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Impact sequential and total post weed control programs

Trial ID: 12S-THP-CTC-18 Protocol ID: 12S-THP-CTC-18
 Location: Throckmorton Study Director: White/Marquardt
 Project ID: 12C04H086 Investigator: Dr. Bill Johnson
 Sponsor Contact: Amvac - Rich Porter

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: 4-2-2012

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:** wji@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
State/Prov: IN
Postal Code: 47909 **E-mail:** jayyoung@purdue.edu
Country: USA United States
Phone No.: 765-538-3422
Fax No.: 765-538-3423

Crop Description

Crop 1: ZEAMD Zea mays indentata Dent corn
Variety: Beck's 6175 **Description:** HXX, LL, RR2
BBCH Scale: BCOR **Planting Date:** 4-18-2012
Planting Method: PLANTD planted **Rate, Unit:** 32000 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Soil Moisture: DRY dry **Soil Temperature, Unit:** 65 F
Emergence Date: 5-2-2012

Pest Description

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

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Site and Design

Plot Width, Unit: 10 FT Plot Length, Unit: 30 FT Plot Area, Unit: 300 FT ² Replications: 4	Site Type: FIELD field Experimental Unit: 1 PLOT plot Tillage Type: CONTIL conventional-till Study Design: RACOBL 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	C
Application Date:	4-18-2012	5-10-2012	5-23-2012
Time of Day:		10:30 AM	9:45 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	ATPLAN	EAPOCR	MIPOCR
Application Placement:	SOIL	FOLIAR	FOLIAR
Applied By:	MW	MW	MW
Air Temperature, Unit:	67 F	69 F	82 F
% Relative Humidity:	48	63	40
Wind Velocity, Unit:	4 MPH	4 MPH	2.5 MPH
Wind Direction:	E	NW	SE
Dew Presence (Y/N):	N no	N no	Y yes
Soil Temperature, Unit:	65 F	60 F	69 F
Soil Moisture:	DRY	SLIWET	DRY
% Cloud Cover:	10	1	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:		V2	V3
Height, Unit:		5 IN	13 IN
Height Minimum, Maximum:			10 16

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Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Height, Unit:		1.5 IN	9.5 IN
Height Minimum, Maximum:		0.5 2.5	5 14
Density, Unit:		25 YD2	25 YD2
Pest 2 Code, Type, Scale:	CHEAL W	CHEAL W	CHEAL W
Height, Unit:		0.5 IN	0.75 IN
Height Minimum, Maximum:			0.5 1
Density, Unit:		8 YD2	10 YD2
Pest 3 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Height, Unit:		1.25 IN	3 IN
Height Minimum, Maximum:		0.5 2	1 5
Density, Unit:		15 YD2	20 YD2

Application Equipment

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

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Trial ID: 12S-THP-CTC-18 Protocol ID: 12S-THP-CTC-18
 Location: Throckmorton Study Director: White/Marquardt
 Project ID: 12C04H086 Investigator: Dr. Bill Johnson
 Sponsor Contact: Amvac - Rich Porter

