

The Ohio State University

Showcase Impact programs for performance and corn safety in university trials.

Trial ID: 16C04H039XOH535 Location: South Charlestown, OH Trial Year: 2016
 Protocol ID: 16C04H039 Investigator: Dr. Mark M. Loux
 Project ID: IMPACT Study Director: Joseph Argentine
 Sponsor Contact: Tony Dobbels

General Trial Information

Study Director: Joseph Argentine
Investigator: Dr. Mark M. Loux

Planned Completion Date: 11-6-2016

Trial Location

City: South Charleston **Country:** USA United States
State/Prov.: Ohio
Postal Code: 45368 **Climate Zone:** USWARM US Warm Continental

Latitude of LL Corner °: 39.86015 N
Longitude of LL Corner °: 83.67002 W
Altitude of LL Corner, Unit: 1085.00 FT

Conducted Under GLP: No
Conducted Under GEP: No

Objectives:

Evaluate commercial IMPACT programs. May be included in a larger trial with other programs.

Contacts

Study Director: Joseph Argentine

Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: ZEAMX Zea mays Corn
Variety: P1197AMXT **BBCH Scale:** BCOR
Description: Pioneer RR/LL 111 RM

Planting Rate, Unit: 32097 S/A
Depth, Unit: 1.5 IN
Row Spacing, Unit: 30 IN
Soil Temperature, Unit: 52 F
Soil Moisture: NORMAL normal, adequate
Seed Bed: MEDIUM medium

Planting Date: 4-20-2016
Planting Method: SEEDED seeded
Planting Equipment: FPP Finger Pickup Planter
Emergence Date: 5-1-2016

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:** CHEAL Chenopodium album
Common Name: Common lambsquarters

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

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

Pest 6 Type: W **Code:** POLPY Persicaria pensylvanica
Common Name: Pennsylvania smartweed

Pest 7 Type: W **Code:** AMBEL Ambrosia artemisiifolia
Common Name: Common ragweed

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 30 FT
Treated Plot Area: 300 FT² **Treatments:** 5
Replications: 4

Site Type: FIELD field
Experimental Unit: 4 ROW row
Tillage Type: CONTIL conventional-till
Study Design: RACOB Randomized Complete Block (RCB)

No. Previous Crop Year

1. Soybean 2015

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Soil Description

Description Name: F-7 East
 % OM: 2 Texture: SIC silty clay
 pH: 6.9 Soil Name: Crosby
 CEC: 14 Fert. Level: G good
 Soil Drainage: G good

Application Description

	A	B	C
Application Date:	4-20-2016	5-19-2016	6-1-2016
Appl. Start Time:	11:45 AM	9:30 AM	8:30 AM
Appl. Stop Time:	12:00 PM	10:00 AM	8:45 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PREMCR	EAPOWE	POSPOS
Application Placement:	BROSOL	BROFOL	BROFOL
Applied By:	Dobbels	Loux	Bolte
Air Temperature, Unit:	65 f	57 F	72 F
% Relative Humidity:	33	52	20
Wind Velocity, Unit:	6 MPH	8 MPH	4 MPH
Wind Direction:	E	NNE	NE
Dew Presence (Y/N):	N no	N no	N no
Soil Temperature, Unit:	52 F	52 F	64 F
Soil Moisture:	NORMAL	NORMAL	NORMAL
% Cloud Cover:	20	0	5
Next Moisture Occurred On:	4-21-2016	5-20-2016	6-4-2016
Time to Next Moisture, Unit:	1 DAY	1 DAY	3 DAY

Crop Stage At Each Application

	A		B		C	
Crop 1 Code, BBCH Scale:	ZEAMX	BCOR	ZEAMX	BCOR	ZEAMX	BCOR
Stage Scale Used:	BBCH		BBCH		BBCH	
Stage Majority, Percent:			V2	90	V4	90
Stage Minimum, Percent:			V2	90	V4	90
Stage Maximum, Percent:			V3	10	V5	10
Height, Unit:			4	IN	8	IN
Height Minimum, Maximum:			3	4	8	10

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Pest Stage At Each Application

