

# The Ohio State University

## BASF CORN HERBICIDE TWO PASS PROGRAMS

Trial ID: 17BASFCORN  
 Protocol ID: MKD-H-2017-US-C52-S-04.1  
 Project ID:

Location: Trial Year: 2017  
 Investigator: Dr. Mark M. Loux  
 Study Director: Daniel Waldstein  
 Sponsor Contact:

### General Trial Information

**Study Director:** Daniel Waldstein  
**Investigator:** Dr. Mark M. Loux

### 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 °:** 39.8577 N  
**Longitude of LL Corner °:** 83.67001 W  
**Altitude of LL Corner, Unit:** 1092.00 FT  
**Conducted Under GLP:** No  
**Conducted Under GEP:** No  
**No.**

### Objectives:

1. Compare efficacy of BASF and competitors lower cost 2 pass programs with higher cost 2 pass programs.

### Contacts

**Study Director:** Daniel Waldstein  
**Investigator:** Dr. Mark M. Loux  
**Organization:** The Ohio State University  
**Address:** 2021 Coffey Road  
**City+State/Prov:** Columbus, Ohio  
**Postal Code:** 43210  
**Country:** USA United States

### Cooperator/Landowner

### Other Contacts

### Crop Description

**Crop 1:** ZEAMX Zea mays Corn  
**Variety:** SC10AQ96  
**Description:** Seed Consultants RR/LL

**Planting Rate, Unit:** 32097 S/A  
**Depth, Unit:** 1.75 IN  
**Row Spacing, Unit:** 30 IN

**Planting Date:** 4-25-2017  
**Planting Method:** PLANTD planted  
**Planting Equipment:** FPP Finger Pickup Planter  
**Emergence Date:** 5-10-2017

**Soil Temperature, Unit:** 56 F  
**Soil Moisture:** DRY dry  
**Seed Bed:** MEDIUM medium

### Pest Description

**Pest 1 Type:** W **Code:** ABUTH Abutilon theophrasti  
**Common Name:** velvetleaf

**Pest 2 Type:** W **Code:** AMARE Amaranthus retroflexus  
**Common Name:** Redroot pigweed

**Pest 3 Type:** W **Code:** SETFA Setaria faberi  
**Common Name:** Giant foxtail

**Pest 4 Type:** W **Code:** IPOHE Ipomoea hederacea  
**Common Name:** ivy-leaf morning glory

**Pest 5 Type:** W **Code:** AMBTR Ambrosia trifida  
**Common Name:** Giant ragweed

**Pest 6 Type:** W **Code:** CHEAL Chenopodium album  
**Common Name:** common lambsquarters

**Pest 7 Type:** W **Code:** HIBTR Hibiscus trionum  
**Common Name:** Venice mallow

### Site and Design

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Treated Plot Width: 10 FT  
 Treated Plot Length: 30 FT  
 Treated Plot Area: 300 FT<sup>2</sup> Treatments: 12  
 Replications: 4  
 No. Previous Crop Year  
 1. Soybean 2016

Site Type: FIELD field  
 Experimental Unit: 1 PLOT plot  
 Tillage Type: CONTIL conventional-till  
 Study Design: RAOBL Randomized Complete Block (RCB)

### Maintenance

No.

### Soil Description

Description Name: Big E  
 % OM: 2.8  
 pH: 5.9  
 CEC: 17.44

Texture: SICL silty clay loam  
 Soil Name: Kokomo  
 Fert. Level: G good  
 Soil Drainage: G good

### Additional Measured Elements

### Application Description

	A	B	C
Application Date:	4-25-2017	5-26-2017	6-6-2017
Appl. Start Time:	12:30 PM	8:30 AM	8:23 AM
Appl. Stop Time:	1:00 PM	9:00 AM	8:30 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	NA2	NA3
Application Placement:	BROSOL	BROFOL	BROFOL
Applied By:		Reeb	LAMB
Air Temperature, Unit:	72 F	60 F	59 F
% Relative Humidity:	55	79	77
Wind Velocity, Unit:	7 MPH	11 MPH	7 MPH
Wind Direction:	ESE	W	N
Dew Presence (Y/N):	N no	N no	Y yes
Soil Temperature, Unit:	56 F	59 F	60 F
Soil Moisture:	DRY	WET	MOIST
% Cloud Cover:	5	1	0
Next Moisture Occurred On:	4-27-2017	5-26-2017	6-13-2017
Time to Next Moisture, Unit:	2 DAY	13 HR	1 WK

### Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ZEAMX BCOR	ZEAMX BCOR	ZEAMX BCOR
Stage Scale Used:		BBCH	BBCH
Stage Majority, Percent:		13 100	15 100
Height, Unit:		6.5 IN	16 IN
Height Minimum, Maximum:		6 7	14 19

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### Pest Stage At Each Application

	A		B		C	
<b>Pest 1 Code, Type, Scale:</b>	ABUTH	W	ABUTH	W	ABUTH	W
<b>Stage Majority, Percent:</b>			13	100	14	100
<b>Height, Unit:</b>			1	IN	3	IN
<b>Height Minimum, Maximum:</b>					2	4
<b>Density, Unit:</b>			0.25	M2	0.25	M2
<b>Pest 2 Code, Type, Scale:</b>	AMARE	W	AMARE	W	AMARE	W
<b>Stage Majority, Percent:</b>			12	100		
<b>Height, Unit:</b>			0.5	IN		
<b>Density, Unit:</b>			8	M2		
<b>Pest 3 Code, Type, Scale:</b>	SETFA	W	SETFA	W	SETFA	W
<b>Stage Majority, Percent:</b>			11	100	13	80
<b>Height, Unit:</b>			1.5	IN	3	IN
<b>Height Minimum, Maximum:</b>					2	4
<b>Density, Unit:</b>			96	M2	96	m2
<b>Pest 4 Code, Type, Scale:</b>	IPOHE	W	IPOHE	W	IPOHE	W
<b>Stage Majority, Percent:</b>			10	100	12	80
<b>Stage Minimum, Percent:</b>					10	20
<b>Stage Maximum, Percent:</b>					12	80
<b>Height, Unit:</b>			0.5	IN	2	IN
<b>Height Minimum, Maximum:</b>					0.25	2
<b>Density, Unit:</b>			0.25	M2	0.25	M2
<b>Pest 5 Code, Type, Scale:</b>	AMBTR	W	AMBTR	W	AMBTR	W
<b>Stage Majority, Percent:</b>			13	100	19	60
<b>Stage Minimum, Percent:</b>					14	20
<b>Stage Maximum, Percent:</b>					19	60
<b>Height, Unit:</b>			2	IN	8	IN
<b>Height Minimum, Maximum:</b>			2	4	3	10
<b>Density, Unit:</b>			2	M2	2	m2
<b>Pest 6 Code, Type, Scale:</b>	CHEAL	W	CHEAL	W	CHEAL	W
<b>Stage Majority, Percent:</b>			15	100	18	100
<b>Height, Unit:</b>			1.5	IN	1	IN
<b>Height Minimum, Maximum:</b>			1	2	1	2
<b>Density, Unit:</b>			2	M2	2	M2
<b>Pest 7 Code, Type, Scale:</b>	HIBTR	W	HIBTR	W	HIBTR	W
<b>Stage Majority, Percent:</b>					12	100
<b>Height, Unit:</b>					1.5	IN
<b>Height Minimum, Maximum:</b>					1	2
<b>Density, Unit:</b>					1	M2

### Application Equipment

	A		B		C	
<b>Appl. Equipment:</b>	10'	AI XR	10'	AI XR	10'	AI XR
<b>Equipment Type:</b>	SPRBAC		SPRBAC		SPRBAC	
<b>Operation Pressure, Unit:</b>	46	PSI	46	PSI	46	PSI
<b>Nozzle Type:</b>	AI XR		AI XR		AI XR	
<b>Nozzle Size:</b>	110015		110015		110015	
<b>Nozzle Spacing, Unit:</b>	18	IN	18	IN	18	IN
<b>Boom Length, Unit:</b>	10	FT	10	FT	10	FT
<b>Boom Height, Unit:</b>	20	IN	20	IN	20	IN
<b>Ground Speed, Unit:</b>	3	MPH	3	MPH	3	MPH
<b>Carrier:</b>	WATER		WATER		WATER	
<b>Spray Volume, Unit:</b>	15	GPA	15	GPA	15	GPA
<b>Mix Size, Unit:</b>	2	Liters	2	Liters	2	Liters
<b>Propellant:</b>	CO2		CO2		CO2	
<b>Trt No Treatment Application Comment</b>						

