1.3	77.5
10 Resolve (25 SG)	0.25 oz ai/a A	302	0.0	99.0
Isoxaflutole (75 SG)	0.5 oz ai/a A	504	5.0	99.0
Cinch ATZ (5.5 SC)	2.06 lb ai/a A	801	7.0	99.0
Abundit (3 SL)	0.75 lb ae/a B	1002	7.0	95.0
AMS - Liquid	0.42 lb ai/a B			
	Mean =		4.8	98.0
11 Resolve (25 SG)	0.3 oz ai/a B	103	0.0	80.0
Mesotrione (50 WG)	1.25 oz ai/a B	403	5.0	95.0
Isoxadifen (50 WG)	0.15 oz ai/a B	606	3.0	97.0
Atrazine	1 lb ai/a B	1006	0.0	90.0
Abundit (3 SL)	0.75 lb ae/a B			
AMS - Liquid	0.42 lb ai/a B			
	Mean =		2.0	90.5

# Purdue University

Pest Type		W Weed	W Weed	W Weed
Pest Code		SETFA	AMBTR	IPOHE
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Ipomoea hedera>
Pest Name		Giant foxtail	Giant ragweed	Ivyleaf mornin>
Crop Code	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	Jun-3-2013	Jul-2-2013	Jul-2-2013	Jul-2-2013
Rating Type	PHYCHL	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Crop Stage Majority	V4			
Pest Stage Majority		24-48 IN	36-71 IN	24-36 IN
Pest Density, Unit		9 FT2	8 YD2	3 YD2
Assessed By	MW	BM/GT	BM/GT	BM/GT
Days After First/Last Applic.	25 25	54 28	54 28	54 28
Plant-Eval Interval	25 DP-1	54 DP-1	54 DP-1	54 DP-1
Days After Emergence	16 DE-1	45 DE-1	45 DE-1	45 DE-1
Trt Treatment	Rate Appl			
No. Name	Rate Unit Code Plot	13	14	15
12 Lumax (3.95 SC)	2.96 lb ai/a A 106	3.0	97.0	90.0
Abundit (3 SL)	0.75 lb ae/a B 306	0.0	99.0	97.0
AMS - Liquid	0.42 lb ai/a B 706	0.0	97.0	95.0
	903	0.0	97.0	85.0
	Mean =	0.8	97.5	91.8
13 Corvus (2.63 SC)	0.115 lb ai/a A 203	5.0	95.0	90.0
Atrazine	1 lb ai/a A 506	7.0	99.0	95.0
Abundit (3 SL)	0.75 lb ae/a B 603	5.0	97.0	95.0
AMS - Liquid	0.42 lb ai/a B 906	0.0	99.0	85.0
	Mean =	4.3	97.5	91.3
14 Lexar (3.7 SC)	3.24 lb ai/a A 206	5.0	99.0	97.0
Abundit (3 SL)	0.75 lb ae/a B 406	0.0	99.0	95.0
AMS - Liquid	0.42 lb ai/a B 803	0.0	97.0	95.0
	806	0.0	99.0	97.0
	Mean =	1.3	98.5	96.0
15 Resolve (25 SG)	0.25 oz ai/a A 303	0.0	95.0	90.0
Isoxaflutole (75 SG)	0.5 oz ai/a A 503	0.0	97.0	90.0
Atrazine	1 lb ai/a A 703	0.0	99.0	97.0
Resolve (25 SG)	0.3 oz ai/a B 1003	5.0	97.0	95.0
Mesotrione (50 WG)	1.25 oz ai/a B			
Isoxadifen (50 WG)	0.15 oz ai/a B			
Abundit (3 SL)	0.75 lb ae/a B			
AMS - Liquid	0.42 lb ai/a B			
	Mean =	1.3	97.0	93.0

# Purdue University

## Weed control programs with Instigate

Trial ID: 13S-THP-CTC-03      Protocol ID: 13S-THP-CTC-03  
Location: Throckmorton      Study Director:  
Project ID: USA-13-004      Investigator: Dr. Bill Johnson  
Sponsor Contact: DuPont - Helen Flanigan

### Pest Type

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

### Pest Code

SETFA, Setaria faberi, = US  
AMBTR, Ambrosia trifida, = US  
CHEAL, Chenopodium album, = US  
ABUTH, Abutilon theophrasti, = US  
IPOHE, Ipomoea hederacea, = US