	A		B		C	
Pest 1 Code, Type, Scale:	SETFA	W	SETFA	W	SETFA	W
Stage Majority, Percent:			13	100	18	60
Stage Minimum, Percent:					14	40
Stage Maximum, Percent:					18	60
Height, Unit:			3	IN	5	IN
Height Minimum, Maximum:			2	3	4	6
Density, Unit:					195	m2
Pest 2 Code, Type, Scale:	AMBTR	W	AMBTR	W	AMBTR	W
Stage Majority, Percent:			12	100	19	60
Stage Minimum, Percent:					18	40
Stage Maximum, Percent:					19	60
Height, Unit:			2	IN	7	IN
Height Minimum, Maximum:			1	3	6	8
Density, Unit:					12	M2
Pest 3 Code, Type, Scale:	CHEAL	W	CHEAL	W	CHEAL	W
Stage Majority, Percent:			14	100		
Height, Unit:			1	IN		
Height Minimum, Maximum:			0.5	1.5		
Density, Unit:					112	m2
Pest 4 Code, Type, Scale:	AMARE	W	AMARE	W	AMARE	W
Stage Majority, Percent:			12	100		
Height, Unit:			0.5	IN		
Height Minimum, Maximum:			0.25	0.75		
Density, Unit:					3	m2
Pest 5 Code, Type, Scale:	ABUTH	W	ABUTH	W	ABUTH	W
Stage Majority, Percent:			12	100	14	100
Height, Unit:			2	IN	3	IN
Height Minimum, Maximum:			1	2	2	3
Density, Unit:					6	m2
Pest 6 Code, Type, Scale:	POLPY	W	POLPY	W	POLPY	W
Stage Majority, Percent:			13	100	14	60
Stage Minimum, Percent:					12	40
Stage Maximum, Percent:					14	60
Height, Unit:			1.5	IN	3	IN
Height Minimum, Maximum:			1	2	2	3
Density, Unit:					17	m2
Pest 7 Code, Type, Scale:	AMBEL	W	AMBEL	W	AMBEL	W
Density, Unit:					2	m2

Application Equipment

	A		B		C	
Appl. Equipment:	10'	AI XR	10'	AI XR	10'	AI XR
Equipment Type:	SPRBAC		SPRBAC		SPRBAC	
Operation Pressure, Unit:	46	PSI	46	PSI	46	PSI
Nozzle Type:	AI XR		AI XR		AI XR	
Nozzle Size:	110015		110015		110015	
Nozzle Spacing, Unit:	18	IN	18	IN	18	IN
Boom Length, Unit:	10	FT	10	FT	10	FT
Boom Height, Unit:	20	IN	20	IN	20	IN
Ground Speed, Unit:	3	MPH	3	MPH	3	MPH
Carrier:	WATER		WATER		WATER	
Spray Volume, Unit:	15	GPA	15	GPA	15	GPA
Mix Size, Unit:	2	Liters	2	Liters	2	Liters
Propellant:	CO2		CO2		CO2	
Tank Mix (Y/N):	Y	yes				

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Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	1*	2*	3*	4*	5*	6*
1	Untreated Check				0 c	0 c	0 c	0 c	0 c	0 b
2	Harness Xtra 5.6	3.6 pt/a		A	95 a	63 b	71 b	74 b	68 b	88 a
	Impact	0.75 fl oz/a		C						
	Aatrex 4L	1 pt/a		C						
	MSO			C						
	N-Pak AMS Liquid			C						
3	Harness Xtra 5.6	3.6 pt/a		A	84 ab	63 b	94 a	78 b	68 b	93 a
	Impact	0.75 fl oz/a		C						
	Liberty	29 oz/a		C						
	Aatrex 4L	1 pt/a		C						
	MSO			C						
	N-Pak AMS Liquid			C						
4	Harness Xtra 5.6	3.6 pt/a		A	93 a	61 b	79 b	71 b	68 b	93 a
	Impact	0.75 fl oz/a		C						
	Roundup PowerMax	32 fl oz/a		C						
	Aatrex 4L	1.0 pt/a		C						
	MSO			C						
	N-Pak AMS Liquid			C						
5	Harness Xtra 5.6	3.6 pt/a		B	70 b	80 a	100 a	100 a	100 a	100 a
	Impact	1 fl oz/a		B						
	MSO			B						
	N-Pak AMS Liquid			B						
	LSD P=.05				17.9	7.4	12.5	10.6	5.8	13.6
	Standard Deviation				11.6	4.8	8.1	6.9	3.8	8.8
	CV				17.02	8.99	11.82	10.65	6.22	11.82
	Bartlett's X2				1.226	1.166	6.291	13.333	0.0	0.0
	P(Bartlett's X2)				0.542	0.558	0.043*	0.001*	.	1.00
	Skewness				-1.1094*	-1.2772*	-1.1617*	-1.1127*	-0.9572	-1.3499*
	Kurtosis				-0.1336	0.1968	-0.0289	0.0573	-0.0264	0.1549
	Replicate F				1.293	1.364	1.584	1.302	1.294	4.710
	Replicate Prob(F)				0.3216	0.3008	0.2448	0.3190	0.3213	0.0214
	Treatment F				45.963	165.218	97.429	121.639	378.882	90.548
	Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 * Adjusted means
 Could not calculate LSD (% mean diff) for columns 10,12,14,20,22,26,29,31 because error mean square = 0.