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	AMBTR	CHEAL		SETFA	AMBTR	CHEAL				
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>		Setaria faberi	Ambrosia trifi>	Chenopodium al>				
Pest Name	Giant ragweed	Common lambsqu>		Giant foxtail	Giant ragweed	Common lambsqu>				
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		
Rating Date	5-16-2012	5-16-2012	5-16-2012	5-22-2012	5-22-2012	5-22-2012	5-22-2012	5-22-2012		
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYCHL	PHYNLS		
Rating Unit	%	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1	1		
Crop Stage Scale	V3	V3	V3	V4	V4	V4	V4	V4		
Pest Stage Majority	1-10 IN	1-2 IN		3 IN	7 IN	3 IN				
Pest Density, Unit	50 M2	5 M2		15 FT2	12 YD2	6 FT2				
Assessed By	PM/GC	PM/GC	PM/GC	MW	MW	MW	MW	MW		
Days After First/Last Applic.	28 6	28 6	28 6	34 12	34 12	34 12	34 12	34 12		
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	34 DP-1	34 DP-1	34 DP-1	34 DP-1	34 DP-1		
Days After Emergence	14 DE-1	14 DE-1	14 DE-1	20 DE-1	20 DE-1	20 DE-1	20 DE-1	20 DE-1		
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	1	2	3	4	5	6	7	8
1 Untreated Check			0.0 c	0.0 b	0.0 c	0.0 b	0.0 b	0.0 b	0.0 a	0.0 b
2 Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a A		70.0 b	100.0 a	0.0 c	98.5 a	66.3 a	99.0 a	0.0 a	0.0 b
Impact (2.8 SC)	0.263 oz ai/a C									
Atrazine	0.5 lb ai/a C									
MSO	1 % v/v C									
28% UAN	2.5 % v/v C									
3 Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a A		81.3 ab	100.0 a	0.0 c	99.0 a	72.5 a	99.0 a	0.8 a	0.0 b
Impact (2.8 SC)	0.35 oz ai/a C									
Atrazine	0.5 lb ai/a C									
MSO	1 % v/v C									
28% UAN	2.5 % v/v C									
4 Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a A		72.5 ab	100.0 a	0.5 c	99.0 a	66.3 a	99.0 a	1.5 a	0.0 b
Impact (2.8 SC)	0.263 oz ai/a C									
Status (56 SG)	1.4 oz ai/a C									
Atrazine	0.5 lb ai/a C									
MSO	1 % v/v C									
28% UAN	2.5 % v/v C									
5 Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a A		77.5 ab	100.0 a	0.0 c	99.0 a	71.3 a	99.0 a	0.0 a	0.0 b
Laudis (3.5 SL)	1.31 oz ai/a C									
Atrazine	0.5 lb ai/a C									
MSO	1 % v/v C									
28% UAN	2.5 % v/v C									
6 Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a A		78.8 ab	100.0 a	0.0 c	99.0 a	72.5 a	99.0 a	0.0 a	0.0 b
Roundup PowerMax 4.5 SL	0.77 lb ae/a C									
AMS - Liquid	1.28 lb ai/a C									
7 Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a A		71.3 ab	100.0 a	0.0 c	99.0 a	63.8 a	99.0 a	0.0 a	0.0 b
Roundup PowerMax 4.5 SL	0.77 lb ae/a C									
Impact (2.8 SC)	0.263 oz ai/a C									
Atrazine	0.5 lb ai/a C									
MSO	0.5 % v/v C									
AMS - Liquid	1.28 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.