### Crop Code

ZEAMX, BCOR, Zea mays, = US

### Rating Type

CONTRO = control / burndown or knockdown  
PHYCHL = phytotoxicity - chlorosis  
PHYLCU = phytotoxicity - leaf curl

### Rating Unit

% = percent

FT2 = per square foot

YD2 = per square yard

### Plant-Eval Interval

20 DP-1 = 1 ZEAMD May-9-2013

25 DP-1 = 1 ZEAMD May-9-2013

54 DP-1 = 1 ZEAMD May-9-2013

# Purdue University

## Weed control programs with Instigate

Trial ID: 13S-THP-CTC-03      Protocol ID: 13S-THP-CTC-03  
 Location: Throckmorton      Study Director:  
 Project ID: USA-13-004      Investigator: Dr. Bill Johnson  
 Sponsor Contact: DuPont - Helen Flanigan

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	SETFA	AMBTR	CHEAL	ABUTH	IPHOE				
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Abutilon theop>	Ipomoea heder>				
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Velvetleaf	Ivyleaf mornin>				
Crop Code						ZEAMX	ZEAMX		
BBCH Scale						BCOR	BCOR		
Crop Scientific Name						Zea mays	Zea mays		
Crop Name						Com	Com		
Rating Date	May-29-2013	May-29-2013	May-29-2013	May-29-2013	May-29-2013	May-29-2013	May-29-2013		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYCHL	PHYLCU		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Crop Stage Majority	V2	V2	V2	V2	V2	V2	V2		
Pest Stage Majority	2.5 IN	3 IN	0.5 IN	0.5 IN	1 IN				
Pest Density, Unit	20 FT2	6 YD2	2 YD2	3 YD2	1 YD2				
Assessed By	MW	MW	MW	MW	MW	MW	MW		
Days After First/Last Applic.	20 20	20 20	20 20	20 20	20 20	20 20	20 20		
Plant-Eval Interval	20 DP-1	20 DP-1	20 DP-1	20 DP-1	20 DP-1	20 DP-1	20 DP-1		
Days After Emergence	11 DE-1	11 DE-1	11 DE-1	11 DE-1	11 DE-1	11 DE-1	11 DE-1		
Trt Treatment	Rate	Appl							
No. Name	Rate Unit	Code	1	2	3	4	5	6	7
1 Untreated Check			0.0 c	0.0 b	0.0 c	0.0 c	0.0 c	0.0 a	0.0 a
2 Resolve (25 SG)	0.25 oz ai/a A		88.8 a	68.8 a	99.0 a	99.0 a	94.3 a	1.5 a	0.0 a
Mesotrione (50 WG)	2.5 oz ai/a A								
Atrazine	1 lb ai/a A								
Abundit (3 SL)	0.75 lb ae/a B								
AMS - Liquid	0.42 lb ai/a B								
3 Resolve (25 SG)	0.25 oz ai/a A		81.0 a	57.5 a	99.0 a	99.0 a	99.0 a	2.0 a	0.0 a
Mesotrione (50 WG)	2.5 oz ai/a A								
Atrazine	1 lb ai/a A								
Resolve (25 SG)	0.3 oz ai/a B								
Mesotrione (50 WG)	1.25 oz ai/a B								
Isoxadifen (50 WG)	0.15 oz ai/a B								
Abundit (3 SL)	0.75 lb ae/a B								
AMS - Liquid	0.42 lb ai/a B								
4 Resolve (25 SG)	0.25 oz ai/a A		84.3 a	56.3 a	99.0 a	99.0 a	88.3 a	2.3 a	0.3 a
Mesotrione (50 WG)	2.5 oz ai/a A								
Cinch ATZ (5.5 SC)	2.06 lb ai/a A								
Abundit (3 SL)	0.75 lb ae/a B								
AMS - Liquid	0.42 lb ai/a B								
5 Resolve (25 SG)	0.25 oz ai/a A		98.0 a	42.5 a	99.0 a	99.0 a	99.0 a	4.0 a	0.0 a
Mesotrione (50 WG)	2.5 oz ai/a A								
Cinch ATZ (5.5 SC)	2.75 lb ai/a A								
6 Resolve (25 SG)	0.25 oz ai/a A		97.5 a	76.3 a	99.0 a	99.0 a	96.8 a	2.0 a	0.3 a
Mesotrione (50 WG)	2.5 oz ai/a A								
Breakfree ATZ (5.25 SC)	1.97 lb ai/a A								
Abundit (3 SL)	0.75 lb ae/a B								
AMS - Liquid	0.42 lb ai/a B								
7 Resolve (25 SG)	0.25 oz ai/a A		98.0 a	61.3 a	99.0 a	91.8 a	99.0 a	1.5 a	0.0 a
Mesotrione (50 WG)	2.5 oz ai/a A								
Breakfree ATZ (5.25 SC)	2.62 lb ai/a A								

