

Monsanto Market Development Corn Trial

Trial ID: 15MONMARK Location: Western Branch Trial Year: 2015
 Protocol ID: 15MONMARK Investigator: Dr. Mark M. Loux
 Project ID: Study Director: Anthony Dobbels
 Sponsor Contact: Rod Stevenson, Monsanto

General Trial Information

Study Director: Anthony Dobbels
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 °: 39.85625 N
Longitude of LL Corner °: -83.67021 W

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: Anthony Dobbels

Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: ZEAMX Zea mays
Variety: SCS 1105 AM RR / LL
Description: Seed Consultants

Planting Date: 5-3-2015
Planting Method: PLANTD planted
Planting Equipment: FPP Finger Pickup Planter
Emergence Date: 5-9-2015

Planting Rate, Unit: 32097 S/A
Depth, Unit: 2 IN
Row Spacing, Unit: 30 IN
Soil Temperature, Unit: 60 F
Soil Moisture: NORMAL normal, adequate
Seed Bed: MEDIUM medium

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:** SOLPT Solanum ptycanthum
Common Name: Eastern black nightshade
- Pest 8 Type:** W **Code:** HIBTR Hibiscus trionum
Common Name: Venice mallow
- Pest 9 Type:** W **Code:** IPOHE Ipomoea hederacea
Common Name: Ivyleaf morningglory
- Pest10 Type:** W **Code:** SIDSP Sida spinosa
Common Name: Prickly sida

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 30 FT
Treated Plot Area: 300 FT² **Treatments:** 14
Replications: 4

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

No. Previous Crop Year

1. Soybean 2014

Soil Description

Description Name: Big E
% OM: 2.8 **Texture:** SIL silt loam
pH: 5.9 **Soil Name:** Kokomo
CEC: 17.44 **Fert. Level:** G good
Soil Drainage: G good

Additional Measured Elements

Date Element Quantity Unit
4-24-2015 NH3 180 LBS

Application Description

	A	B	C
Application Date:	5-4-2015	5-22-2015	6-3-2015
Appl. Start Time:	11:00 AM	9:00 AM	9:15 AM
Appl. Stop Time:	11:20 AM	9:30 AM	9:30 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	EPO	POST
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	Bethel	Barclay	Barclay
Air Temperature, Unit:	73 F	55 F	60 F
% Relative Humidity:	45	69	85
Wind Velocity, Unit:	10 MPH	7 MPH	4 MPH
Wind Direction:	SW	WSW	NNE
Dew Presence (Y/N):	N no	N no	Y yes
Soil Temperature, Unit:	58 F	52 F	59 F
Soil Moisture:	DRY	DRY	WET
% Cloud Cover:	40	0	100
Next Moisture Occurred On:	5-5-2015	5-26-2015	6-5-2015
Time to Next Moisture, Unit:	14 HR	4 DAY	2 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	
Stage Majority, Percent:			12	100	15	100
Height, Unit:			5	IN	12	IN
Height Minimum, Maximum:			4.5	5		