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**Date By Notes**

**No. Date By Deviations**

Pest Type		W Weed	W Weed	W Weed			
Pest Code		SETFA	AMBTR	CHEAL			
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>			
Pest Name		Giant foxtail Giant ragweed common lambsqu>					
Crop Code	ZEAMX				ZEAMX	ZEAMX	ZEAMX
Crop Name	Corn				Corn	Corn	Corn
Rating Date	5-26-2017	5-26-2017	5-26-2017	5-26-2017	6-19-201	6-19-201	6-19-201
					7	7	7
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYCHL	PHYNEC	PHYSTU
Rating Unit	%	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1	1
Assessed By	Loux	Loux	Loux	Loux	Loux	Loux	Loux
SE Group No.	22	2	3	4	11	12	13
Rating Timing	AT POST	AT POST	AT POST	AT POST			
Days After First/Last Applic.	31 31	31 31	31 31	31 31	55 13	55 13	55 13
Trt-Eval Interval	0 DA-B	0 DA-B	0 DA-B	0 DA-B	13 DA-C	13 DA-C	13 DA-C
Plant-Eval Interval	31 DP-1	31 DP-1	31 DP-1	31 DP-1	55 DP-1	55 DP-1	55 DP-1
Days After Emergence	16 DE-1	16 DE-1	16 DE-1	16 DE-1	40 DE-1	40 DE-1	40 DE-1
Number of Decimals	0	0	0	0	0	0	0

Trt Treatment	Rate	Appl	1*	2*	3*	4*	5*	6*	7*
No. Name	Rate Unit	Code							
1 CHECK			0 c	0 d	0 g	0 b	0 -	0 -	0 -
2 VERDICT	10.0 fl oz/a	A	3 a	100 a	65 bcd	100 a	0 -	0 -	0 -
2 ARMEZON PRO	16.0 fl oz/a	B							
2 ATRAZIN 4L	16.0 fl oz/a	B							
2 ROUNDUP POWERMAX	32.0 fl oz/a	B							
2 PREFERENCE	0.25 % v/v	B							
2 AMMONIUM SULFATE	2.5 % v/v	B							
3 VERDICT	10.0 fl oz/a	A	0 c	93 bc	59 cde	100 a	0 -	0 -	0 -
3 STATUS HERBICIDE	5.0 oz wt/a	C							
3 ROUNDUP POWERMAX	32.0 fl oz/a	C							
3 PREFERENCE	0.25 % v/v	C							
3 AMMONIUM SULFATE	2.5 % v/v	C							
4 ZIDUA SC	3.3 fl oz/a	A	0 c	100 a	43 f	100 a	0 -	0 -	0 -
4 ATRAZIN 4L	32.0 fl oz/a	A							
4 ARMEZON PRO	14.0 fl oz/a	C							
4 ROUNDUP POWERMAX	32.0 fl oz/a	C							
4 ATRAZIN 4L	16.0 fl oz/a	C							
4 PREFERENCE	0.25 % v/v	C							
4 AMMONIUM SULFATE	2.5 % v/v	C							
5 ARMEZON PRO	14.0 fl oz/a	A	1 bc	99 ab	53 def	100 a	0 -	0 -	0 -
5 ATRAZIN 4L	32.0 fl oz/a	A							
5 STATUS HERBICIDE	5.0 oz wt/a	C							
5 ROUNDUP POWERMAX	32.0 fl oz/a	C							
5 PREFERENCE	0.25 % v/v	C							
5 AMMONIUM SULFATE	2.5 % v/v	C							
6 ARMEZON PRO	14.0 fl oz/a	A	4 a	100 a	68 bc	100 a	0 -	0 -	0 -
6 ATRAZIN 4L	32.0 fl oz/a	A							
6 ARMEZON PRO	14.0 fl oz/a	B							
6 ATRAZIN 4L	16.0 fl oz/a	B							
6 ROUNDUP POWERMAX	32.0 fl oz/a	B							
6 PREFERENCE	0.25 % v/v	B							
6 AMMONIUM SULFATE	2.5 % v/v	B							

