

Purdue University

Impact Sequential Programs in Corn

Trial ID: 11S-THP-CTC-22 Protocol ID: 11S-THP-CTC-22
 Location: Throckmorton Study Director: White/Marquardt
 Project ID: 11-TPZ-H-100 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: 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:** 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

Phone No.: 765-538-3422
Fax No.: 765-538-3423

State/Prov: IN
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: DRY dry

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:** IPOHE *Ipomoea hederacea*

Common Name: Ivyleaf morningglory

Pest 3 Type: W **Code:** ABUTH *Abutilon theophrasti*

Common Name: Velvetleaf

Pest 4 Type: W **Code:** AMBTR *Ambrosia trifida*

Common Name: Giant ragweed

Purdue University

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: RACOB1 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:	5-13-2011	6-6-2011	6-17-2011
Time of Day:	9:25 AM	1-1:30 AM	8:25 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	ATPLAN	EAPOWE	MIPOWE
Application Placement:	FOLIAR	FOLIAR	FOLIAR
Applied By:	MW	MW	MW
Air Temperature, Unit:	71 F	88 F	78 F
% Relative Humidity:	78	83	63
Wind Velocity, Unit:	5.6 MPH	4.5 MPH	2.7 MPH
Wind Direction:	E	SE	SW
Dew Presence (Y/N):	Y yes	N no	Y yes
Soil Temperature, Unit:	69 F	87 F	77 F
Soil Moisture:	DRY	SLIWET	DRY
% Cloud Cover:	50	10	5

Crop Stage At Each Application			
	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMD BCOR	ZEAMD BCOR	ZEAMD BCOR
Stage Scale Used:			BBCH
Stage Majority, Percent:			V5
Height, Unit:		5.5 IN	22.5 IN
Height Minimum, Maximum:		4 7	20 25

Purdue University

Pest Stage At Each Application

	A	B	C
Pest 1 Code, Type, Scale:	SETFA W	SETFA W	SETFA W
Height, Unit:		3.5 IN	15 IN
Height Minimum, Maximum:		1 6	10 20
Density, Unit:		65 YD2	60 YD2
Pest 2 Code, Type, Scale:	IPOHE W	IPOHE W	IPOHE W
Height, Unit:		1.5 IN	7 IN
Height Minimum, Maximum:		1 2	6 8
Density, Unit:		4 YD2	2 YD2
Pest 3 Code, Type, Scale:	ABUTH W	ABUTH W	ABUTH W
Height, Unit:		2 IN	11 IN
Height Minimum, Maximum:		1 3	9 13
Density, Unit:		4 YD2	6 YD2
Pest 4 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W
Height, Unit:		3.5 IN	10.5 IN
Height Minimum, Maximum:		2 5	9 12
Density, Unit:		3 YD2	3 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

Purdue University

Impact Sequential Programs in Corn

Trial ID: 11S-THP-CTC-22 Protocol ID: 11S-THP-CTC-22
 Location: Throckmorton Study Director: White/Marquardt
 Project ID: 11-TPZ-H-100 Investigator: Dr. Bill Johnson
 Sponsor Contact: Amvac - Rich Porter

Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code		AMBTR	SETFA	ABUTH	SETFA	AMBTR	ABUTH					
Pest Scientific Name		Ambrosia trifi>	Setaria faberi	Abutilon theop>	Setaria faberi	Ambrosia trifi>	Abutilon theop>					
Pest Name		Giant ragweed	Giant foxtail	Velvetleaf	Giant foxtail	Giant ragweed	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												
Part Rated												
Rating Date	6-13-2011	6-13-2011	6-13-2011	6-13-2011	6-21-2011	6-21-2011	6-21-2011	6-21-2011				
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	V6	V6	V6	V6	V6	V6	V6	V6				
Pest Stage Majority		1-24 IN	2-18 IN	4-8 IN	6-18 IN	4-24 IN	3-18 IN					
Pest Density, Unit		15 YD2	75 YD2	2 YD2	62.5YD2	13 YD2	8 YD2					
Assessed By	PM/CB	PM/CB	PM/CB	PM/CB	RH/JS	RH/JS	RH/JS	RH/JS				
Days After First/Last Applic.	31 7	31 7	31 7	31 7	39 4	39 4	39 4	39 4				
Plant-Eval Interval	32 DP-1	32 DP-1	32 DP-1	32 DP-1	40 DP-1	40 DP-1	40 DP-1	40 DP-1				
Days After Emergence	22 DE-1	22 DE-1	22 DE-1	22 DE-1	30 DE-1	30 DE-1	30 DE-1	30 DE-1				
Trt No.	Treatment Name	Rate	Appl Unit	Code	1	2	3	4	5	6	7	8
1	Untreated Check				0.0 b	0.0 b	0.0 b	0.0 b	0.0 c	0.0 c	0.0 c	0.0 a
2	Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a	A		0.0 b	84.0 a	99.3 a	91.3 a	97.0 b	45.0 b	79.5 b	1.3 a
3	Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a	A		0.0 b	90.5 a	98.3 a	100.0 a	99.5 ab	94.5 a	100.0 a	1.8 a
	Impact (2.8 SC)	0.0164 lb 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		0.0 b	84.8 a	97.3 a	99.8 a	99.5 ab	88.3 a	100.0 a	2.0 a
	Impact (2.8 SC)	0.0219 lb 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		0.0 b	76.5 a	99.8 a	100.0 a	99.5 ab	94.5 a	98.8 a	0.0 a
	Impact (2.8 SC)	0.0164 lb ai/a	C									
	Status (56 SG)	0.0875 lb 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		0.0 b	83.8 a	100.0 a	92.5 a	99.0 ab	87.5 a	97.5 a	0.5 a
	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		0.0 b	94.3 a	98.0 a	98.8 a	98.3 ab	97.5 a	100.0 a	1.0 a
	Impact (2.8 SC)	0.0109 lb ai/a	C									
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	C									
	Atrazine	0.5 lb ai/a	C									
	Destiny HC	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.

Purdue University

Pest Type		W Weed	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code		AMBTR	SETFA	ABUTH	SETFA	AMBTR	ABUTH					
Pest Scientific Name		Ambrosia trifi>	Setaria faberi	Abutilon theop>	Setaria faberi	Ambrosia trifi>	Abutilon theop>					
Pest Name		Giant ragweed	Giant foxtail	Velvetleaf	Giant foxtail	Giant ragweed	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	Corn	Corn	Corn	Corn	Corn	Corn				
Part Rated												
Rating Date	6-13-2011	6-13-2011	6-13-2011	6-13-2011	6-21-2011	6-21-2011	6-21-2011	6-21-2011				
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	V6	V6	V6	V6	V6	V6	V6	V6				
Pest Stage Majority		1-24 IN	2-18 IN	4-8 IN	6-18 IN	4-24 IN	3-18 IN					
Pest Density, Unit		15 YD2	75 YD2	2 YD2	62.5YD2	13 YD2	8 YD2					
Assessed By	PM/CB	PM/CB	PM/CB	PM/CB	RH/JS	RH/JS	RH/JS	RH/JS				
Days After First/Last Applic.	31 7	31 7	31 7	31 7	39 4	39 4	39 4	39 4				
Plant-Eval Interval	32 DP-1	32 DP-1	32 DP-1	32 DP-1	40 DP-1	40 DP-1	40 DP-1	40 DP-1				
Days After Emergence	22 DE-1	22 DE-1	22 DE-1	22 DE-1	30 DE-1	30 DE-1	30 DE-1	30 DE-1				
Trt No.	Treatment Name	Rate	Appl Unit	Code	1	2	3	4	5	6	7	8
8	Harness Xtra 5.6 (5.6 SC) Impact (2.8 SC)	2.24 lb ai/a 0.0109 lb ai/a	B B		8.8 a	99.0 a	99.8 a	100.0 a	100.0 a	99.5 a	100.0 a	2.5 a
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B									
	Destiny HC	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		0.0 b	99.5 a	100.0 a	100.0 a	100.0 a	99.5 a	100.0 a	0.5 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		0.0 b	88.0 a	98.8 a	97.5 a	99.5 ab	89.5 a	98.8 a	0.5 a
	Laudis (3.5 SL)	0.082 lb ai/a	C									
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	C									
	MSO	1 % v/v	C									
	AMS - Liquid	1.28 lb ai/a	C									
11	Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a	A		0.0 b	93.0 a	99.3 a	100.0 a	100.0 a	97.0 a	100.0 a	0.0 a
	Laudis (3.5 SL)	0.082 lb ai/a	C									
	Atrazine	0.5 lb ai/a	C									
	COC	1 % v/v	C									
	AMS - Liquid	1.28 lb ai/a	C									
12	Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a	B		8.8 a	99.3 a	100.0 a	100.0 a	100.0 a	97.0 a	100.0 a	0.0 a
	Laudis (3.5 SL)	0.082 lb ai/a	B									
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	B									
	MSO	1 % v/v	B									
	AMS - Liquid	1.28 lb ai/a	B									
LSD (P=.05)		3.54			3.54	15.34	2.13	6.46	1.75	22.83	10.50	2.14
Standard Deviation		2.45			2.45	10.63	1.48	4.47	1.21	15.81	7.27	1.48
CV		167.93			167.93	12.85	1.62	4.97	1.33	19.17	8.12	177.66
Bartlett's X2		0.0			0.0	44.844	14.741	18.042	6.707	67.296	19.957	6.944
P(Bartlett's X2)		.			.	0.001*	0.039*	0.001*	0.349	0.001*	0.001*	0.435
Replicate F		2.200			2.200	8.119	0.826	0.473	0.545	2.322	0.563	1.090
Replicate Prob(F)		0.1066			0.1066	0.0003	0.4890	0.7029	0.6549	0.0932	0.6430	0.3670
Treatment F		7.737			7.737	25.878	1505.329	162.503	2245.074	14.305	62.658	1.376
Treatment Prob(F)		0.0001			0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.2302