Pest Stage At Each Application

	A		B		C	
Pest 1 Code, Type, Scale:	SETFA	W	SETFA	W	SETFA	W
Stage Majority, Percent:			13	100	13	90
Stage Minimum, Percent:					13	90
Stage Maximum, Percent:					14	10
Height, Unit:			3	IN	5	IN
Height Minimum, Maximum:			1	3	3	6
Density, Unit:			197	M2	78	m2
Pest 2 Code, Type, Scale:	AMBTR	W	AMBTR	W	AMBTR	W
Stage Majority, Percent:			12	80	14	80
Stage Minimum, Percent:			12	80	14	80
Stage Maximum, Percent:			14	20	16	20
Height, Unit:			2	IN	4	IN
Height Minimum, Maximum:			2	4	4	5
Density, Unit:			14	M2	6	m2
Pest 3 Code, Type, Scale:	CHEAL	W	CHEAL	W	CHEAL	W
Stage Majority, Percent:			14	90	14	80
Stage Minimum, Percent:			12	10	14	80
Stage Maximum, Percent:			14	90	18	20
Diameter, Unit:			1	IN		
Height, Unit:			1.5	IN	1	IN
Height Minimum, Maximum:			0.5	1.5	1	2
Density, Unit:			32	M2	2	m2
Pest 4 Code, Type, Scale:	AMARE	W	AMARE	W	AMARE	W
Stage Majority, Percent:			14	100		
Diameter, Unit:			0.5	IN		
Height, Unit:			1	IN		
Height Minimum, Maximum:			0.5	1		
Density, Unit:			4	M2		
Pest 5 Code, Type, Scale:	ABUTH	W	ABUTH	W	ABUTH	W
Stage Majority, Percent:			11	90		
Stage Minimum, Percent:			10	10		
Stage Maximum, Percent:			11	90		
Diameter, Unit:			0.5	IN		
Height, Unit:			0.25	IN		
Height Minimum, Maximum:			0.25	0.5		
Density, Unit:			2	M2		
Pest 6 Code, Type, Scale:	POLPY	W	POLPY	W	POLPY	W
Stage Majority, Percent:			11	100	12	100
Diameter, Unit:			0.5	IN		
Height, Unit:			1	IN	1	IN
Height Minimum, Maximum:			0.25	1		
Density, Unit:			1	M2	1	m2
Pest 7 Code, Type, Scale:	SOLPT	W	SOLPT	W	SOLPT	W
Stage Majority, Percent:			12	100		
Diameter, Unit:			0.125	IN		
Height, Unit:			0.25	IN		
Height Minimum, Maximum:			0.125	0.25		
Density, Unit:			4	M2		
Pest 8 Code, Type, Scale:	HIBTR	W	HIBTR	W	HIBTR	W
Stage Majority, Percent:			10	100	12	100
Diameter, Unit:			0.5	IN		
Height, Unit:			0.5	IN	1	IN
Height Minimum, Maximum:			0.5	0.75	1	2
Density, Unit:			1	M2	1	m2
Pest 9 Code, Type, Scale:	IPOHE	W	IPOHE	W	IPOHE	W
Stage Majority, Percent:					12	100
Stage Minimum, Percent:					12	
Stage Maximum, Percent:					13	
Height, Unit:					2.5	IN
Height Minimum, Maximum:					2	3
Density, Unit:					0.5	M2
Pest10 Code, Type, Scale:	SIDSP	W	SIDSP	W	SIDSP	W
Stage Majority, Percent:					12	100
Height, Unit:					1	IN
Height Minimum, Maximum:					0.5	1
Density, Unit:					0.25	M2

Application Equipment

	A	B	C
Appl. Equipment:	6 FOOT BOOM	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:	6.67 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

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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			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	6-3-2015	6-3-2015	6-3-2015	6-3-2015
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	Dobbels	Dobbels	Dobbels	Dobbels
Rating Timing	AT POST	AT POST	AT POST	AT POST
Days After First/Last Applic.	30 12	30 12	30 12	30 12
Trt-Eval Interval	0 DA-C	0 DA-C	0 DA-C	0 DA-C
Plant-Eval Interval	31 DP-1	31 DP-1	31 DP-1	31 DP-1
Days After Emergence	25 DE-1	25 DE-1	25 DE-1	25 DE-1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit	Appl Code	Description	1	2	3	4
1	Harness Xtra 5.6	2.6 qt/a		A	PRE		0 a	82 ab	50 bcd	95 a
1	Roundup PowerMax	32 oz/a		C	POST					
1	Class Act Next Gen	2.5 % v/v		C	POST					
2	Degree Xtra	3 qt/a		A	PRE		0 a	55 fg	30 ef	90 a
2	Roundup PowerMax	32 oz/a		C	POST					
2	Class Act Next Gen	2.5 % v/v		C	POST					
3	Tripleflex	1.5 qt/a		A	PRE		0 a	78 abc	58 bc	100 a
3	Atrazine	1 qt/a		A	PRE					
3	Roundup PowerMax	32 oz/a		C	POST					
3	Class Act Next Gen	2.5 % v/v		C	POST					
4	Harness Xtra 5.6	2 qt/a		A	PRE		0 a	75 bcd	58 bc	100 a
4	Balance Flexx	3 oz/a		A	PRE					
4	Roundup PowerMax	32 oz/a		C	POST					
4	Class Act Next Gen	2.5 % v/v		C	POST					
5	Degree Xtra	2.3 qt/a		A	PRE		0 a	66 de	43 c-f	88 a
5	Balance Flexx	3 oz/a		A	PRE					
5	Roundup PowerMax	32 oz/a		C	POST					
5	Class Act Next Gen	2.5 % v/v		C	POST					
6	Corvus	4 lb ai/a		A	PRE		0 a	45 g	43 c-f	94 a
6	Atrazine	1 qt/a		A	PRE					
7	Lumax EZ	3 qt/a		A	PRE		0 a	61 ef	48 b-e	86 a
8	Halex GT	2 qt/a		B	EPO		0 a	85 ab	85 a	99 a
8	Class Act Next Gen	2.5 % v/v		B	EPO					
9	Atrazine	1 qt/a		A	PRE		0 a	87 a	85 a	100 a
9	Halex GT	2.5 qt/a		B	EPO					
9	Class Act Next Gen	2.5 % v/v		B	EPO					