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 Protocol ID: 16C04H039
 Project ID: IMPACT

Location: South Charlestown, OH Trial Year: 2016
 Investigator: Dr. Mark M. Loux
 Study Director: Joseph Argentine
 Sponsor Contact: Tony Dobbels

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	SETFA	AMBTR	CHEAL	POLPY	ABUTH	AMARE				
Pest Scientific Name	Setaria faberi	Ambrosia trif>	Chenopodium al>	Persicaria pen>	Abutilon theop>	Amaranthus ret>				
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Pennsylvania s>	velvetleaf	Redroot pigweed				
Rating Date	6-14-2016	6-14-2016	6-14-2016	6-14-2016	6-14-2016	6-14-2016				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
SE Group No.	7	8	9	10	11	13				
Rating Timing										
Days After First/Last Applic.	55 13	55 13	55 13	55 13	55 13	55 13				
Trt-Eval Interval	13 DA-C	26 DA-B	26 DA-B	26 DA-B	13 DA-C	13 DA-C				
Plant-Eval Interval	55 DP-1	55 DP-1	55 DP-1	55 DP-1	55 DP-1	55 DP-1				
Days After Emergence	44 DE-1	44 DE-1	44 DE-1	44 DE-1	44 DE-1	44 DE-1				
Number of Decimals	0	0	0	0	0	0				
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	7*	8*	9*	10*	11*	12*
1	Untreated Check				0 c	0 c	0 c	0 b	0 c	0 b
2	Harness Xtra 5.6	3.6 pt/a		A	95 a	86 a	100 a	100 a	100 a	100 a
	Impact	0.75 fl oz/a		C						
	Aatrex 4L	1 pt/a		C						
	MSO			C						
	N-Pak AMS Liquid			C						
3	Harness Xtra 5.6	3.6 pt/a		A	99 a	84 ab	100 a	100 a	99 a	100 a
	Impact	0.75 fl oz/a		C						
	Liberty	29 oz/a		C						
	Aatrex 4L	1 pt/a		C						
	MSO			C						
	N-Pak AMS Liquid			C						
4	Harness Xtra 5.6	3.6 pt/a		A	100 a	83 ab	100 a	100 a	100 a	100 a
	Impact	0.75 fl oz/a		C						
	Roundup PowerMax	32 fl oz/a		C						
	Aatrex 4L	1.0 pt/a		C						
	MSO			C						
	N-Pak AMS Liquid			C						
5	Harness Xtra 5.6	3.6 pt/a		B	73 b	78 b	93 b	100 a	94 b	100 a
	Impact	1 fl oz/a		B						
	MSO			B						
	N-Pak AMS Liquid			B						
	LSD P=.05				8.4	8.5	6.6	.	3.8	.
	Standard Deviation				5.5	5.5	4.3	0.0	2.5	0.0
	CV				7.48	8.38	5.45	0.0	3.13	0.0
	Bartlett's X2				4.755	3.928	0.0	0.0	1.148	0.0
	P(Bartlett's X2)				0.093	0.269	.	.	0.284	.
	Skewness				-1.3287*	-1.5112*	-1.5727*	-1.6245*	-1.6001*	-1.6245*
	Kurtosis				0.143	0.5446	0.596	0.6985	0.6559	0.6985
	Replicate F				0.375	0.762	1.000	0.000	0.828	0.000
	Replicate Prob(F)				0.7727	0.5368	0.4262	1.0000	0.5038	1.0000
	Treatment F				240.167	179.122	422.455	0.000	1279.345	0.000
	Treatment Prob(F)				0.0001	0.0001	0.0001	1.0000	0.0001	1.0000