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		AMBTR	SETFA	ABUTH	SETFA	AMBTR	IPOHE			
Pest Scientific Name		Ambrosia trifi>	Setaria faberi	Abutilon theop>	Setaria faberi	Ambrosia trifi>	Ipomoea heder>			
Pest Name		Giant ragweed	Giant foxtail	Velvetleaf	Giant foxtail	Giant ragweed	Ivyleaf mornin>			
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	6 FT	6 FT	6 FT	6 FT	6 FT	6 FT	6 FT			
Part Rated										
Rating Date	7-2-2011	7-2-2011	7-2-2011	7-2-2011	7-14-2011	7-14-2011	7-14-2011			
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1	1			
Crop Stage Majority	V9-V10	V9-V10	V9-V10	V9-V10	VT	VT	VT			
Pest Stage Majority		12-50 IN	24-42 IN	12-36 IN	40 IN	6 FT	27 IN			
Pest Density, Unit		3 YD2	60 YD2	1.5 YD2	40 YD2	5 YD2	2 YD2			
Assessed By	CB	CB	CB	CB	CB	CB	CB			
Days After First/Last Applic.	50 15	50 15	50 15	50 15	62 27	62 27	62 27			
Plant-Eval Interval	51 DP-1	51 DP-1	51 DP-1	51 DP-1	63 DP-1	63 DP-1	63 DP-1			
Days After Emergence	41 DE-1	41 DE-1	41 DE-1	41 DE-1	53 DE-1	53 DE-1	53 DE-1			
Trt No.	Treatment Name	Rate	Appl Code	9	10	11	12	13	14	15
1	Untreated Check			0.0 a	0.0 c	0.0 b	0.0 c	0.0 c	0.0 c	0.0 b
2	Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a	A	0.0 a	55.0 b	88.8 a	45.0 b	93.8 b	84.8 b	96.8 a
3	Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a	A	0.0 a	92.5 a	98.3 a	97.5 a	96.5 ab	98.0 a	99.0 a
	Impact (2.8 SC)	0.0164 lb 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	0.0 a	98.0 a	97.8 a	100.0 a	96.5 ab	96.5 a	99.0 a
	Impact (2.8 SC)	0.0219 lb 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	0.0 a	98.8 a	97.5 a	100.0 a	96.5 ab	97.5 a	99.0 a
	Impact (2.8 SC)	0.0164 lb ai/a	C							
	Status (56 SG)	0.0875 lb 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	0.0 a	93.8 a	96.5 a	99.8 a	96.0 ab	94.8 a	99.0 a
	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	0.0 a	99.3 a	94.3 a	100.0 a	95.3 ab	98.0 a	99.0 a
	Impact (2.8 SC)	0.0109 lb ai/a	C							
	Roundup PowerMax 4.5 SL	0.77 lb ae/a	C							
	Atrazine	0.5 lb ai/a	C							
	Destiny HC	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.

