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Weed Control with Realm Q.

Trial ID: 11S-THP-CTC-04 Protocol ID: 11S-THP-CTC-104
 Location: Throckmorton Study Director: White/Marquardt
 Project ID: USA-11-111 Investigator: Dr. Bill Johnson
 Sponsor Contact: DuPont - Helen Flanigan

General Trial Information

Study Director: White/Marquardt **Title:** Research Associate
Investigator: Dr. Bill Johnson **Title:** Professor

Discipline: H herbicide
Trial Status: E established
Initiation Date: 4-8-2011

Trial Location

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

Personnel

Study Director: White/Marquardt **Title:** Research Associate

Affiliation: Purdue University
Address: 915 W State Street
Location: West Lafayette, IN, USA

Postal Code: 47907 **E-mail:** mdwhite@purdue.edu
Phone No.: 765-494-0891

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

Affiliation: Purdue University
Address: 915 W State Street
Location: West Lafayette, IN, USA

Postal Code: 47907 **E-mail:** wgi@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: Pioneer 33W84
BBCH Scale: BCOR

Description: HXX LL RR2
Planting Date: 5-12-2011

Planting Method: PLANTD planted
Depth, Unit: 1.5 IN

Rate, Unit: 34000 S/A

Row Spacing, Unit: 30 IN

Soil Moisture: SLIWET slightly wet **Soil Temperature, Unit:** 70.5 F
Emergence Date: 5-22-2011

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:** IPOHE *Ipomoea hederacea*
Common Name: Ivyleaf morningglory

Pest 4 Type: W **Code:** AMARE *Amaranthus retroflexus*
Common Name: Redroot pigweed

Pest 5 Type: W **Code:** ABUTH *Abutilon theophrasti*
Common Name: Velvetleaf

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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 ²	Tillage Type: CONTIL conventional-till
Replications: 4	Study Design: RACOBL 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	C
Application Date:	5-12-2011	6-9-2011	6-17-2011
Time of Day:	10-12:30	11-11:25	7:45-8:10
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	ATPLAN	EAPOWE	LAPOCR
Application Placement:	FOLIAR	FOLIAR	FOLIAR
Applied By:	RT	MW	MW
Air Temperature, Unit:	79 F	76 F	78 F
% Relative Humidity:	43	68	63
Wind Velocity, Unit:	9.5 MPH	8.5 MPH	2.7 MPH
Wind Direction:		SW	SW
Dew Presence (Y/N):	N no	N no	Y yes
Soil Temperature, Unit:	70.5 F	73 F	77 F
Soil Moisture:	SLIWET	DRY	DRY
% Cloud Cover:	40	90	5

Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:		BBCH	BBCH
Stage Majority, Percent:		V3	V5
Stage Minimum, Percent:		V3	V3
Stage Maximum, Percent:		V4	V5
Height, Unit:		8.5 IN	17 IN
Height Minimum, Maximum:		8 9	14 20

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Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Height, Unit:		4 IN	8 IN
Height Minimum, Maximum:		2 6	6 10
Density, Unit:		70 YD2	35 YD2
Pest 2 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Height, Unit:		6 IN	11 IN
Height Minimum, Maximum:		2 8	7 15
Density, Unit:		25 YD2	35 YD2
Pest 3 Code, Type, Scale:	IPOHE W	IPOHE W	IPOHE W
Height, Unit:		2 IN	3 IN
Height Minimum, Maximum:		1 3	2 4
Density, Unit:		10 YD2	3 YD2
Pest 4 Code, Type, Scale:	AMARE W	AMARE W	AMARE W
Height, Unit:		2.5 IN	4.5 IN
Height Minimum, Maximum:		1 4	3 6
Density, Unit:		7 YD2	4 YD2
Pest 5 Code, Type, Scale:	ABUTH W	ABUTH W	ABUTH W
Height, Unit:		3 IN	
Height Minimum, Maximum:		2 4	
Density, Unit:		4 YD2	

Application Equipment

	A	B	C
Appl. Equipment:	CO2 BKPK	CO2 FORD	CO2 FORD
Equipment Type:	SPRBAC	SPTRMO	SPTRMO
Operation Pressure, Unit:	17 PSI		
Nozzle Type:	FLAT FAN	FLAT FAN	FLAT FAN
Nozzle Size:	XR 110 02	XR 100 02	XR 100 02
Nozzle Spacing, Unit:	15 IN	20 IN	20 IN
Nozzles/Row:	8	6	6
Boom Length, Unit:	10 FT	10 FT	10 FT
Boom Height, Unit:	18 IN	20 IN	20 IN
Ground Speed, Unit:	3 MPH	2.1 MPH	2.1 MPH
Carrier:	H2O	MEIGS	MEIGS
Water Hardness (ppm CaCO3):	150		
Spray Volume, Unit:	15 gal/ac	20 gal/ac	20 gal/ac
Mix Size, Unit:	1.8 liters	2.5 liters	2.5 liters
Propellant:	CO2	CO2	CO2
Tank Mix (Y/N):	N no		

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Weed Control with Realm Q.

Trial ID: 11S-THP-CTC-04 Protocol ID: 11S-THP-CTC-104
 Location: Throckmorton Study Director: White/Marquardt
 Project ID: USA-11-111 Investigator: Dr. Bill Johnson
 Sponsor Contact: DuPont - Helen Flanigan

Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code		SETFA	AMBTR	AMARE	IPOHE	CHEAL	ABUTH				
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Amaranthus ret>	Ipomoea heder>	Chenopodium al>	Abutilon theop>				
Pest Name		Giant foxtail	Giant ragweed	Redroot pigweed	Ivyleaf mornin>	Common lambsqu>	Velvetleaf				
Crop Code		ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX			
BBCH Scale		BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR			
Crop Scientific Name		Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays			
Crop Name		Corn	Corn	Corn	Corn	Corn	Corn	Corn			
Description		8-9 IN	8-9 IN	8-9 IN	8-9 IN	8-9 IN	8-9 IN	8-9 IN			
Rating Date		5-24-2011	6-9-2011	6-9-2011	6-9-2011	6-9-2011	6-9-2011	6-16-2011			
Rating Type		PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN			
Rating Unit		%	%	%	%	%	%	%			
Number of Subsamples		1	1	1	1	1	1	1			
Crop Stage Majority		V1	V3	V3	V3	V3	V3	V5			
Pest Stage Majority			4 IN	6 IN	2.5 IN	2 IN	3 IN				
Pest Density, Unit			70 YD2	25 YD2	7 YD2	10 YD2	- YD2	4 YD2			
Assessed By		MW	MW	MW	MW	MW	MW	PM/JS			
Days After First/Last Applic.		12 12	28 28	28 28	28 28	28 28	28 28	28 28 35 7			
Trt-Eval Interval		12 DA-A									
Plant-Eval Interval		12 DP-1	28 DP-1	28 DP-1	28 DP-1	28 DP-1	28 DP-1	35 DP-1			
Days After Emergence		2 DE-1	18 DE-1	18 DE-1	18 DE-1	18 DE-1	18 DE-1	25 DE-1			
Trt Treatment	Rate	Appl									
No. Name	Rate	Unit	Code	1	2	3	4	5	6	7	8
1 Untreated Check				0.0 a	0.0 b	0.0 d	0.0 b	0.0 c	0.0 b	0.0 c	0.0 c
2 Resolve (25 SG)	0.3 oz ai/a	B		0.0 a	10.0 b	7.5 d	0.0 b	0.0 c	4.7 b	0.0 c	0.0 c
Isoxadifen (50 WG)	0.15 oz ai/a	B									
Mesotrione (50 WG)	1.25 oz ai/a	B									
COC	1 % v/v	B									
AMS - Liquid	2 lb ai/a	B									
Abundit (3 SL)	0.75 lb ae/a	C									
AMS - Liquid	2 lb ai/a	C									
3 Resolve (25 SG)	0.3 oz ai/a	B		0.0 a	0.0 b	0.0 d	0.0 b	0.0 c	24.8 b	24.8 c	10.5 a
Isoxadifen (50 WG)	0.15 oz ai/a	B									
Mesotrione (50 WG)	1.25 oz ai/a	B									
Abundit (3 SL)	0.75 lb ae/a	B									
AMS - Liquid	2 lb ai/a	B									
4 Resolve (25 SG)	0.3 oz ai/a	B		0.0 a	0.0 b	0.0 d	0.1 b	0.0 c	4.6 b	0.0 c	5.0 abc
Isoxadifen (50 WG)	0.15 oz ai/a	B									
Mesotrione (50 WG)	1.25 oz ai/a	B									
Abundit (3 SL)	0.75 lb ae/a	B									
Atrazine	0.5 lb ai/a	B									
AMS - Liquid	2 lb ai/a	B									
5 Resolve (25 SG)	0.3 oz ai/a	B		0.0 a	0.0 b	0.0 d	0.0 b	0.0 c	4.3 b	0.0 c	2.0 bc
Isoxadifen (50 WG)	0.15 oz ai/a	B									
Mesotrione (50 WG)	1.25 oz ai/a	B									
Atrazine	0.5 lb ai/a	B									
COC	1 % v/v	B									
AMS - Liquid	2 lb ai/a	B									
Abundit (3 SL)	0.75 lb ae/a	C									
AMS - Liquid	2 lb ai/a	C									

Means followed by same letter do not significantly differ (P=0.05, Student-Newman-Keuls)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

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Pest Type Pest Code Pest Scientific Name		W Weed SETFA Setaria faberi	W Weed AMBTR Ambrosia trif>	W Weed AMARE Amaranthus ret>	W Weed IPOHE Ipomoea heder>	W Weed CHEAL Chenopodium al>	W Weed ABUTH Abutilon theop>					
Pest Name		Giant foxtail	Giant ragweed	Redroot pigweed	Ivyleaf mornin>	Common lambsqu>	Velvetleaf					
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX				
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR				
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays				
Crop Name Description	Corn	Corn 8-9 IN	Corn 8-9 IN	Corn 8-9 IN	Corn 8-9 IN	Corn 8-9 IN	Corn 8-9 IN	Corn				
Rating Date	5-24-2011	6-9-2011	6-9-2011	6-9-2011	6-9-2011	6-9-2011	6-9-2011	6-16-2011				
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN				
Rating Unit	%	%	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1	1	1				
Crop Stage Majority	V1	V3	V3	V3	V3	V3	V3	V5				
Pest Stage Majority		4 IN	6 IN	2.5 IN	2 IN		3 IN					
Pest Density, Unit Assessed By	MW	70 YD2 MW	25 YD2 MW	7 YD2 MW	10 YD2 MW	- YD2 MW	4 YD2 MW	PM/JS				
Days After First/Last Applic.	12 12	28 28	28 28	28 28	28 28	28 28	28 28	35 7				
Trt-Eval Interval	12 DA-A											
Plant-Eval Interval	12 DP-1	28 DP-1	28 DP-1	28 DP-1	28 DP-1	28 DP-1	28 DP-1	35 DP-1				
Days After Emergence	2 DE-1	18 DE-1	18 DE-1	18 DE-1	18 DE-1	18 DE-1	18 DE-1	25 DE-1				
Trt No.	Treatment Name	Rate	Unit	Appl Code	1	2	3	4	5	6	7	8
6	Cinch ATZ (5.5 SC) Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) COC AMS - Liquid	1.38 lb ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 1 % v/v 2 lb ai/a	A B B B B B	A B B B B B	0.0 a	80.0 a	37.5 c	99.0 a	83.3 ab	99.0 a	44.8 bc	3.0 bc
7	Cinch ATZ (5.5 SC) Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) Abundit (3 SL) AMS - Liquid	1.38 lb ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 0.75 lb ae/a 2 lb ai/a	A B B B B B	A B B B B B	0.0 a	92.5 a	53.8 bc	99.0 a	84.5 ab	99.0 a	91.8 a	2.0 bc
8	Resolve (25 SG) Isoxaflutole (75 SG) Atrazine Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) COC AMS - Liquid	0.25 oz ai/a 0.5 oz ai/a 1 lb ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 1 % v/v 2 lb ai/a	A A A B B B B B	A A A B B B B B	0.0 a	88.8 a	85.0 a	99.0 a	79.5 ab	99.0 a	99.0 a	8.0 ab
9	Resolve (25 SG) Isoxaflutole (75 SG) Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) Atrazine COC AMS - Liquid	0.25 oz ai/a 0.5 oz ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 0.5 lb ai/a 1 % v/v 2 lb ai/a	A A B B B B B B	A A B B B B B B	0.0 a	76.3 a	58.8 bc	96.8 a	54.8 b	99.0 a	96.8 a	2.3 bc
10	Resolve (25 SG) Isoxaflutole (75 SG) Atrazine Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) Abundit (3 SL) AMS - Liquid	0.25 oz ai/a 0.5 oz ai/a 1 lb ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 0.75 lb ae/a 2 lb ai/a	A A A B B B B B	A A A B B B B B	0.0 a	88.8 a	90.5 a	99.0 a	86.0 ab	99.0 a	99.0 a	1.8 bc

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.