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed				
Pest Code	IPHOE	XANST	SETFA	AMBTR	CHEAL				
Pest Scientific Name	Ipomoea heder>	Xanthium strum>	Setaria faberi	Ambrosia trifi>	Chenopodium al>				
Pest Name	Ivyleaf mornin>	Heart-leaf coc>	Giant foxtail	Giant ragweed	Common lambsqu>				
Rating Date	6-14-2016	6-14-2016	6-29-2016	6-29-2016	6-29-2016				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1				
SE Group No.	14	15	17	18	19				
Rating Timing									
Days After First/Last Applic.	55 13	55 13	70 28	70 28	70 28				
Trt-Eval Interval	26 DA-B	26 DA-B	28 DA-C	28 DA-C	28 DA-C				
Plant-Eval Interval	55 DP-1	55 DP-1	70 DP-1	70 DP-1	70 DP-1				
Days After Emergence	44 DE-1	44 DE-1	59 DE-1	59 DE-1	59 DE-1				
Number of Decimals	0	0	0	0	0				
Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	13*	14*	15*	16*	17*
1	Untreated Check				0 b	0 b	0 c	0 c	0 b
2	Harness Xtra 5.6	3.6 pt/a		A	81 a	100 a	88 a	86 a	100 a
	Impact	0.75 fl oz/a		C					
	Aatrex 4L	1 pt/a		C					
	MSO			C					
	N-Pak AMS Liquid			C					
3	Harness Xtra 5.6	3.6 pt/a		A	81 a	100 a	91 a	91 a	100 a
	Impact	0.75 fl oz/a		C					
	Liberty	29 oz/a		C					
	Aatrex 4L	1 pt/a		C					
	MSO			C					
	N-Pak AMS Liquid			C					
4	Harness Xtra 5.6	3.6 pt/a		A	78 a	100 a	93 a	90 a	99 a
	Impact	0.75 fl oz/a		C					
	Roundup PowerMax	32 fl oz/a		C					
	Aatrex 4L	1.0 pt/a		C					
	MSO			C					
	N-Pak AMS Liquid			C					
5	Harness Xtra 5.6	3.6 pt/a		B	80 a	100 a	78 b	76 b	96 a
	Impact	1 fl oz/a		B					
	MSO			B					
	N-Pak AMS Liquid			B					
	LSD P=.05				6.2	.	6.4	5.7	5.0
	Standard Deviation				4.0	0.0	4.2	3.7	3.3
	CV				6.26	0.0	6.0	5.35	4.13
	Bartlett's X2				6.964	0.0	0.983	3.378	2.966
	P(Bartlett's X2)				0.031*	.	0.805	0.337	0.085
	Skewness				-1.5578*	-1.6245*	-1.4996*	-1.5014*	-1.5977*
	Kurtosis				0.5886	0.6985	0.49	0.495	0.6474
	Replicate F				2.494	0.000	0.643	1.077	1.882
	Replicate Prob(F)				0.1097	1.0000	0.6021	0.3957	0.1864
	Treatment F				319.753	0.000	355.429	446.539	735.118
	Treatment Prob(F)				0.0001	1.0000	0.0001	0.0001	0.0001