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Pest Code		SETFA	AMBTR	CHEAL			
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>			
Pest Name		Giant foxtail	Giant ragweed	common lambsqu>			
Crop Code	ZEAMX				ZEAMX	ZEAMX	ZEAMX
Crop Name	Corn				Corn	Corn	Corn
Rating Date	5-26-2017	5-26-2017	5-26-2017	5-26-2017	6-19-2017	6-19-2017	6-19-2017
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYCHL	PHYNEC	PHYSTU
Rating Unit	%	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1	1
Assessed By	Loux	Loux	Loux	Loux	Loux	Loux	Loux
SE Group No.	22	2	3	4	11	12	13
Rating Timing	AT POST	AT POST	AT POST	AT POST			
Days After First/Last Applic.	31 31	31 31	31 31	31 31	55 13	55 13	55 13
Trt-Eval Interval	0 DA-B	0 DA-B	0 DA-B	0 DA-B	13 DA-C	13 DA-C	13 DA-C
Plant-Eval Interval	31 DP-1	31 DP-1	31 DP-1	31 DP-1	55 DP-1	55 DP-1	55 DP-1
Days After Emergence	16 DE-1	16 DE-1	16 DE-1	16 DE-1	40 DE-1	40 DE-1	40 DE-1
Number of Decimals	0	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Appl Code	1*	2*	3*	4*	5*	6*	7*
		Rate Unit								
7	SURESTART	28.0 fl oz/a	A	4 a	100 a	78 ab	100 a	0 -	0 -	0 -
7	RESICORE	40.0 fl oz/a	B							
7	ROUNDUP POWERMAX	32.0 fl oz/a	B							
7	PREFERENCE	0.25 % v/v	B							
7	AMMONIUM SULFATE	2.5 % v/v	B							
8	RESICORE	40.0 fl oz/a	A	4 a	100 a	84 a	100 a	0 -	0 -	0 -
8	RESICORE	40.0 fl oz/a	B							
8	ROUNDUP POWERMAX	32.0 fl oz/a	B							
8	PREFERENCE	0.25 % v/v	B							
8	AMMONIUM SULFATE	2.5 % v/v	B							
9	ANTHEM ATZ	32.0 fl oz/a	A	3 ab	100 a	64 cd	100 a	0 -	0 -	0 -
9	CALLISTO	3.0 fl oz/a	B							
9	ROUNDUP POWERMAX	32.0 fl oz/a	B							
9	ATRAZIN 4L	16.0 fl oz/a	B							
9	PREFERENCE	0.25 % v/v	B							
9	AMMONIUM SULFATE	2.5 % v/v	B							
10	VERDICT	16.0 fl oz/a	A	0 c	100 a	53 def	100 a	0 -	0 -	0 -
10	STATUS HERBICIDE	5.0 oz wt/a	C							
10	ROUNDUP POWERMAX	32.0 fl oz/a	C							
10	PREFERENCE	0.25 % v/v	C							
10	AMMONIUM SULFATE	2.5 % v/v	C							
11	VERDICT	10.0 fl oz/a	A	0 c	86 c	50 ef	100 a	0 -	0 -	0 -
11	STATUS HERBICIDE	5.0 oz wt/a	C							
11	ZIDUA SC	1.64 fl oz/a	C							
11	ROUNDUP POWERMAX	32.0 fl oz/a	C							
11	PREFERENCE	0.25 % v/v	C							
11	AMMONIUM SULFATE	2.5 % v/v	C							