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Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code		SETFA	AMBTR	AMARE	IPOHE	CHEAL	ABUTH					
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Amaranthus ret>	Ipomoea heder>	Chenopodium al>	Abutilon theop>					
Pest Name		Giant foxtail	Giant ragweed	Redroot pigweed	Ivyleaf mornin>	Common lambsqu>	Velvetleaf					
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX				
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR				
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays				
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn	Corn	Corn				
Description		8-9 IN	8-9 IN	8-9 IN	8-9 IN	8-9 IN	8-9 IN					
Rating Date	5-24-2011	6-9-2011	6-9-2011	6-9-2011	6-9-2011	6-9-2011	6-9-2011	6-16-2011				
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN				
Rating Unit	%	%	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1	1	1				
Crop Stage Majority	V1	V3	V3	V3	V3	V3	V3	V5				
Pest Stage Majority		4 IN	6 IN	2.5 IN	2 IN	3 IN	3 IN					
Pest Density, Unit		70 YD2	25 YD2	7 YD2	10 YD2	- YD2	4 YD2					
Assessed By	MW	MW	MW	MW	MW	MW	MW	PM/JS				
Days After First/Last Applic.	12 12	28 28	28 28	28 28	28 28	28 28	28 28	35 7				
Trt-Eval Interval	12 DA-A											
Plant-Eval Interval	12 DP-1	28 DP-1	28 DP-1	28 DP-1	28 DP-1	28 DP-1	28 DP-1	35 DP-1				
Days After Emergence	2 DE-1	18 DE-1	18 DE-1	18 DE-1	18 DE-1	18 DE-1	18 DE-1	25 DE-1				
Trt No.	Treatment Name	Rate	Unit	Appl Code	1	2	3	4	5	6	7	8
11	Resolve (25 SG) Isoxaflutole (75 SG) Atrazine Abundit (3 SL) AMS - Liquid	0.25 oz ai/a 0.5 oz ai/a 1 lb ai/a 0.75 lb ae/a 2 lb ai/a	A A A B B		0.0 a	81.3 a	71.3 ab	99.0 a	79.5 ab	99.0 a	95.5 a	0.0 c
12	Cinch ATZ (5.5 SC) Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) Abundit (3 SL) AMS - Liquid	1.38 lb ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 0.75 lb ae/a 2 lb ai/a	B B B B B B		0.0 a	0.0 b	0.0 d	0.0 b	0.0 c	0.0 b	0.0 c	4.3 bc
13	Cinch ATZ (5.5 SC) Abundit (3 SL) AMS - Liquid	1.38 lb ai/a 0.75 lb ae/a 2 lb ai/a	A B B		0.0 a	87.5 a	53.8 bc	99.0 a	99.0 a	95.5 a	64.8 ab	4.3 bc
14	Cinch ATZ (5.5 SC) Capreno (3.45 SL) Abundit (3 SL) COC AMS - Liquid	1.38 lb ai/a 0.081 lb ai/a 0.75 lb ae/a 1 % v/v 2 lb ai/a	A B B B B		0.0 a	93.0 a	59.8 bc	99.0 a	84.3 ab	96.8 a	60.0 ab	5.5 abc
15	Halex GT (4.39 SC) Atrazine NIS AMS - Liquid	2.2 lb ai/a 0.5 lb ai/a 0.25 % v/v 2 lb ai/a	B B B B		0.0 a	10.0 b	2.5 d	0.0 b	0.0 c	24.8 b	0.0 c	0.5 c
	LSD (P=.05)	0.00			0.00	13.12	19.56	1.68	22.63	25.99	28.55	4.18
	Standard Deviation	0.00			0.00	9.18	13.69	1.18	15.83	18.19	19.98	2.93
	CV	0.0			0.0	19.45	39.47	2.23	36.5	32.12	44.32	89.62
	Bartlett's X2	0.0			0.0	23.932	20.136	0.0	4.452	17.489	18.949	14.542
	P(Bartlett's X2)	.			.	0.004*	0.017*	.	0.616	0.001*	0.004*	0.104
	Replicate F	0.000			0.000	0.679	2.620	0.991	2.556	3.356	1.373	0.233
	Replicate Prob(F)	1.0000			1.0000	0.5695	0.0632	0.4066	0.0687	0.0290	0.2642	0.8726
	Treatment F	0.000			0.000	88.828	25.486	7519.767	29.370	26.322	18.910	4.364
	Treatment Prob(F)	1.0000			1.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	SETFA	AMBTR	AMARE	IPOHE	ABUTH	SETFA	AMBTR			
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Amaranthus ret>	Ipomoea hederata>	Abutilon theop>	Setaria faberi	Ambrosia trifi>			
Pest Name	Giant foxtail	Giant ragweed	Redroot pigweed	Ivyleaf mornin>	Velvetleaf	Giant foxtail	Giant ragweed			
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX			
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR			
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays			
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn	Corn			
Description										
Rating Date	6-17-2011	6-17-2011	6-17-2011	6-17-2011	6-17-2011	6-23-2011	6-23-2011			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1	1			
Crop Stage Majority						V6	V6			
Pest Stage Majority	6-10 IN	7-15 IN	3-6 IN	2-4 IN		6-15 IN	6-24 IN			
Pest Density, Unit	35 YD2	17 YD2	4 YD2	3 YD2		67.5YD2	12.5YD2			
Assessed By	MW	MW	MW	MW	MW	MW	MW			
Days After First/Last Applic.	36 8	36 8	36 8	36 8	36 8	42 6	42 6			
Trt-Eval Interval										
Plant-Eval Interval	36 DP-1	36 DP-1	36 DP-1	36 DP-1	36 DP-1	42 DP-1	42 DP-1			
Days After Emergence	26 DE-1	26 DE-1	26 DE-1	26 DE-1	26 DE-1	32 DE-1	32 DE-1			
Trt Treatment	Rate	Appl								
No. Name	Rate	Unit	Code	9	10	11	12	13	14	15
1 Untreated Check				0.0 d	0.0 e	0.0 c	0.0 c	0.0 b	0.0 d	0.0 c
2 Resolve (25 SG)	0.3 oz ai/a	B		73.8 b	55.0 d	74.8 b	62.3 b	89.3 a	79.0 c	78.8 b
Isxadifen (50 WG)	0.15 oz ai/a	B								
Mesotrione (50 WG)	1.25 oz ai/a	B								
COC	1 % v/v	B								
AMS - Liquid	2 lb ai/a	B								
Abundit (3 SL)	0.75 lb ae/a	C								
AMS - Liquid	2 lb ai/a	C								
3 Resolve (25 SG)	0.3 oz ai/a	B		95.8 a	77.5 abc	95.5 a	62.3 b	99.0 a	94.5 ab	92.0 a
Isxadifen (50 WG)	0.15 oz ai/a	B								
Mesotrione (50 WG)	1.25 oz ai/a	B								
Abundit (3 SL)	0.75 lb ae/a	B								
AMS - Liquid	2 lb ai/a	B								
4 Resolve (25 SG)	0.3 oz ai/a	B		87.0 a	90.0 a	99.0 a	91.8 ab	95.5 a	93.5 ab	95.3 a
Isxadifen (50 WG)	0.15 oz ai/a	B								
Mesotrione (50 WG)	1.25 oz ai/a	B								
Abundit (3 SL)	0.75 lb ae/a	B								
Atrazine	0.5 lb ai/a	B								
AMS - Liquid	2 lb ai/a	B								
5 Resolve (25 SG)	0.3 oz ai/a	B		52.5 c	90.0 a	99.0 a	79.5 ab	99.0 a	86.8 b	97.3 a
Isxadifen (50 WG)	0.15 oz ai/a	B								
Mesotrione (50 WG)	1.25 oz ai/a	B								
Atrazine	0.5 lb ai/a	B								
COC	1 % v/v	B								
AMS - Liquid	2 lb ai/a	B								
Abundit (3 SL)	0.75 lb ae/a	C								
AMS - Liquid	2 lb ai/a	C								