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	AMBTR	CHEAL		SETFA	AMBTR	CHEAL						
Pest Scientific Name	Ambrosia trifid>	Chenopodium albidum>		Setaria faberii	Ambrosia trifid>	Chenopodium albidum>						
Pest Name	Giant ragweed	Common lambsquarters		Giant foxtail	Giant ragweed	Common lambsquarters						
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				
Rating Date	5-16-2012	5-16-2012	5-16-2012	5-22-2012	5-22-2012	5-22-2012	5-22-2012	5-22-2012				
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYCHL	PHYNLS				
Rating Unit	%	%	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1	1	1				
Crop Stage Scale	V3	V3	V3	V4	V4	V4	V4	V4				
Pest Stage Majority	1-10 IN	1-2 IN		3 IN	7 IN	3 IN						
Pest Density, Unit	50 M2	5 M2		15 FT2	12 YD2	6 FT2						
Assessed By	PM/GC	PM/GC	PM/GC	MW	MW	MW	MW	MW				
Days After First/Last Applic.	28 6	28 6	28 6	34 12	34 12	34 12	34 12	34 12				
Plant-Eval Interval	28 DP-1	28 DP-1	28 DP-1	34 DP-1	34 DP-1	34 DP-1	34 DP-1	34 DP-1				
Days After Emergence	14 DE-1	14 DE-1	14 DE-1	20 DE-1	20 DE-1	20 DE-1	20 DE-1	20 DE-1				
Trt No.	Treatment Name	Rate	Appl Unit	Code	1	2	3	4	5	6	7	8
8	Warrant (3 CS)	1.13 lb ai/a	B		81.3 ab	100.0 a	10.0 a	99.0 a	70.0 a	99.0 a	4.3 a	5.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B									
	Impact (2.8 SC)	0.263 oz ai/a	B									
	Atrazine	0.5 lb ai/a	B									
	MSO	0.5 % v/v	B									
	AMS - Liquid	1.28 lb ai/a	B									
9	Halex GT (4.39 SC)	1.98 lb ai/a	B		86.8 a	100.0 a	4.3 b	99.0 a	71.3 a	99.0 a	1.3 a	4.5 a
	Atrazine	0.5 lb ai/a	B									
	NIS	0.25 % v/v	B									
	AMS - Liquid	1.28 lb ai/a	B									
10	Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a	A		80.0 ab	100.0 a	0.0 c	99.0 a	75.0 a	99.0 a	0.0 a	0.0 b
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	C									
	Impact (2.8 SC)	0.175 oz ai/a	C									
	Atrazine	0.5 lb ai/a	C									
	MSO	0.5 % v/v	C									
	AMS - Liquid	1.28 lb ai/a	C									
	LSD (P=.05)				9.74	0.00	0.87	0.46	12.40	0.00	2.86	1.93
	Standard Deviation				6.71	0.00	0.60	0.32	8.55	0.00	1.97	1.33
	CV				9.6	0.0	40.58	0.36	13.59	0.0	254.42	139.91
	Bartlett's X2				3.087	0.0	0.472	0.0	3.953	0.0	5.539	4.555
	P(Bartlett's X2)				0.929	.	0.492	.	0.861	.	0.136	0.033*
	Replicate F				1.580	0.000	0.070	1.000	1.697	0.000	0.538	1.000
	Replicate Prob(F)				0.2173	1.0000	0.9756	0.4079	0.1912	1.0000	0.6603	0.4079
	Treatment F				55.983	0.000	119.760	39161.004	27.386	0.000	1.878	9.113
	Treatment Prob(F)				0.0001	1.0000	0.0001	0.0001	0.0001	1.0000	0.0993	0.0001