Purdue University

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	AMBTR	SETFA	ABUTH	SETFA	AMBTR	IPOHE			
Pest Scientific Name	Ambrosia trifida>	Setaria faberi	Abutilon theophrasti>	Setaria faberi	Ambrosia trifida>	Ipomoea hederacea>			
Pest Name	Giant ragweed	Giant foxtail	Velvetleaf	Giant foxtail	Giant ragweed	Ivyleaf morningglow>			
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			
Description	6 FT	6 FT	6 FT	6 FT					
Part Rated									
Rating Date	7-2-2011	7-2-2011	7-2-2011	7-2-2011	7-14-2011	7-14-2011			
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
Crop Stage Majority	V9-V10	V9-V10	V9-V10	V9-V10	VT	VT			
Pest Stage Majority		12-50 IN	24-42 IN	12-36 IN	40 IN	6 FT			
Pest Density, Unit		3 YD2	60 YD2	1.5 YD2	40 YD2	5 YD2			
Assessed By	CB	CB	CB	CB					
Days After First/Last Applic.	50 15	50 15	50 15	50 15	62 27	62 27			
Plant-Eval Interval	51 DP-1	51 DP-1	51 DP-1	51 DP-1	63 DP-1	63 DP-1			
Days After Emergence	41 DE-1	41 DE-1	41 DE-1	41 DE-1	53 DE-1	53 DE-1			
Trt Treatment	Rate	Appl							
No. Name	Rate	Unit Code	9	10	11	12	13	14	15
8 Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a	B	1.3 a	96.5 a	100.0 a	100.0 a	97.5 ab	97.5 a	96.8 a
Impact (2.8 SC)	0.0109 lb ai/a	B							
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
Destiny HC	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	0.8 a	100.0 a	99.8 a	100.0 a	98.0 ab	99.0 a	99.0 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	0.0 a	97.5 a	86.8 a	97.5 a	97.5 ab	98.0 a	99.0 a
Laudis (3.5 SL)	0.082 lb ai/a	C							
Roundup PowerMax 4.5 SL	0.77 lb ae/a	C							
MSO	1 % v/v	C							
AMS - Liquid	1.28 lb ai/a	C							
11 Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a	A	0.0 a	99.5 a	99.5 a	99.8 a	98.0 ab	98.0 a	98.5 a
Laudis (3.5 SL)	0.082 lb ai/a	C							
Atrazine	0.5 lb ai/a	C							
COC	1 % v/v	C							
AMS - Liquid	1.28 lb ai/a	C							
12 Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a	B	0.8 a	98.0 a	98.8 a	100.0 a	98.5 a	97.0 a	99.0 a
Laudis (3.5 SL)	0.082 lb ai/a	B							
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B							
MSO	1 % v/v	B							
AMS - Liquid	1.28 lb ai/a	B							
LSD (P=.05)	1.40	12.78	11.61	17.65	2.68	5.43	2.71		
Standard Deviation	0.97	8.85	8.04	12.23	1.85	3.76	1.87		
CV	424.21	10.33	9.12	14.11	2.09	4.26	2.08		
Bartlett's X2	1.096	64.875	56.923	52.667	13.28	33.176	5.46		
P(Bartlett's X2)	0.578	0.001*	0.001*	0.001*	0.208	0.001*	0.065		
Replicate F	0.375	2.646	0.767	1.156	0.404	1.778	0.806		
Replicate Prob(F)	0.7718	0.0653	0.5208	0.3412	0.7508	0.1705	0.4996		
Treatment F	0.792	45.033	48.806	26.493	910.143	222.376	921.729		
Treatment Prob(F)	0.6468	0.0001	0.0001	0.0001	0.0001	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