Means followed by same letter do not significantly differ (P=0.05, 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	AMARE	IPOHE	ABUTH	SETFA	AMBTR				
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Amaranthus ret>	Ipomoea hедера>	Abutilon theop>	Setaria faberi	Ambrosia trifi>				
Pest Name	Giant foxtail	Giant ragweed	Redroot pigweed	Ivyleaf mornin>	Velvetleaf	Giant foxtail	Giant ragweed				
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX				
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR				
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays				
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn	Corn				
Description											
Rating Date	6-17-2011	6-17-2011	6-17-2011	6-17-2011	6-17-2011	6-23-2011	6-23-2011				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1	1				
Crop Stage Majority						V6	V6				
Pest Stage Majority	6-10 IN	7-15 IN	3-6 IN	2-4 IN		6-15 IN	6-24 IN				
Pest Density, Unit	35 YD2	17 YD2	4 YD2	3 YD2		67.5YD2	12.5YD2				
Assessed By	MW	MW	MW	MW	MW	MW	MW				
Days After First/Last Applic.	36 8	36 8	36 8	36 8	36 8	42 6	42 6				
Trt-Eval Interval											
Plant-Eval Interval	36 DP-1	36 DP-1	36 DP-1	36 DP-1	36 DP-1	42 DP-1	42 DP-1				
Days After Emergence	26 DE-1	26 DE-1	26 DE-1	26 DE-1	26 DE-1	32 DE-1	32 DE-1				
Trt No.	Treatment Name	Rate	Unit	Appl Code	9	10	11	12	13	14	15
6	Cinch ATZ (5.5 SC) Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) COC AMS - Liquid	1.38 lb ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 1 % v/v 2 lb ai/a	A B B B B B		93.8 a	68.8 c	99.0 a	96.8 ab	99.0 a	97.3 a	90.0 a
7	Cinch ATZ (5.5 SC) Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) Abundit (3 SL) AMS - Liquid	1.38 lb ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 0.75 lb ae/a 2 lb ai/a	A B B B B B		99.0 a	83.8 ab	99.0 a	96.8 ab	99.0 a	99.5 a	95.0 a
8	Resolve (25 SG) Isoxaflutole (75 SG) Atrazine Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) COC AMS - Liquid	0.25 oz ai/a 0.5 oz ai/a 1 lb ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 1 % v/v 2 lb ai/a	A A A B B B B B		96.5 a	90.0 a	99.0 a	96.8 ab	99.0 a	100.0 a	95.8 a
9	Resolve (25 SG) Isoxaflutole (75 SG) Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) Atrazine COC AMS - Liquid	0.25 oz ai/a 0.5 oz ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 0.5 lb ai/a 1 % v/v 2 lb ai/a	A A B B B B B B		83.8 a	92.5 a	99.0 a	88.5 ab	99.0 a	94.5 ab	97.3 a
10	Resolve (25 SG) Isoxaflutole (75 SG) Atrazine Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) Abundit (3 SL) AMS - Liquid	0.25 oz ai/a 0.5 oz ai/a 1 lb ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 0.75 lb ae/a 2 lb ai/a	A A A B B B B B		98.0 a	92.5 a	99.0 a	97.0 ab	99.0 a	99.5 a	94.5 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 SETFA	W Weed AMBTR	W Weed AMARE	W Weed IPOHE	W Weed ABUTH	W Weed SETFA	W Weed AMBTR				
Pest Code	SETFA	AMBTR	AMARE	IPOHE	ABUTH	SETFA	AMBTR				
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Amaranthus ret>	Ipomoea heder>	Abutilon theop>	Setaria faberi	Ambrosia trifi>				
Pest Name	Giant foxtail	Giant ragweed	Redroot pigweed	Ivyleaf mornin>	Velvetleaf	Giant foxtail	Giant ragweed				
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX				
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR				
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays				
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn	Corn				
Description											
Rating Date	6-17-2011	6-17-2011	6-17-2011	6-17-2011	6-17-2011	6-23-2011	6-23-2011				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1	1				
Crop Stage Majority						V6	V6				
Pest Stage Majority						6-15 IN	6-24 IN				
Pest Density, Unit	35 YD2	17 YD2	4 YD2	3 YD2		67.5YD2	12.5YD2				
Assessed By	MW	MW	MW	MW	MW	MW	MW				
Days After First/Last Applic.	36 8	36 8	36 8	36 8	36 8	42 6	42 6				
Trt-Eval Interval											
Plant-Eval Interval	36 DP-1	36 DP-1	36 DP-1	36 DP-1	36 DP-1	42 DP-1	42 DP-1				
Days After Emergence	26 DE-1	26 DE-1	26 DE-1	26 DE-1	26 DE-1	32 DE-1	32 DE-1				
Trt No.	Treatment Name	Rate	Unit	Appl Code	9	10	11	12	13	14	15
11	Resolve (25 SG) Isoxaflutole (75 SG) Atrazine Abundit (3 SL) AMS - Liquid	0.25 oz ai/a 0.5 oz ai/a 1 lb ai/a 0.75 lb ae/a 2 lb ai/a	A A A B B		96.3 a	81.3 abc	99.0 a	96.8 ab	99.0 a	97.8 a	81.3 b
12	Cinch ATZ (5.5 SC) Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) Abundit (3 SL) AMS - Liquid	1.38 lb ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 0.75 lb ae/a 2 lb ai/a	B B B B B B		93.5 a	90.0 a	99.0 a	95.5 ab	99.0 a	93.8 ab	97.8 a
13	Cinch ATZ (5.5 SC) Abundit (3 SL) AMS - Liquid	1.38 lb ai/a 0.75 lb ae/a 2 lb ai/a	A B B		99.0 a	72.5 bc	99.0 a	94.5 ab	99.0 a	100.0 a	76.5 b
14	Cinch ATZ (5.5 SC) Capreno (3.45 SL) Abundit (3 SL) COC AMS - Liquid	1.38 lb ai/a 0.081 lb ai/a 0.75 lb ae/a 1 % v/v 2 lb ai/a	A B B B B		99.0 a	80.0 abc	99.0 a	98.5 a	98.5 a	98.8 a	92.8 a
15	Halex GT (4.39 SC) Atrazine NIS AMS - Liquid	2.2 lb ai/a 0.5 lb ai/a 0.25 % v/v 2 lb ai/a	B B B B		94.8 a	92.3 a	99.0 a	96.8 ab	99.0 a	97.5 a	97.5 a
LSD (P=.05)		9.95	9.87	9.55	20.25	7.44	5.98	7.55			
Standard Deviation		6.96	6.91	6.68	14.17	5.21	4.19	5.29			
CV		8.27	8.97	7.38	16.96	5.69	4.71	6.19			
Bartlett's X2		30.774	24.106	3.856	63.648	14.9	35.741	40.424			
P(Bartlett's X2)		0.001*	0.03*	0.05*	0.001*	0.001*	0.001*	0.001*			
Replicate F		1.330	2.180	0.922	4.587	1.858	6.646	3.309			
Replicate Prob(F)		0.2775	0.1046	0.4387	0.0073	0.1514	0.0009	0.0291			
Treatment F		57.629	47.663	59.734	13.561	95.421	145.117	87.029			
Treatment Prob(F)		0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001			