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	POLPY	ABUTH	AMARE	IPOHE	XANST	SETFA			
Pest Scientific Name	Persicaria pen>	Abutilon theop>	Amaranthus ret>	Ipomoea heder>	Xanthium strum>	Setaria faberi			
Pest Name	Pennsylvania s>	velvetleaf	Redroot pigweed	ivy-leaf morni>	Heart-leaf coc>	Giant foxtail			
Rating Date	6-29-2016	6-29-2016	6-29-2016	6-29-2016	6-29-2016	7-13-2016			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
SE Group No.	20	21	31	31	22	23			
Rating Timing									
Days After First/Last Applic.	70 28	70 28	70 28	70 28	70 28	84 42			
Trt-Eval Interval	28 DA-C	28 DA-C	28 DA-C	28 DA-C	28 DA-C	42 DA-C			
Plant-Eval Interval	70 DP-1	70 DP-1	70 DP-1	70 DP-1	70 DP-1	84 DP-1			
Days After Emergence	59 DE-1	59 DE-1	59 DE-1	59 DE-1	59 DE-1	73 DE-1			
Number of Decimals	0	0	0	0	0	0			
Trt Treatment No. Name	Other Rate	Other Rate	Appl Unit Code	18*	19*	20*	21*	22*	23*
1 Untreated Check				0 b	0 b	0 b	0 b	0 b	0 b
2 Harness Xtra 5.6 Impact	3.6 pt/a		A	96 a	99 a	100 a	81 a	100 a	90 a
Aatrex 4L	0.75 fl oz/a		C						
MSO	1 pt/a		C						
N-Pak AMS Liquid			C						
3 Harness Xtra 5.6 Impact	3.6 pt/a		A	100 a	100 a	100 a	80 a	100 a	68 a
Liberty	0.75 fl oz/a		C						
Aatrex 4L	29 oz/a		C						
MSO	1 pt/a		C						
N-Pak AMS Liquid			C						
4 Harness Xtra 5.6 Impact	3.6 pt/a		A	78 a	100 a	100 a	83 a	100 a	88 a
Roundup PowerMax	0.75 fl oz/a		C						
Aatrex 4L	32 fl oz/a		C						
MSO	1.0 pt/a		C						
N-Pak AMS Liquid			C						
5 Harness Xtra 5.6 Impact	3.6 pt/a		B	100 a	100 a	100 a	80 a	100 a	80 a
MSO	1 fl oz/a		B						
N-Pak AMS Liquid			B						
LSD P=.05				30.1	1.7	.	4.0	.	32.4
Standard Deviation				19.6	1.1	0.0	2.6	0.0	21.0
CV				26.16	1.4	0.0	3.99	0.0	32.36
Bartlett's X2				6.538	0.0	0.0	1.296	0.0	10.429
P(Bartlett's X2)				0.011*	.	.	0.255	.	0.005*
Skewness				-1.2385*	-1.6216*	-1.6245*	-1.6019*	-1.6245*	-1.1489*
Kurtosis				-0.486	0.6935	0.6985	0.6677	0.6985	-0.5851
Replicate F				1.441	1.000	0.000	0.688	0.000	0.972
Replicate Prob(F)				0.2796	0.4262	1.0000	0.5768	1.0000	0.4380
Treatment F				19.170	6361.001	0.000	786.750	0.000	12.627
Treatment Prob(F)				0.0001	0.0001	1.0000	0.0001	1.0000	0.0003

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	AMBTR	CHEAL	POLPY	ABUTH	IPOHE			
Pest Scientific Name	Ambrosia trif>	Chenopodium al>	Persicaria pen>	Abutilon theop>	Ipomoea heder>			
Pest Name	Giant ragweed	common lambsqu>	annual smartwe>	velvetleaf	ivy-leaf morni>			
Rating Date	7-13-2016	7-13-2016	7-13-2016	7-13-2016	7-13-2016			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1			
SE Group No.	24	25	26	27	28			
Rating Timing								
Days After First/Last Applic.	84 42	84 42	84 42	84 42	84 42			
Trt-Eval Interval	42 DA-C	42 DA-C	42 DA-C	42 DA-C	42 DA-C			
Plant-Eval Interval	84 DP-1	84 DP-1	84 DP-1	84 DP-1	84 DP-1			
Days After Emergence	73 DE-1	73 DE-1	73 DE-1	73 DE-1	73 DE-1			
Number of Decimals	0	0	0	0	0			
Trt Treatment	Other Rate	Other Rate	Appl Unit Code	24*	25*	26*	27*	28*
1 Untreated Check				0 c	0 b	0 b	0 b	0 c
2 Harness Xtra 5.6	3.6 pt/a		A	84 a	100 a	100 a	99 a	84 ab
Impact	0.75 fl oz/a		C					
Aatrex 4L	1 pt/a		C					
MSO			C					
N-Pak AMS Liquid			C					
3 Harness Xtra 5.6	3.6 pt/a		A	89 a	96 a	100 a	100 a	80 b
Impact	0.75 fl oz/a		C					
Liberty	29 oz/a		C					
Aatrex 4L	1 pt/a		C					
MSO			C					
N-Pak AMS Liquid			C					
4 Harness Xtra 5.6	3.6 pt/a		A	86 a	100 a	100 a	100 a	89 a
Impact	0.75 fl oz/a		C					
Roundup PowerMax	32 fl oz/a		C					
Aatrex 4L	1.0 pt/a		C					
MSO			C					
N-Pak AMS Liquid			C					
5 Harness Xtra 5.6	3.6 pt/a		B	78 b	100 a	100 a	98 a	86 ab
Impact	1 fl oz/a		B					
MSO			B					
N-Pak AMS Liquid			B					
LSD P=.05				5.8	5.1	.	3.3	7.3
Standard Deviation				3.7	3.3	0.0	2.2	4.8
CV				5.56	4.17	0.0	2.73	7.03
Bartlett's X2				2.932	11.725	0.0	9.598	1.137
P(Bartlett's X2)				0.402	0.001*	.	0.008*	0.768
Skewness				-1.5188*	-1.5999*	-1.6245*	-1.611*	-1.5205*
Kurtosis				0.5316	0.6506	0.6985	0.6743	0.5251
Replicate F				3.910	1.172	0.000	2.738	2.697
Replicate Prob(F)				0.0368	0.3612	1.0000	0.0897	0.0928
Treatment F				410.015	718.620	0.000	1678.006	254.505
Treatment Prob(F)				0.0001	0.0001	1.0000	0.0001	0.0001