Means followed by same letter do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,26,28;
 Average=24,25,27
 Could not calculate LSD (% mean diff) for columns 1,5,9,14,16,21,29 because error mean square = 0.

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			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	6-3-2015	6-3-2015	6-3-2015	6-3-2015
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	Dobbels	Dobbels	Dobbels	Dobbels
Rating Timing	AT POST	AT POST	AT POST	AT POST
Days After First/Last Applic.	30 12	30 12	30 12	30 12
Trt-Eval Interval	0 DA-C	0 DA-C	0 DA-C	0 DA-C
Plant-Eval Interval	31 DP-1	31 DP-1	31 DP-1	31 DP-1
Days After Emergence	25 DE-1	25 DE-1	25 DE-1	25 DE-1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Unit	Appl Code	Appl Description	1	2	3	4
10	Realm Q 4 oz					0 a	80 ab	64 b	100 a
10	Rimsulfuron	1.2 oz/a		A	PRE				
10	Mesotrione	2.5 oz/a		A	PRE				
10	Isoxadifen-ethyl	0.3 oz/a		A	PRE				
10	Cinch ATZ	2.6 qt/a		A	PRE				
10	Abundit Extra	47 oz/a		C	POST				
10	Class Act Next Gen	2.5 % v/v		C	POST				
11	Degree Xtra	2.5 qt/a		A	PRE	0 a	68 cde	38 def	91 a
11	Roundup PowerMax	32 oz/a		C	POST				
11	Impact	0.75 oz/a		C	POST				
11	Warrant	48 oz/a		C	POST				
11	Class Act Next Gen	2.5 % v/v		C	POST				
12	Degree Xtra	2.5 qt/a		A	PRE	0 a	60 ef	25 f	80 a
12	Roundup PowerMax	32 oz/a		C	POST				
12	Impact	0.75 oz/a		C	POST				
12	Class Act Next Gen	2.5 % v/v		C	POST				
13	Degree Xtra	2.5 qt/a		A	PRE	0 a	58 ef	30 ef	85 a
13	Roundup PowerMax	32 oz/a		C	POST				
13	Status	3 oz/a		C	POST				
13	Class Act Next Gen	2.5 % v/v		C	POST				
14	Degree Xtra	2.5 qt/a		A	PRE	0 a	63 ef	35 def	65 a
14	Roundup PowerMax	32 oz/a		C	POST				
14	Tripleflex	1.5 qt/a		C	POST				
14	Class Act Next Gen	2.5 % v/v		C	POST				
	LSD P=.05					.	10.3	19.1	21.9
	Standard Deviation					0.0	7.2	13.4	15.3
	CV					0.0	10.5	27.2	16.79
	Grand Mean					0.0	68.6	49.2	90.9
	Bartlett's X2					0.0	15.21	25.863	23.135
	P(Bartlett's X2)					.	0.294	0.011*	0.003*
	Skewness					.	-0.2078	-0.0635	-3.2966*
	Kurtosis					.	-1.0197	-0.3832	14.8601*
	Replicate F					0.000	22.601	2.471	2.283
	Replicate Prob(F)					1.0000	0.0001	0.0765	0.0946
	Treatment F					0.000	12.064	7.902	1.686
	Treatment Prob(F)					1.0000	0.0001	0.0001	0.1044