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Purdue University

Pest Type	W Weed			W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	IPOHE			AMBTR	SETFA	IPOHE	SETFA	AMBTR			
Pest Scientific Name	Ipomoea hederata>			Ambrosia trifida>	Setaria faberii	Ipomoea hederata>	Setaria faberii	Ambrosia trifida>			
Pest Name	Ivyleaf mornin>			Giant ragweed	Giant foxtail	Ivyleaf mornin>	Giant foxtail	Giant ragweed			
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX				
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR				
Crop Scientific Name	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays				
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn	Corn				
Description											
Rating Date	6-23-2011	6-23-2011	7-8-2011	7-8-2011	7-8-2011	7-8-2011	7-14-2011	7-14-2011			
Rating Type	CONTRO	PHYGEN	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1	1	1			
Crop Stage Majority	V6	V6	V12	V12	V12	V12	V12	V12			
Pest Stage Majority	4-12 IN			6IN-6 FT	24-48 IN	2-12 IN					
Pest Density, Unit	4.5 YD2			10 YD2	60 YD2	2 YD2					
Assessed By	MW	MW	PM/RT	PM/RT	PM/RT	PM/RT					
Days After First/Last Applic.	42 6	42 6	57 21	57 21	57 21	57 21	63 27	63 27			
Trt-Eval Interval											
Plant-Eval Interval	42 DP-1	42 DP-1	57 DP-1	57 DP-1	57 DP-1	57 DP-1	63 DP-1	63 DP-1			
Days After Emergence	32 DE-1	32 DE-1	47 DE-1	47 DE-1	47 DE-1	47 DE-1	53 DE-1	53 DE-1			
Trt Treatment	Rate	Appl									
No. Name	Rate	Unit	Code	16	17	18	19	20	21	22	23
1 Untreated Check				0.0 b	0.0 a	0.0 a	0.0 d	0.0 e	0.0 b	0.0 f	0.0 d
2 Resolve (25 SG)	0.3 oz ai/a	B		97.8 a	1.3 a	0.3 a	86.8 a	100.0 a	96.3 a	98.0 a	94.8 a
Isoxadifen (50 WG)	0.15 oz ai/a	B									
Mesotrione (50 WG)	1.25 oz ai/a	B									
COC	1 % v/v	B									
AMS - Liquid	2 lb ai/a	B									
Abundit (3 SL)	0.75 lb ae/a	C									
AMS - Liquid	2 lb ai/a	C									
3 Resolve (25 SG)	0.3 oz ai/a	B		100.0 a	7.0 a	0.5 a	87.5 a	86.3 cd	87.5 a	95.5 abc	93.8 a
Isoxadifen (50 WG)	0.15 oz ai/a	B									
Mesotrione (50 WG)	1.25 oz ai/a	B									
Abundit (3 SL)	0.75 lb ae/a	B									
AMS - Liquid	2 lb ai/a	B									
4 Resolve (25 SG)	0.3 oz ai/a	B		99.5 a	0.5 a	0.8 a	93.3 a	94.5 abc	91.3 a	95.5 abc	98.0 a
Isoxadifen (50 WG)	0.15 oz ai/a	B									
Mesotrione (50 WG)	1.25 oz ai/a	B									
Abundit (3 SL)	0.75 lb ae/a	B									
Atrazine	0.5 lb ai/a	B									
AMS - Liquid	2 lb ai/a	B									
5 Resolve (25 SG)	0.3 oz ai/a	B		98.8 a	3.5 a	0.0 a	94.8 a	99.0 ab	99.5 a	97.5 a	97.5 a
Isoxadifen (50 WG)	0.15 oz ai/a	B									
Mesotrione (50 WG)	1.25 oz ai/a	B									
Atrazine	0.5 lb ai/a	B									
COC	1 % v/v	B									
AMS - Liquid	2 lb ai/a	B									
Abundit (3 SL)	0.75 lb ae/a	C									
AMS - Liquid	2 lb ai/a	C									