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	CHEAL	AMBTR	SETFA	CHEAL	SETFA	SETFA				
Pest Scientific Name	Chenopodium al>	Ambrosia trifi>	Setaria faberi	Chenopodium al>	Setaria faberi	Setaria faberi				
Pest Name	Common lambsqu>	Giant ragweed	Giant foxtail	Common lambsqu>	Giant foxtail	Giant foxtail				
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	Zea mays	Zea mays				
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn				
Rating Date	5-29-2012	6-4-2012	6-4-2012	6-4-2012	6-4-2012	6-18-2012				
Rating Type	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Scale	V5	V5	V5	V5	V5	V9				
Pest Stage Majority	1-5 IN		1-30 IN	1-15 IN	1-12 IN	6-18 IN				
Pest Density, Unit	20 M2		40 M2	40 M2	10 M2	15 M2				
Assessed By	JS/GC	JS/GC	JS/GC	JS/GC	JS/GC	JS/JR				
Days After First/Last Applic.	41 6	47 12	47 12	47 12	47 12	61 26				
Plant-Eval Interval	41 DP-1	47 DP-1	47 DP-1	47 DP-1	47 DP-1	61 DP-1				
Days After Emergence	27 DE-1	33 DE-1	33 DE-1	33 DE-1	33 DE-1	47 DE-1				
Trt No.	Treatment Name	Rate	Appl Code	16	17	18	19	20	21	22
8	Warrant (3 CS)	1.13 lb ai/a	B	100.0 a	0.0 b	41.3 c	0.0 b	100.0 a	0.0 a	37.5 b
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
	Impact (2.8 SC)	0.263 oz ai/a	B							
	Atrazine	0.5 lb ai/a	B							
	MSO	0.5 % v/v	B							
	AMS - Liquid	1.28 lb ai/a	B							
9	Halex GT (4.39 SC)	1.98 lb ai/a	B	100.0 a	0.0 b	43.8 c	0.0 b	100.0 a	0.0 a	20.0 c
	Atrazine	0.5 lb ai/a	B							
	NIS	0.25 % v/v	B							
	AMS - Liquid	1.28 lb ai/a	B							
10	Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a	A	100.0 a	1.3 a	93.8 a	100.0 a	100.0 a	0.0 a	100.0 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	C							
	Impact (2.8 SC)	0.175 oz ai/a	C							
	Atrazine	0.5 lb ai/a	C							
	MSO	0.5 % v/v	C							
	AMS - Liquid	1.28 lb ai/a	C							
	LSD (P=.05)	0.00		0.00	0.23	4.79	20.92	0.00	0.00	17.42
	Standard Deviation	0.00		0.00	0.16	3.30	14.42	0.00	0.00	12.01
	CV	0.0		0.0	126.49	4.55	21.46	0.0	0.0	15.94
	Bartlett's X2	0.0		0.0	0.0	9.375	35.682	0.0	0.0	46.229
	P(Bartlett's X2)	.		.	.	0.312	0.001*	.	.	0.001*
	Replicate F	0.000		0.000	1.000	0.907	0.886	0.000	0.000	1.441
	Replicate Prob(F)	1.0000		1.0000	0.4079	0.4508	0.4606	1.0000	1.0000	0.2528
	Treatment F	0.000		0.000	25.000	400.946	42.255	0.000	0.000	43.877
	Treatment Prob(F)	1.0000		1.0000	0.0001	0.0001	0.0001	1.0000	1.0000	0.0001