The Ohio State University

Showcase Impact programs for performance and corn safety in university trials.

Trial ID: 16C04H039XOH535 Location: South Charlestown, OH Trial Year: 2016
 Protocol ID: 16C04H039 Investigator: Dr. Mark M. Loux
 Project ID: IMPACT Study Director: Joseph Argentine
 Sponsor Contact: Tony Dobbels

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	29*	30*	31
	Pest Type			W Weed		W Weed	
	Pest Code			XANST		AMARE	
	Pest Scientific Name			Xanthium strum>		Amaranthus ret>	
	Pest Name			Common cockleb>		Redroot pigweed	
	Rating Date			7-13-2016		7-13-2016	
	Rating Type			CONTRO		CONTRO	
	Rating Unit			%		%	
	Number of Subsamples			1		1	1
	SE Group No.			29		30	16
	Rating Timing						
	Days After First/Last Applic.			84 42		84 42	
	Trt-Eval Interval			42 DA-C		42 DA-C	
	Plant-Eval Interval			84 DP-1		84 DP-1	
	Days After Emergence			73 DE-1		73 DE-1	
	Number of Decimals			0		0	
	1 Untreated Check				0 b	0 b	
	2 Harness Xtra 5.6	3.6 pt/a		A	100 a	100 a	
	Impact	0.75 fl oz/a		C			
	Aatrex 4L	1 pt/a		C			
	MSO			C			
	N-Pak AMS Liquid			C			
	3 Harness Xtra 5.6	3.6 pt/a		A	100 a	99 a	
	Impact	0.75 fl oz/a		C			
	Liberty	29 oz/a		C			
	Aatrex 4L	1 pt/a		C			
	MSO			C			
	N-Pak AMS Liquid			C			
	4 Harness Xtra 5.6	3.6 pt/a		A	100 a	100 a	
	Impact	0.75 fl oz/a		C			
	Roundup PowerMax	32 fl oz/a		C			
	Aatrex 4L	1.0 pt/a		C			
	MSO			C			
	N-Pak AMS Liquid			C			
	5 Harness Xtra 5.6	3.6 pt/a		B	100 a	100 a	
	Impact	1 fl oz/a		B			
	MSO			B			
	N-Pak AMS Liquid			B			
	LSD P=.05				.	1.8	.
	Standard Deviation				0.0	1.2	.
	CV				0.0	1.45	.
	Bartlett's X2				0.0	5.548	.
	P(Bartlett's X2)				.	0.019*	.
	Skewness				-1.6245*	-1.6215*	.
	Kurtosis				0.6985	0.6935	.
	Replicate F				0.000	0.845	
	Replicate Prob(F)				1.0000	0.4955	
	Treatment F				0.000	5918.889	
	Treatment Prob(F)				1.0000	0.0001	

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Project ID: IMPACT Study Director: Joseph Argentine
Sponsor Contact: Tony Dobbels

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
POLPY, *Persicaria pensylvanica*, = US
ABUTH, *Abutilon theophrasti*, = US
XANST, *Xanthium strumarium*, = US
AMARE, *Amaranthus retroflexus*, = US
IPOHE, *Ipomoea hederacea*, = US

Rating Type

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

Plant-Eval Interval

42 DP-1 = 1 ZEAMX 4-20-2016
55 DP-1 = 1 ZEAMX 4-20-2016
70 DP-1 = 1 ZEAMX 4-20-2016
84 DP-1 = 1 ZEAMX 4-20-2016