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				
Pest Code	IPHOE			AMBTR	SETFA	IPHOE	SETFA	AMBTR				
Pest Scientific Name	Ipomoea hederata>			Ambrosia trifida>	Setaria faberi	Ipomoea hederata>	Setaria faberi	Ambrosia trifida>				
Pest Name	Ivyleaf mornin>			Giant ragweed	Giant foxtail	Ivyleaf mornin>	Giant foxtail	Giant ragweed				
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX						
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR						
Crop Scientific Name	Zea mays			Zea mays	Zea mays	Zea mays						
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn						
Description												
Rating Date	6-23-2011	6-23-2011	7-8-2011	7-8-2011	7-8-2011	7-8-2011	7-14-2011	7-14-2011				
Rating Type	CONTRO	PHYGEN	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1	1	1				
Crop Stage Majority	V6	V6	V12	V12	V12	V12						
Pest Stage Majority	4-12 IN			6IN-6 FT	24-48 IN	2-12 IN						
Pest Density, Unit	4.5 YD2			10 YD2	60 YD2	2 YD2						
Assessed By	MW	MW	PM/RT	PM/RT	PM/RT	PM/RT						
Days After First/Last Applic.	42 6	42 6	57 21	57 21	57 21	57 21	63 27	63 27				
Trt-Eval Interval												
Plant-Eval Interval	42 DP-1	42 DP-1	57 DP-1	57 DP-1	57 DP-1	57 DP-1	63 DP-1	63 DP-1				
Days After Emergence	32 DE-1	32 DE-1	47 DE-1	47 DE-1	47 DE-1	47 DE-1	53 DE-1	53 DE-1				
Trt No.	Treatment Name	Rate	Unit	App Code	16	17	18	19	20	21	22	23
6	Cinch ATZ (5.5 SC) Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) COC AMS - Liquid	1.38 lb ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 1 % v/v 2 lb ai/a	A B B B B B		99.5 a	0.0 a	0.0 a	85.5 a	88.0 cd	93.3 a	91.3 de	93.5 a
7	Cinch ATZ (5.5 SC) Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) Abundit (3 SL) AMS - Liquid	1.38 lb ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 0.75 lb ae/a 2 lb ai/a	A B B B B B		99.5 a	0.0 a	0.0 a	89.5 a	95.0 abc	97.3 a	97.0 a	96.0 a
8	Resolve (25 SG) Isoxaflutole (75 SG) Atrazine Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) COC AMS - Liquid	0.25 oz ai/a 0.5 oz ai/a 1 lb ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 1 % v/v 2 lb ai/a	A A A B B B B B		99.0 a	2.5 a	0.0 a	97.3 a	90.5 abc	98.8 a	95.0 abc	97.5 a
9	Resolve (25 SG) Isoxaflutole (75 SG) Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) Atrazine COC AMS - Liquid	0.25 oz ai/a 0.5 oz ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 0.5 lb ai/a 1 % v/v 2 lb ai/a	A A B B B B B B		99.0 a	0.5 a	0.0 a	97.3 a	88.8 bcd	96.3 a	92.5 cd	97.5 a
10	Resolve (25 SG) Isoxaflutole (75 SG) Atrazine Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) Abundit (3 SL) AMS - Liquid	0.25 oz ai/a 0.5 oz ai/a 1 lb ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 0.75 lb ae/a 2 lb ai/a	A A A B B B B B		97.8 a	1.0 a	0.0 a	88.8 a	86.3 cd	85.8 a	93.0 bcd	96.3 a

Means followed by same letter do not significantly differ (P= .05, Student-Newman-Keuls)
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Purdue University