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Pest Type	W Weed AMBTR	W Weed CHEAL	W Weed SETFA	W Weed AMBTR	W Weed CHEAL				
Pest Code	Ambrosia trifi>	Chenopodium aI>	Setaria faberi	Ambrosia trifi>	Chenopodium aI>				
Pest Scientific Name	Giant ragweed	Common lambsqu>	Giant foxtail	Giant ragweed	Common lambsqu>				
Pest Name									
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX
BBCH Scale	BCOR	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	Zea mays
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn	Corn	Corn	Corn
Rating Date	6-18-2012	6-18-2012	7-24-2012	7-24-2012	7-24-2012	7-24-2012	9-24-2012	9-24-2012	9-24-2012
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	MOICON	YIELD	
Rating Unit	%	%	%	%	%	%	%	bu/ac	
Number of Subsamples	1	1	1	1	1	1	1	1	1
Crop Stage Scale	V9	V9				R2			
Pest Stage Majority	12-48 IN	1-12 IN	30 IN	60 IN	36 IN				
Pest Density, Unit	20 M2	10 M2	15 M2	20 M2	10 M2				
Assessed By	JS/JR	JS/JR	JS/JR						
Days After First/Last Applic.	61 26	61 26	97 62	97 62	97 62	97 62	159 124	159 124	159 124
Plant-Eval Interval	61 DP-1	61 DP-1	97 DP-1	97 DP-1	97 DP-1	97 DP-1	159 DP-1	159 DP-1	159 DP-1
Days After Emergence	47 DE-1	47 DE-1	83 DE-1	83 DE-1	83 DE-1	83 DE-1	145 DE-1	145 DE-1	145 DE-1
Trt Treatment									
No. Name	23	24	25	26	27	28	29	30	
1 Untreated Check	0.0 c	0.0 b	0.0 c	0.0 b	0.0 b	0.0 a	19.280 a	23.80 b	
2 Harness Xtra 5.6 (5.6 SC) Impact (2.8 SC) Atrazine MSO 28% UAN	2.24 lb ai/a A 0.263 oz ai/a C 0.5 lb ai/a C 1 % v/v C 2.5 % v/v C	90.8 a	100.0 a	96.5 a	93.8 a	99.0 a	0.0 a	21.125 a	101.40 a
3 Harness Xtra 5.6 (5.6 SC) Impact (2.8 SC) Atrazine MSO 28% UAN	2.24 lb ai/a A 0.35 oz ai/a C 0.5 lb ai/a C 1 % v/v C 2.5 % v/v C	89.5 a	100.0 a	97.0 a	94.3 a	99.0 a	0.0 a	20.890 a	122.20 a
4 Harness Xtra 5.6 (5.6 SC) Impact (2.8 SC) Status (56 SG) Atrazine MSO 28% UAN	2.24 lb ai/a A 0.263 oz ai/a C 1.4 oz ai/a C 0.5 lb ai/a C 1 % v/v C 2.5 % v/v C	92.3 a	100.0 a	96.0 a	94.8 a	99.0 a	0.0 a	20.648 a	123.05 a
5 Harness Xtra 5.6 (5.6 SC) Laudis (3.5 SL) Atrazine MSO 28% UAN	2.24 lb ai/a A 1.31 oz ai/a C 0.5 lb ai/a C 1 % v/v C 2.5 % v/v C	97.8 a	100.0 a	94.3 a	97.0 a	99.0 a	0.0 a	21.813 a	80.83 ab
6 Harness Xtra 5.6 (5.6 SC) Roundup PowerMax 4.5 SL AMS - Liquid	2.24 lb ai/a A 0.77 lb ae/a C 1.28 lb ai/a C	86.3 a	100.0 a	98.0 a	91.3 a	99.0 a	0.0 a	20.605 a	113.70 a
7 Harness Xtra 5.6 (5.6 SC) Roundup PowerMax 4.5 SL Impact (2.8 SC) Atrazine MSO AMS - Liquid	2.24 lb ai/a A 0.77 lb ae/a C 0.263 oz ai/a C 0.5 lb ai/a C 0.5 % v/v C 1.28 lb ai/a C	93.8 a	100.0 a	98.0 a	94.3 a	99.0 a	0.0 a	23.110 a	125.58 a