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Pest Code		SETFA	AMBTR	CHEAL					
Pest Scientific Name		Setaria faberi	Ambrosia trifi>	Chenopodium al>					
Pest Name		Giant foxtail	Giant ragweed	common lambsqu>					
Crop Code	ZEAMX				ZEAMX	ZEAMX	ZEAMX		
Crop Name	Corn				Corn	Corn	Corn		
Rating Date	5-26-2017	5-26-2017	5-26-2017	5-26-2017	6-19-201	6-19-201	6-19-201		
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYCHL	PHYNEC	PHYSTU		
Rating Unit	%	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1	1		
Assessed By	Loux	Loux	Loux	Loux	Loux	Loux	Loux		
SE Group No.	22	2	3	4	11	12	13		
Rating Timing	AT POST	AT POST	AT POST	AT POST					
Days After First/Last Applic.	31 31	31 31	31 31	31 31	55 13	55 13	55 13		
Trt-Eval Interval	0 DA-B	0 DA-B	0 DA-B	0 DA-B	13 DA-C	13 DA-C	13 DA-C		
Plant-Eval Interval	31 DP-1	31 DP-1	31 DP-1	31 DP-1	55 DP-1	55 DP-1	55 DP-1		
Days After Emergence	16 DE-1	16 DE-1	16 DE-1	16 DE-1	40 DE-1	40 DE-1	40 DE-1		
Number of Decimals	0	0	0	0	0	0	0		
Trt Treatment No. Name	Rate Rate Unit	Appl Code	1*	2*	3*	4*	5*	6*	7*
12 ACURON	48.0 fl oz/a	A	4 a	100 a	90 a	100 a	0 -	0 -	0 -
12 HALEX GT	57.6 fl oz/a	B							
12 ATRAZIN 4L	16.0 fl oz/a	B							
12 ROUNDUP POWERMAX	32.0 fl oz/a	B							
12 PREFERENCE	0.25 % v/v	B							
12 AMMONIUM SULFATE	2.5 % v/v	B							
LSD P=.05			2.2	6.9	12.9	.	.	.	.
Standard Deviation			1.5	4.8	9.0	0.0	0.0	0.0	0.0
CV			85.47	5.32	15.31	0.0	0.0	0.0	0.0
Bartlett's X2			5.507	21.348	4.373	0.0	0.0	0.0	0.0
P(Bartlett's X2)			0.481	0.001*	0.885	.	.	.	.
Skewness			0.9469*	-2.8996*	-0.8462*	-3.1133*	.	.	.
Kurtosis			-0.1097	7.0571*	1.1792	8.0253*	.	.	.
Replicate F			0.919	1.430	1.541	0.000	0.000	0.000	0.000
Replicate Prob(F)			0.4425	0.2515	0.2223	1.0000	1.0000	1.0000	1.0000
Treatment F			5.648	143.595	26.917	0.000	0.000	0.000	0.000
Treatment Prob(F)			0.0001	0.0001	0.0001	1.0000	1.0000	1.0000	1.0000

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Pest Scientific Name	Setaria faberi	Ambrosia trifida	Chenopodium album	Setaria faberi	Ambrosia trifida	Chenopodium album
Pest Name	Giant foxtail	Giant ragweed	common lambsquarters	Giant foxtail	Giant ragweed	common lambsquarters
Crop Code						
Crop Name						
Rating Date	6-19-2017	6-19-2017	6-19-2017	7-11-2017	7-11-2017	7-11-2017
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Assessed By	Loux	Loux	Loux	Loux	Loux	Loux
SE Group No.	21	15	16	17	18	19
Rating Timing						
Days After First/Last Applic.	55 13	55 13	55 13	77 35	77 35	77 35
Trt-Eval Interval	13 DA-C	13 DA-C	13 DA-C	35 DA-C	35 DA-C	35 DA-C
Plant-Eval Interval	55 DP-1	55 DP-1	55 DP-1	77 DP-1	77 DP-1	77 DP-1
Days After Emergence	40 DE-1	40 DE-1	40 DE-1	62 DE-1	62 DE-1	62 DE-1
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Appl Code	8*	9*	10*	11*	12*	13*
1	CHECK				0 d	0 e	0 b	0 f	0 b	0 c
2	VERDICT	10.0 fl oz/a	A		92 abc	64 d	100 a	87 abc	63 a	100 a
2	ARMEZON PRO	16.0 fl oz/a	B							
2	ATRAZIN 4L	16.0 fl oz/a	B							
2	ROUNDUP POWERMAX	32.0 fl oz/a	B							
2	PREFERENCE	0.25 % v/v	B							
2	AMMONIUM SULFATE	2.5 % v/v	B							
3	VERDICT	10.0 fl oz/a	A		90 abc	94 a	100 a	68 cde	76 a	100 a
3	STATUS HERBICIDE	5.0 oz wt/a	C							
3	ROUNDUP POWERMAX	32.0 fl oz/a	C							
3	PREFERENCE	0.25 % v/v	C							
3	AMMONIUM SULFATE	2.5 % v/v	C							
4	ZIDUA SC	3.3 fl oz/a	A		100 a	86 abc	100 a	99 a	76 a	100 a
4	ATRAZIN 4L	32.0 fl oz/a	A							
4	ARMEZON PRO	14.0 fl oz/a	C							
4	ROUNDUP POWERMAX	32.0 fl oz/a	C							
4	ATRAZIN 4L	16.0 fl oz/a	C							
4	PREFERENCE	0.25 % v/v	C							
4	AMMONIUM SULFATE	2.5 % v/v	C							
5	ARMEZON PRO	14.0 fl oz/a	A		86 bc	93 a	100 a	64 de	81 a	100 a
5	ATRAZIN 4L	32.0 fl oz/a	A							
5	STATUS HERBICIDE	5.0 oz wt/a	C							
5	ROUNDUP POWERMAX	32.0 fl oz/a	C							
5	PREFERENCE	0.25 % v/v	C							
5	AMMONIUM SULFATE	2.5 % v/v	C							
6	ARMEZON PRO	14.0 fl oz/a	A		96 ab	70 bcd	100 a	96 a	65 a	100 a
6	ATRAZIN 4L	32.0 fl oz/a	A							
6	ARMEZON PRO	14.0 fl oz/a	B							
6	ATRAZIN 4L	16.0 fl oz/a	B							
6	ROUNDUP POWERMAX	32.0 fl oz/a	B							
6	PREFERENCE	0.25 % v/v	B							
6	AMMONIUM SULFATE	2.5 % v/v	B							