Pest Type	W Weed			W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	IPHOE			AMBTR	SETFA	IPHOE	SETFA	AMBTR				
Pest Scientific Name	Ipomoea hederata>			Ambrosia trifida>	Setaria faberi	Ipomoea hederata>	Setaria faberi	Ambrosia trifida>				
Pest Name	Ivyleaf mornin>			Giant ragweed	Giant foxtail	Ivyleaf mornin>	Giant foxtail	Giant ragweed				
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX						
BBCH Scale	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR						
Crop Scientific Name	Zea mays			Zea mays	Zea mays	Zea mays						
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn						
Description												
Rating Date	6-23-2011	6-23-2011	7-8-2011	7-8-2011	7-8-2011	7-8-2011	7-14-2011	7-14-2011				
Rating Type	CONTRO	PHYGEN	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1	1	1				
Crop Stage Majority	V6	V6	V12	V12	V12	V12						
Pest Stage Majority	4-12 IN			6IN-6 FT	24-48 IN	2-12 IN						
Pest Density, Unit	4.5 YD2			10 YD2	60 YD2	2 YD2						
Assessed By	MW	MW	PM/RT	PM/RT	PM/RT	PM/RT						
Days After First/Last Applic.	42 6	42 6	57 21	57 21	57 21	57 21	63 27	63 27				
Trt-Eval Interval												
Plant-Eval Interval	42 DP-1	42 DP-1	57 DP-1	57 DP-1	57 DP-1	57 DP-1	63 DP-1	63 DP-1				
Days After Emergence	32 DE-1	32 DE-1	47 DE-1	47 DE-1	47 DE-1	47 DE-1	53 DE-1	53 DE-1				
Trt No.	Treatment Name	Rate	Unit	Appl Code	16	17	18	19	20	21	22	23
11	Resolve (25 SG) Isoxaflutole (75 SG) Atrazine Abundit (3 SL) AMS - Liquid	0.25 oz ai/a 0.5 oz ai/a 1 lb ai/a 0.75 lb ae/a 2 lb ai/a	A A A B B		99.5 a	0.5 a	0.0 a	58.8 b	80.3 d	91.5 a	88.8 e	81.3 b
12	Cinch ATZ (5.5 SC) Resolve (25 SG) Isoxadifen (50 WG) Mesotrione (50 WG) Abundit (3 SL) AMS - Liquid	1.38 lb ai/a 0.3 oz ai/a 0.15 oz ai/a 1.25 oz ai/a 0.75 lb ae/a 2 lb ai/a	B B B B B B		99.5 a	4.5 a	1.3 a	93.3 a	92.8 abc	98.3 a	97.0 a	96.5 a
13	Cinch ATZ (5.5 SC) Abundit (3 SL) AMS - Liquid	1.38 lb ai/a 0.75 lb ae/a 2 lb ai/a	A B B		97.0 a	0.8 a	0.0 a	45.0 c	90.0 abc	94.5 a	96.5 ab	73.8 c
14	Cinch ATZ (5.5 SC) Capreno (3.45 SL) Abundit (3 SL) COC AMS - Liquid	1.38 lb ai/a 0.081 lb ai/a 0.75 lb ae/a 1 % v/v 2 lb ai/a	A B B B B		99.5 a	2.5 a	0.0 a	87.0 a	97.0 abc	100.0 a	98.5 a	93.0 a
15	Halex GT (4.39 SC) Atrazine NIS AMS - Liquid	2.2 lb ai/a 0.5 lb ai/a 0.25 % v/v 2 lb ai/a	B B B B		98.5 a	2.0 a	0.8 a	96.5 a	99.0 ab	92.8 a	97.5 a	96.8 a
LSD (P=.05)		2.76	4.60	1.13	10.16	6.55	8.62	2.58	5.68			
Standard Deviation		1.93	3.22	0.79	7.11	4.58	6.03	1.80	3.98			
CV		2.09	182.27	338.49	8.88	5.34	6.84	2.03	4.57			
Bartlett's X2		26.456	37.395	6.69	22.056	19.44	23.431	14.544	32.132			
P(Bartlett's X2)		0.009*	0.001*	0.153	0.055	0.078	0.024*	0.204	0.002*			
Replicate F		2.224	1.254	5.237	3.901	0.202	5.149	0.184	1.679			
Replicate Prob(F)		0.0994	0.3025	0.0037	0.0152	0.8944	0.0040	0.9065	0.1861			
Treatment F		701.350	1.517	1.000	55.705	113.462	67.442	752.719	158.429			
Treatment Prob(F)		0.0001	0.1470	0.4708	0.0001	0.0001	0.0001	0.0001	0.0001			

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
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Purdue University

Pest Type		W Weed	W Weed
Pest Code		AMARE	IPOHE
Pest Scientific Name		Amaranthus ret>	Ipomoea heder>
Pest Name		Redroot pigweed	Ivyleaf mornin>
Crop Code			
BBCH Scale			
Crop Scientific Name			
Crop Name			
Description			
Rating Date		7-14-2011	7-14-2011
Rating Type		CONTRO	CONTRO
Rating Unit		%	%
Number of Subsamples		1	1
Crop Stage Majority			
Pest Stage Majority			
Pest Density, Unit			
Assessed By			
Days After First/Last Applic.		63 27	63 27
Trt-Eval Interval			
Plant-Eval Interval		63 DP-1	63 DP-1
Days After Emergence		53 DE-1	53 DE-1
Trt Treatment	Rate Appl		
No. Name	Rate Unit Code	24	25
1 Untreated Check		0.0 b	0.0 b
2 Resolve (25 SG)	0.3 oz ai/a B	99.0 a	96.8 a
Isxadifen (50 WG)	0.15 oz ai/a B		
Mesotrione (50 WG)	1.25 oz ai/a B		
COC	1 % v/v B		
AMS - Liquid	2 lb ai/a B		
Abundit (3 SL)	0.75 lb ae/a C		
AMS - Liquid	2 lb ai/a C		
3 Resolve (25 SG)	0.3 oz ai/a B	96.8 a	96.0 a
Isxadifen (50 WG)	0.15 oz ai/a B		
Mesotrione (50 WG)	1.25 oz ai/a B		
Abundit (3 SL)	0.75 lb ae/a B		
AMS - Liquid	2 lb ai/a B		
4 Resolve (25 SG)	0.3 oz ai/a B	96.8 a	94.8 a
Isxadifen (50 WG)	0.15 oz ai/a B		
Mesotrione (50 WG)	1.25 oz ai/a B		
Abundit (3 SL)	0.75 lb ae/a B		
Atrazine	0.5 lb ai/a B		
AMS - Liquid	2 lb ai/a B		
5 Resolve (25 SG)	0.3 oz ai/a B	99.0 a	99.0 a
Isxadifen (50 WG)	0.15 oz ai/a B		
Mesotrione (50 WG)	1.25 oz ai/a B		
Atrazine	0.5 lb ai/a B		
COC	1 % v/v B		
AMS - Liquid	2 lb ai/a B		
Abundit (3 SL)	0.75 lb ae/a C		
AMS - Liquid	2 lb ai/a C		