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

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	SETFA	AMBTR	ABUTH	IPOHE	CHEAL		SETFA			
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Abutilon theop>	Ipomoea heder>	Chenopodium al>		Setaria faberi			
Pest Name	Giant foxtail	Giant ragweed	Velvetleaf	Ivyleaf mornin>	Common lambsqu>		Giant foxtail			
Crop Code						ZEAMX				
BBCH Scale						BCOR				
Crop Scientific Name						Zea mays				
Crop Name						Corn				
Rating Date	Jun-3-2013	Jun-3-2013	Jun-3-2013	Jun-3-2013	Jun-3-2013	Jun-3-2013	Jul-2-2013			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYCHL	CONTRO			
Rating Unit	%	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1	1			
Crop Stage Majority	V4	V4	V4	V4	V4	V4				
Pest Stage Majority	3 IN	5 IN	2 IN	2 IN	2 IN		24-48 IN			
Pest Density, Unit	10 FT2	5 YD2	1 YD2	2 YD2	2 FT2		9 FT2			
Assessed By	MW	MW	MW	MW	MW	MW	BM/GT			
Days After First/Last Applic.	25 25	25 25	25 25	25 25	25 25	25 25	54 28			
Plant-Eval Interval	25 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1	25 DP-1	54 DP-1			
Days After Emergence	16 DE-1	16 DE-1	16 DE-1	16 DE-1	16 DE-1	16 DE-1	45 DE-1			
Trt Treatment	Rate	Appl								
No. Name	Rate	Unit	Code	8	9	10	11	12	13	14
15 Resolve (25 SG)	0.25 oz ai/a	A		95.5 a	65.0 a	99.0 a	74.5 a	94.3 a	1.3 a	97.0 a
Isoxaflutole (75 SG)	0.5 oz ai/a	A								
Atrazine	1 lb ai/a	A								
Resolve (25 SG)	0.3 oz ai/a	B								
Mesotrione (50 WG)	1.25 oz ai/a	B								
Isoxadifen (50 WG)	0.15 oz ai/a	B								
Abundit (3 SL)	0.75 lb ae/a	B								
AMS - Liquid	0.42 lb ai/a	B								
LSD (P=.05)				16.82	17.61	9.24	17.57	11.01	3.67	11.10
Standard Deviation				11.77	12.32	6.46	12.30	7.71	2.57	7.76
CV				14.38	17.33	7.47	15.56	9.06	125.16	8.99
Bartlett's X2				97.141	31.84	10.913	47.516	6.287	5.147	75.732
P(Bartlett's X2)				0.001*	0.001*	0.001*	0.001*	0.279	0.972	0.001*
Replicate F				1.056	1.635	1.057	3.028	4.123	0.570	0.625
Replicate Prob(F)				0.3782	0.1956	0.3775	0.0398	0.0119	0.6381	0.6030
Treatment F				23.014	23.714	102.355	23.284	69.652	1.726	42.119
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0864	0.0001