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	SETFA	AMBTR	CHEAL
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Chenopodium album	Setaria faberi	Ambrosia trifida	Chenopodium album
Pest Name	Giant foxtail	Giant ragweed	common lambsquarters	Giant foxtail	Giant ragweed	common lambsquarters
Crop Code						
Crop Name						
Rating Date	6-19-2017	6-19-2017	6-19-2017	7-11-2017	7-11-2017	7-11-2017
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Assessed By	Loux	Loux	Loux	Loux	Loux	Loux
SE Group No.	21	15	16	17	18	19
Rating Timing						
Days After First/Last Applic.	55 13	55 13	55 13	77 35	77 35	77 35
Trt-Eval Interval	13 DA-C	13 DA-C	13 DA-C	35 DA-C	35 DA-C	35 DA-C
Plant-Eval Interval	55 DP-1	55 DP-1	55 DP-1	77 DP-1	77 DP-1	77 DP-1
Days After Emergence	40 DE-1	40 DE-1	40 DE-1	62 DE-1	62 DE-1	62 DE-1
Number of Decimals	0	0	0	0	0	0

Trt Treatment No. Name	Rate Unit	Appl Code	8*	9*	10*	11*	12*	13*
7 SURESTART	28.0 fl oz/a	A	92 abc	69 cd	100 a	82 a-d	65 a	100 a
7 RESICORE	40.0 fl oz/a	B						
7 ROUNDUP POWERMAX	32.0 fl oz/a	B						
7 PREFERENCE	0.25 % v/v	B						
7 AMMONIUM SULFATE	2.5 % v/v	B						
8 RESICORE	40.0 fl oz/a	A	92 abc	71 bcd	100 a	82 a-d	74 a	100 a
8 RESICORE	40.0 fl oz/a	B						
8 ROUNDUP POWERMAX	32.0 fl oz/a	B						
8 PREFERENCE	0.25 % v/v	B						
8 AMMONIUM SULFATE	2.5 % v/v	B						
9 ANTHEM ATZ	32.0 fl oz/a	A	85 c	65 d	100 a	72 b-e	64 a	100 a
9 CALLISTO	3.0 fl oz/a	B						
9 ROUNDUP POWERMAX	32.0 fl oz/a	B						
9 ATRAZIN 4L	16.0 fl oz/a	B						
9 PREFERENCE	0.25 % v/v	B						
9 AMMONIUM SULFATE	2.5 % v/v	B						
10 VERDICT	16.0 fl oz/a	A	86 bc	88 ab	100 a	61 e	61 a	98 b
10 STATUS HERBICIDE	5.0 oz wt/a	C						
10 ROUNDUP POWERMAX	32.0 fl oz/a	C						
10 PREFERENCE	0.25 % v/v	C						
10 AMMONIUM SULFATE	2.5 % v/v	C						
11 VERDICT	10.0 fl oz/a	A	93 abc	94 a	100 a	90 ab	79 a	100 a
11 STATUS HERBICIDE	5.0 oz wt/a	C						
11 ZIDUA SC	1.64 fl oz/a	C						
11 ROUNDUP POWERMAX	32.0 fl oz/a	C						
11 PREFERENCE	0.25 % v/v	C						
11 AMMONIUM SULFATE	2.5 % v/v	C						