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
Pest Code	AMARE	IPOHE
Pest Scientific Name	Amaranthus ret>	Ipomoea heder>
Pest Name	Redroot pigweed	Ivyleaf mornin>
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Rating Date	7-14-2011	7-14-2011
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Number of Subsamples	1	1
Crop Stage Majority		
Pest Stage Majority		
Pest Density, Unit		
Assessed By		
Days After First/Last Applic.	63 27	63 27
Trt-Eval Interval		
Plant-Eval Interval	63 DP-1	63 DP-1
Days After Emergence	53 DE-1	53 DE-1
Trt Treatment	Rate	Appl
No. Name	Rate Unit	Code
6 Cinch ATZ (5.5 SC) Resolve (25 SG)	1.38 lb ai/a 0.3 oz ai/a	A B
Isxadifen (50 WG)	0.15 oz ai/a	B
Mesotrione (50 WG)	1.25 oz ai/a	B
COC	1 % v/v	B
AMS - Liquid	2 lb ai/a	B
	99.0 a	96.5 a
7 Cinch ATZ (5.5 SC) Resolve (25 SG)	1.38 lb ai/a 0.3 oz ai/a	A B
Isxadifen (50 WG)	0.15 oz ai/a	B
Mesotrione (50 WG)	1.25 oz ai/a	B
Abundit (3 SL)	0.75 lb ae/a	B
AMS - Liquid	2 lb ai/a	B
	99.0 a	97.5 a
8 Resolve (25 SG) Isoxaflutole (75 SG)	0.25 oz ai/a 0.5 oz ai/a	A A
Atrazine	1 lb ai/a	A
Resolve (25 SG)	0.3 oz ai/a	B
Isxadifen (50 WG)	0.15 oz ai/a	B
Mesotrione (50 WG)	1.25 oz ai/a	B
COC	1 % v/v	B
AMS - Liquid	2 lb ai/a	B
	99.0 a	98.5 a
9 Resolve (25 SG) Isoxaflutole (75 SG)	0.25 oz ai/a 0.5 oz ai/a	A A
Resolve (25 SG)	0.3 oz ai/a	B
Isxadifen (50 WG)	0.15 oz ai/a	B
Mesotrione (50 WG)	1.25 oz ai/a	B
Atrazine	0.5 lb ai/a	B
COC	1 % v/v	B
AMS - Liquid	2 lb ai/a	B
	99.0 a	98.0 a
10 Resolve (25 SG) Isoxaflutole (75 SG)	0.25 oz ai/a 0.5 oz ai/a	A A
Atrazine	1 lb ai/a	A
Resolve (25 SG)	0.3 oz ai/a	B
Isxadifen (50 WG)	0.15 oz ai/a	B
Mesotrione (50 WG)	1.25 oz ai/a	B
Abundit (3 SL)	0.75 lb ae/a	B
AMS - Liquid	2 lb ai/a	B
	99.0 a	95.8 a

Purdue University

Pest Type	W Weed	W Weed
Pest Code	AMARE	IPOHE
Pest Scientific Name	Amaranthus ret>	Ipomoea heder>
Pest Name	Redroot pigweed	Ivyleaf mornin>
Crop Code		
BBCH Scale		
Crop Scientific Name		
Crop Name		
Description		
Rating Date	7-14-2011	7-14-2011
Rating Type	CONTRO	CONTRO
Rating Unit	%	%
Number of Subsamples	1	1
Crop Stage Majority		
Pest Stage Majority		
Pest Density, Unit		
Assessed By		
Days After First/Last Applic.	63 27	63 27
Trt-Eval Interval		
Plant-Eval Interval	63 DP-1	63 DP-1
Days After Emergence	53 DE-1	53 DE-1
Trt Treatment	Rate Appl	
No. Name	Rate Unit Code	
	24	25
11 Resolve (25 SG)	0.25 oz ai/a A	99.0 a
Isoxaflutole (75 SG)	0.5 oz ai/a A	96.0 a
Atrazine	1 lb ai/a A	
Abundit (3 SL)	0.75 lb ae/a B	
AMS - Liquid	2 lb ai/a B	
12 Cinch ATZ (5.5 SC)	1.38 lb ai/a B	98.0 a
Resolve (25 SG)	0.3 oz ai/a B	98.0 a
Isoxadifen (50 WG)	0.15 oz ai/a B	
Mesotrione (50 WG)	1.25 oz ai/a B	
Abundit (3 SL)	0.75 lb ae/a B	
AMS - Liquid	2 lb ai/a B	
13 Cinch ATZ (5.5 SC)	1.38 lb ai/a A	99.0 a
Abundit (3 SL)	0.75 lb ae/a B	92.3 a
AMS - Liquid	2 lb ai/a B	
14 Cinch ATZ (5.5 SC)	1.38 lb ai/a A	99.0 a
Capreno (3.45 SL)	0.081 lb ai/a B	97.0 a
Abundit (3 SL)	0.75 lb ae/a B	
COC	1 % v/v B	
AMS - Liquid	2 lb ai/a B	
15 Halex GT (4.39 SC)	2.2 lb ai/a B	99.0 a
Atrazine	0.5 lb ai/a B	98.0 a
NIS	0.25 % v/v B	
AMS - Liquid	2 lb ai/a B	
LSD (P=.05)	2.31	3.90
Standard Deviation	1.61	2.73
CV	1.75	3.02
Bartlett's X2	2.024	26.27
P(Bartlett's X2)	0.363	0.01*
Replicate F	3.100	5.539
Replicate Prob(F)	0.0368	0.0027
Treatment F	997.340	336.873
Treatment Prob(F)	0.0001	0.0001

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

Weed Control with Realm Q.

Trial ID: 11S-THP-CTC-04

Protocol ID: 11S-THP-CTC-104

Location: Throckmorton
Project ID: USA-11-111Study Director: White/Marquardt
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

AMARE, Amaranthus retroflexus, = US

IPOHE, Ipomoea hederacea, = US

CHEAL, Chenopodium album, = US

ABUTH, Abutilon theophrasti, = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

YD2 = per square yard

Plant-Eval Interval

12 DP-1 = 1 ZEAMD 5-12-2011

28 DP-1 = 1 ZEAMD 5-12-2011

35 DP-1 = 1 ZEAMD 5-12-2011

36 DP-1 = 1 ZEAMD 5-12-2011

42 DP-1 = 1 ZEAMD 5-12-2011

57 DP-1 = 1 ZEAMD 5-12-2011

63 DP-1 = 1 ZEAMD 5-12-2011