# Purdue University

Pest Type		W Weed	W Weed
Pest Code		AMBTR	IPOHE
Pest Scientific Name		Ambrosia trifi>	Ipomoea heder>
Pest Name		Giant ragweed	Ivyleaf mornin>
Crop Code			
BBCB Scale			
Crop Scientific Name			
Crop Name			
Rating Date		Jul-2-2013	Jul-2-2013
Rating Type		CONTRO	CONTRO
Rating Unit		%	%
Number of Subsamples		1	1
Crop Stage Majority			
Pest Stage Majority		36-71 IN	24-36 IN
Pest Density, Unit		8 YD2	3 YD2
Assessed By		BM/GT	BM/GT
Days After First/Last Applic.		54 28	54 28
Plant-Eval Interval		54 DP-1	54 DP-1
Days After Emergence		45 DE-1	45 DE-1
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	
1 Untreated Check		15	16
		0.0 c	0.0 b
2 Resolve (25 SG)	0.25 oz ai/a A	92.5 a	99.0 a
Mesotrione (50 WG)	2.5 oz ai/a A		
Atrazine	1 lb ai/a A		
Abundit (3 SL)	0.75 lb ae/a B		
AMS - Liquid	0.42 lb ai/a B		
3 Resolve (25 SG)	0.25 oz ai/a A	92.8 a	99.0 a
Mesotrione (50 WG)	2.5 oz ai/a A		
Atrazine	1 lb ai/a A		
Resolve (25 SG)	0.3 oz ai/a B		
Mesotrione (50 WG)	1.25 oz ai/a B		
Isoxadifen (50 WG)	0.15 oz ai/a B		
Abundit (3 SL)	0.75 lb ae/a B		
AMS - Liquid	0.42 lb ai/a B		
4 Resolve (25 SG)	0.25 oz ai/a A	86.3 a	97.5 a
Mesotrione (50 WG)	2.5 oz ai/a A		
Cinch ATZ (5.5 SC)	2.06 lb ai/a A		
Abundit (3 SL)	0.75 lb ae/a B		
AMS - Liquid	0.42 lb ai/a B		
5 Resolve (25 SG)	0.25 oz ai/a A	67.5 b	99.0 a
Mesotrione (50 WG)	2.5 oz ai/a A		
Cinch ATZ (5.5 SC)	2.75 lb ai/a A		
6 Resolve (25 SG)	0.25 oz ai/a A	93.0 a	97.5 a
Mesotrione (50 WG)	2.5 oz ai/a A		
Breakfree ATZ (5.25 SC)	1.97 lb ai/a A		
Abundit (3 SL)	0.75 lb ae/a B		
AMS - Liquid	0.42 lb ai/a B		
7 Resolve (25 SG)	0.25 oz ai/a A	85.0 a	99.0 a
Mesotrione (50 WG)	2.5 oz ai/a A		
Breakfree ATZ (5.25 SC)	2.62 lb ai/a A		



# Purdue University

Pest Type	W Weed	W Weed
Pest Code	AMBTR	IPOHE
Pest Scientific Name	Ambrosia trifi>	Ipomoea heder>
Pest Name	Giant ragweed	Ivyleaf mornin>
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Rating Date	Jul-2-2013	Jul-2-2013
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Number of Subsamples	1	1
Crop Stage Majority		
Pest Stage Majority	36-71 IN	24-36 IN
Pest Density, Unit	8 YD2	3 YD2
Assessed By	BM/GT	BM/GT
Days After First/Last Applic.	54 28	54 28
Plant-Eval Interval	54 DP-1	54 DP-1
Days After Emergence	45 DE-1	45 DE-1
Trt Treatment	Rate Appl	
No. Name	Rate Unit Code	
	15	16
15 Resolve (25 SG)	0.25 oz ai/a A	93.0 a
Isoxaflutole (75 SG)	0.5 oz ai/a A	
Atrazine	1 lb ai/a A	
Resolve (25 SG)	0.3 oz ai/a B	
Mesotrione (50 WG)	1.25 oz ai/a B	
Isoxadifen (50 WG)	0.15 oz ai/a B	
Abundit (3 SL)	0.75 lb ae/a B	
AMS - Liquid	0.42 lb ai/a B	
LSD (P=.05)	11.07	1.15
Standard Deviation	7.75	0.80
CV	9.31	0.87
Bartlett's X2	31.622	1.878
P(Bartlett's X2)	0.003*	0.598
Replicate F	1.920	0.926
Replicate Prob(F)	0.1409	0.4364
Treatment F	38.563	4011.442
Treatment Prob(F)	0.0001	0.0001

# Purdue University

## Weed control programs with Instigate

Trial ID: 13S-THP-CTC-03      Protocol ID: 13S-THP-CTC-03  
 Location: Throckmorton      Study Director:  
 Project ID: USA-13-004      Investigator: Dr. Bill Johnson  
 Sponsor Contact: DuPont - Helen Flanigan

### Pest Type

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

### Pest Code

SETFA, Setaria faberi, = US  
 AMBTR, Ambrosia trifida, = US  
 CHEAL, Chenopodium album, = US  
 ABUTH, Abutilon theophrasti, = US  
 IPOHE, Ipomoea hederacea, = US

### Crop Code

ZEAMX, BCOR, Zea mays, = US

### Rating Type

CONTRO = control / burndown or knockdown  
 PHYCHL = phytotoxicity - chlorosis  
 PHYLCU = phytotoxicity - leaf curl

### Rating Unit

% = percent

FT2 = per square foot

YD2 = per square yard

### Plant-Eval Interval

20 DP-1 = 1 ZEAMD May-9-2013

25 DP-1 = 1 ZEAMD May-9-2013

54 DP-1 = 1 ZEAMD May-9-2013