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit Number of Subsamples Crop Stage Majority Pest Stage Majority Pest Density, Unit Assessed By Days After First/Last Applic. Plant-Eval Interval Days After Emergence	W Weed ABUTH Abutilon theop>	W Weed SETFA Setaria faberi	W Weed ABUTH Abutilon theop>	W Weed AMBTR Ambrosia trif>	W Weed IPOHE Ipomoea heder>						
	Velvetleaf	Giant foxtail	Velvetleaf	Giant ragweed	Ivyleaf mornin>						
	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX			
	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR			
	Zea mays Corn	Zea mays Corn	Zea mays Corn	Zea mays Corn	Zea mays Corn	Zea mays Corn	Zea mays Corn	Zea mays Corn			
	7-14-2011	7-14-2011	8-11-2011	8-11-2011	8-11-2011	8-11-2011	SEED - 10-12-2011	10-12-2011			
	CONTRO %	PHYGEN %	CONTRO %	CONTRO %	CONTRO %	CONTRO %	MOICON %	YIELD bu/ac			
	1	1	1	1	1	1	1	1			
	VT	VT	R3	R3	R3	R3					
	30 IN 3 YD2		40 IN 30 YD2	36 IN 4 YD2	90 IN 5 YD2	30 IN 3 YD2					
	62 27	62 27	90 55	90 55	90 55	90 55	152 117	152 117			
	63 DP-1	63 DP-1	91 DP-1	91 DP-1	91 DP-1	91 DP-1	153 DP-1	153 DP-1			
	53 DE-1	53 DE-1	81 DE-1	81 DE-1	81 DE-1	81 DE-1	143 DE-1	143 DE-1			
Trt Treatment No. Name	Rate Rate	Appl Unit	Code	16	17	18	19	20	21	22	23
1 Untreated Check				0.0 c	3.8 a	0.0 b	0.0 c	0.0 c	0.0 c	17.758 a	63.28 b
2 Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a	A		92.3 b	0.0 b	95.0 a	87.5 b	83.8 b	92.3 b	17.330 a	157.98 a
3 Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a	A		98.0 a	0.0 b	98.0 a	99.0 a	97.5 a	98.5 a	17.125 a	179.73 a
Impact (2.8 SC)	0.0164 lb 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		96.8 a	0.0 b	97.0 a	99.0 a	97.5 a	99.0 a	17.233 a	168.78 a
Impact (2.8 SC)	0.0219 lb 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		99.0 a	0.0 b	97.0 a	99.0 a	98.0 a	99.0 a	16.478 a	171.20 a
Impact (2.8 SC)	0.0164 lb ai/a	C									
Status (56 SG)	0.0875 lb 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		99.0 a	0.0 b	97.0 a	99.0 a	97.5 a	99.0 a	16.913 a	190.70 a
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		99.0 a	0.0 b	95.3 a	99.0 a	99.0 a	99.0 a	16.850 a	154.33 a
Impact (2.8 SC)	0.0109 lb ai/a	C									
Roundup PowerMax 4.5 SL	0.77 lb ae/a	C									
Atrazine	0.5 lb ai/a	C									
Destiny HC	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.