# The Ohio State University

## BASF CORN HERBICIDE TWO PASS PROGRAMS

Trial ID: 17BASFCORN  
 Protocol ID: MKD-H-2017-US-C52-S-04.1  
 Project ID:

Location: Trial Year: 2017  
 Investigator: Dr. Mark M. Loux  
 Study Director: Daniel Waldstein  
 Sponsor Contact:

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	SETFA	AMBTR	CHEAL
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Chenopodium album	Setaria faberi	Ambrosia trifida	Chenopodium album
Pest Name	Giant foxtail	Giant ragweed	common lambsquarters	Giant foxtail	Giant ragweed	common lambsquarters
Crop Code						
Crop Name						
Rating Date	6-19-2017	6-19-2017	6-19-2017	7-11-2017	7-11-2017	7-11-2017
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Assessed By	Loux	Loux	Loux	Loux	Loux	Loux
SE Group No.	21	15	16	17	18	19
Rating Timing						
Days After First/Last Applic.	55 13	55 13	55 13	77 35	77 35	77 35
Trt-Eval Interval	13 DA-C	13 DA-C	13 DA-C	35 DA-C	35 DA-C	35 DA-C
Plant-Eval Interval	55 DP-1	55 DP-1	55 DP-1	77 DP-1	77 DP-1	77 DP-1
Days After Emergence	40 DE-1	40 DE-1	40 DE-1	62 DE-1	62 DE-1	62 DE-1
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Appl Code	8*	9*	10*	11*	12*	13*
12	ACURON	48.0 fl oz/a		A	100 a	75 bcd	100 a	100 a	78 a	100 a
12	HALEX GT	57.6 fl oz/a		B						
12	ATRAZIN 4L	16.0 fl oz/a		B						
12	ROUNDUP POWERMAX	32.0 fl oz/a		B						
12	PREFERENCE	0.25 % v/v		B						
12	AMMONIUM SULFATE	2.5 % v/v		B						

LSD P=.05	10.9	17.9	.	20.1	20.2	2.1
Standard Deviation	7.6	12.4	0.0	14.0	14.0	1.4
CV	8.98	17.15	0.0	18.6	21.54	1.58
Bartlett's X2	4.884	21.233	0.0	31.933	11.837	0.0
P(Bartlett's X2)	0.77	0.02*	.	0.001*	0.296	.
Skewness	-2.6323*	-1.4806*	-3.1133*	-1.3896*	-1.2956*	-3.0993*
Kurtosis	6.09*	1.7751*	8.0253*	1.5269*	1.7147*	7.9662*
Replicate F	1.261	3.571	0.000	0.759	3.405	1.000
Replicate Prob(F)	0.3038	0.0243	1.0000	0.5254	0.0289	0.4051
Treatment F	50.900	16.912	0.000	15.130	9.617	1593.727
Treatment Prob(F)	0.0001	0.0001	1.0000	0.0001	0.0001	0.0001

# The Ohio State University

## BASF CORN HERBICIDE TWO PASS PROGRAMS

Trial ID: 17BASFCORN  
Protocol ID: MKD-H-2017-US-C52-S-04.1  
Project ID:

Location: Trial Year: 2017  
Investigator: Dr. Mark M. Loux  
Study Director: Daniel Waldstein  
Sponsor Contact:

Pest Type

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

Pest Code

SETFA, Setaria faberi, Giant foxtail = US

AMBTR, Ambrosia trifida, Giant ragweed = US

CHEAL, Chenopodium album, common lambsquarters = US

Crop Code

ZEAMX, BCOR, Zea mays, Corn = US

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

PHYCHL = phytotoxicity - chlorosis

PHYNEC = phytotoxicity - necrosis /burn

PHYSTU = phytotoxicity - stunting

Rating Unit

% = percent

Plant-Eval Interval

31 DP-1 = 1 ZEAMX 4-25-2017

55 DP-1 = 1 ZEAMX 4-25-2017

77 DP-1 = 1 ZEAMX 4-25-2017