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed	
Pest Code	AMBTR	CHEAL	SETFA	AMBTR	CHEAL					
Pest Scientific Name	Ambrosia trifi>	Chenopodium al>	Setaria faberi	Ambrosia trifi>	Chenopodium al>					
Pest Name	Giant ragweed	Common lambsqu>	Giant foxtail	Giant ragweed	Common lambsqu>					
Crop Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	
BBCH Scale	BCOR	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	Zea mays	
Crop Name	Corn	Corn	Corn	Corn	Corn	Corn	Corn	Corn	Corn	
Rating Date	6-18-2012	6-18-2012	7-24-2012	7-24-2012	7-24-2012	7-24-2012	7-24-2012	9-24-2012	9-24-2012	
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	PHYGEN	MOICON	YIELD		
Rating Unit	%	%	%	%	%	%	%	bu/ac		
Number of Subsamples	1	1	1	1	1	1	1	1	1	
Crop Stage Scale	V9	V9				R2				
Pest Stage Majority	12-48 IN	1-12 IN	30 IN	60 IN	36 IN					
Pest Density, Unit	20 M2	10 M2	15 M2	20 M2	10 M2					
Assessed By	JS/JR	JS/JR	JS/JR	JS/JR	JS/JR					
Days After First/Last Applic.	61 26	61 26	97 62	97 62	97 62	97 62	159 124	159 124		
Plant-Eval Interval	61 DP-1	61 DP-1	97 DP-1	97 DP-1	97 DP-1	97 DP-1	159 DP-1	159 DP-1		
Days After Emergence	47 DE-1	47 DE-1	83 DE-1	83 DE-1	83 DE-1	83 DE-1	145 DE-1	145 DE-1		
Trt Treatment	Rate	Appl								
No. Name	Rate	Unit Code	23	24	25	26	27	28	29	30
8 Warrant (3 CS)	1.13 lb ai/a	B	10.0 c	100.0 a	99.0 a	0.0 b	99.0 a	0.0 a	20.665 a	61.85 ab
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B								
Impact (2.8 SC)	0.263 oz ai/a	B								
Atrazine	0.5 lb ai/a	B								
MSO	0.5 % v/v	B								
AMS - Liquid	1.28 lb ai/a	B								
9 Halex GT (4.39 SC)	1.98 lb ai/a	B	41.3 b	100.0 a	47.3 b	5.0 b	99.0 a	0.0 a	21.630 a	75.30 ab
Atrazine	0.5 lb ai/a	B								
NIS	0.25 % v/v	B								
AMS - Liquid	1.28 lb ai/a	B								
10 Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a	A	92.0 a	100.0 a	97.0 a	95.3 a	99.0 a	0.0 a	20.970 a	131.08 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	C								
Impact (2.8 SC)	0.175 oz ai/a	C								
Atrazine	0.5 lb ai/a	C								
MSO	0.5 % v/v	C								
AMS - Liquid	1.28 lb ai/a	C								
LSD (P=.05)			18.67	0.00	24.99	6.07	0.00	0.00	2.4573	51.365
Standard Deviation			12.87	0.00	17.22	4.18	0.00	0.00	1.6935	35.400
CV			18.55	0.0	20.93	6.29	0.0	0.0	8.04	36.92
Bartlett's X2			32.103	0.0	81.71	11.289	0.0	0.0	11.24	9.548
P(Bartlett's X2)			0.001*	.	0.001*	0.126	.	.	0.26	0.388
Replicate F			1.660	0.000	1.148	1.179	0.000	0.000	3.248	0.675
Replicate Prob(F)			0.1991	1.0000	0.3478	0.3362	1.0000	1.0000	0.0373	0.5747
Treatment F			34.128	0.000	14.593	458.998	0.000	0.000	1.369	3.867
Treatment Prob(F)			0.0001	1.0000	0.0001	0.0001	1.0000	1.0000	0.2503	0.0030

Purdue University

Impact sequential and total post weed control programs

Trial ID: 12S-THP-CTC-18 Protocol ID: 12S-THP-CTC-18
 Location: Throckmorton Study Director: White/Marquardt
 Project ID: 12C04H086 Investigator: Dr. Bill Johnson
 Sponsor Contact: Amvac - Rich Porter

Pest Type

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

Pest Code

AMBTR, Ambrosia trifida, = US

CHEAL, Chenopodium album, = US

SETFA, Setaria faberi, = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

CONTRO = control / burndown or knockdown

PHYGEN = phytotoxicity - general / injury

PHYCHL = phytotoxicity - chlorosis

PHYNLS = phytotoxicity - necrosis, leaf spot

MOICON = moisture content

YIELD = yield

Rating Unit

% = percent

bu/ac = bushels per acre

M2 = per square meter

FT2 = per square foot

YD2 = per square yard

Plant-Eval Interval

28 DP-1 = 1 ZEAMD 4-18-2012

34 DP-1 = 1 ZEAMD 4-18-2012

36 DP-1 = 1 ZEAMD 4-18-2012

41 DP-1 = 1 ZEAMD 4-18-2012

47 DP-1 = 1 ZEAMD 4-18-2012

61 DP-1 = 1 ZEAMD 4-18-2012

97 DP-1 = 1 ZEAMD 4-18-2012

159 DP-1 = 1 ZEAMD 4-18-2012