Purdue University

Pest Type Pest Code Pest Scientific Name Pest Name Crop Code BBCH Scale Crop Scientific Name Crop Name Description Part Rated Rating Date Rating Type Rating Unit Number of Subsamples Crop Stage Majority Pest Stage Majority Pest Density, Unit Assessed By Days After First/Last Applic. Plant-Eval Interval Days After Emergence	W Weed ABUTH Abutilon theop>	W Weed SETFA Setaria faberi	W Weed ABUTH Abutilon theop>	W Weed AMBTR Ambrosia trifi>	W Weed IPOHE Ipomoea hедера>						
	Velvetleaf	Giant foxtail	Velvetleaf	Giant ragweed	Ivyleaf mornin>						
	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX	ZEAMX			
	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR	BCOR			
	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays	Zea mays			
	Corn	Corn	Corn	Corn	Corn	Corn	Corn	Corn			
	7-14-2011	7-14-2011	8-11-2011	8-11-2011	8-11-2011	8-11-2011	SEED - 10-12-2011	10-12-2011			
	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	MOICON	YIELD			
	%	%	%	%	%	%	%	bu/ac			
	1	1	1	1	1	1	1	1			
	VT	VT	R3	R3	R3	R3	R3	R3			
	30 IN	40 IN	36 IN	90 IN	30 IN	30 IN	30 IN	30 IN			
	3 YD2	30 YD2	4 YD2	5 YD2	3 YD2	3 YD2	3 YD2	3 YD2			
	62 27	62 27	90 55	90 55	90 55	90 55	152 117	152 117			
	63 DP-1	63 DP-1	91 DP-1	91 DP-1	91 DP-1	91 DP-1	153 DP-1	153 DP-1			
	53 DE-1	53 DE-1	81 DE-1	81 DE-1	81 DE-1	81 DE-1	143 DE-1	143 DE-1			
Trt Treatment No. Name	Rate Rate	Appl Unit	Code	16	17	18	19	20	21	22	23
8 Harness Xtra 5.6 (5.6 SC) Impact (2.8 SC)	2.24 lb ai/a 0.0109 lb ai/a	B B		99.0 a	0.0 b	96.5 a	99.0 a	96.0 a	98.0 a	16.998 a	159.15 a
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B									
Destiny HC	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		99.0 a	0.0 b	98.0 a	99.0 a	99.0 a	99.0 a	16.845 a	172.83 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		99.0 a	0.0 b	97.5 a	99.0 a	99.0 a	99.0 a	17.060 a	183.28 a
Laudis (3.5 SL)	0.082 lb ai/a	C									
Roundup PowerMax 4.5 SL	0.77 lb ae/a	C									
MSO	1 % v/v	C									
AMS - Liquid	1.28 lb ai/a	C									
11 Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a	A		99.0 a	0.0 b	97.5 a	99.0 a	99.0 a	98.5 a	16.850 a	183.85 a
Laudis (3.5 SL)	0.082 lb ai/a	C									
Atrazine	0.5 lb ai/a	C									
COC	1 % v/v	C									
AMS - Liquid	1.28 lb ai/a	C									
12 Harness Xtra 5.6 (5.6 SC)	2.24 lb ai/a	B		99.0 a	0.0 b	98.5 a	99.0 a	98.0 a	99.0 a	17.175 a	160.35 a
Laudis (3.5 SL)	0.082 lb ai/a	B									
Roundup PowerMax 4.5 SL	0.77 lb ae/a	B									
MSO	1 % v/v	B									
AMS - Liquid	1.28 lb ai/a	B									
LSD (P=.05)	2.67	2.00	2.40	2.69	4.62	2.18	0.9159	29.852			
Standard Deviation	1.85	1.38	1.66	1.86	3.20	1.51	0.6343	20.674			
CV	2.06	442.22	1.87	2.08	3.61	1.68	3.72	12.75			
Bartlett's X2	2.014	0.0	10.113	0.0	32.95	9.078	12.126	8.33			
P(Bartlett's X2)	0.365	.	0.257	.	0.001*	0.028*	0.354	0.684			
Replicate F	1.996	1.000	0.692	1.000	0.560	0.496	3.384	10.459			
Replicate Prob(F)	0.1338	0.4051	0.5632	0.4051	0.6453	0.6878	0.0296	0.0001			
Treatment F	941.155	2.455	1139.214	933.720	311.064	1414.211	0.999	10.335			
Treatment Prob(F)	0.0001	0.0228	0.0001	0.0001	0.0001	0.0001	0.4682	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

Impact Sequential Programs in Corn

Trial ID: 11S-THP-CTC-22

Protocol ID: 11S-THP-CTC-22

Location: Throckmorton
Project ID: 11-TPZ-H-100Study Director: White/Marquardt
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

SETFA, Setaria faberi, = US

ABUTH, Abutilon theophrasti, = US

IPOHE, Ipomoea hederacea, = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Part Rated

SEED = seed

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

MOICON = moisture content

YIELD = yield

Rating Unit

% = percent

bu/ac = bushels per acre

YD2 = per square yard

Plant-Eval Interval

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

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

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

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

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

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