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMARE	ABUTH	IPOHE	
Pest Scientific Name	Amaranthus ret>	Abutilon theop>	Ipomoea heder>	
Pest Name	Redroot pigweed	velvetleaf	Ivyleaf mornin>	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Rating Date	6-3-2015	6-3-2015	6-3-2015	6-10-2015
Rating Type	CONTRO	CONTRO	CONTRO	PHYNEC
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	Dobbels	Dobbels	Dobbels	ACKLEY
Rating Timing	AT POST	AT POST	AT POST	
Days After First/Last Applic.	30 12	30 12	30 12	37 7
Trt-Eval Interval	0 DA-C	0 DA-C	0 DA-C	7 DA-C
Plant-Eval Interval	31 DP-1	31 DP-1	31 DP-1	38 DP-1
Days After Emergence	25 DE-1	25 DE-1	25 DE-1	32 DE-1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit	Appl Code	Appl Description	5	6	7	8
1	Harness Xtra 5.6	2.6 qt/a		A	PRE		100 a	90 ab	90 a	0 b
1	Roundup PowerMax	32 oz/a		C	POST					
1	Class Act Next Gen	2.5 % v/v		C	POST					
2	Degree Xtra	3 qt/a		A	PRE		100 a	100 a	95 a	0 b
2	Roundup PowerMax	32 oz/a		C	POST					
2	Class Act Next Gen	2.5 % v/v		C	POST					
3	Tripleflex	1.5 qt/a		A	PRE		100 a	95 ab	83 a	0 b
3	Atrazine	1 qt/a		A	PRE					
3	Roundup PowerMax	32 oz/a		C	POST					
3	Class Act Next Gen	2.5 % v/v		C	POST					
4	Harness Xtra 5.6	2 qt/a		A	PRE		100 a	100 a	100 a	0 b
4	Balance Flexx	3 oz/a		A	PRE					
4	Roundup PowerMax	32 oz/a		C	POST					
4	Class Act Next Gen	2.5 % v/v		C	POST					
5	Degree Xtra	2.3 qt/a		A	PRE		100 a	100 a	88 a	0 b
5	Balance Flexx	3 oz/a		A	PRE					
5	Roundup PowerMax	32 oz/a		C	POST					
5	Class Act Next Gen	2.5 % v/v		C	POST					
6	Corvus	4 lb ai/a		A	PRE		100 a	100 a	93 a	0 b
6	Atrazine	1 qt/a		A	PRE					
7	Lumax EZ	3 qt/a		A	PRE		100 a	100 a	91 a	0 b
8	Halex GT	2 qt/a		B	EPO		100 a	100 a	95 a	0 b
8	Class Act Next Gen	2.5 % v/v		B	EPO					
9	Atrazine	1 qt/a		A	PRE		100 a	100 a	100 a	0 b
9	Halex GT	2.5 qt/a		B	EPO					
9	Class Act Next Gen	2.5 % v/v		B	EPO					

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Crop Code	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	6-17-2015	6-17-2015	6-17-2015	6-17-2015
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	ACKLEY	ACKLEY	ACKLEY	ACKLEY
Rating Timing				
Days After First/Last Applic.	44 14	44 14	44 14	44 14
Trt-Eval Interval	14 DA-C	14 DA-C	14 DA-C	14 DA-C
Plant-Eval Interval	45 DP-1	45 DP-1	45 DP-1	45 DP-1
Days After Emergence	39 DE-1	39 DE-1	39 DE-1	39 DE-1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit	Appl Code	Appl Description	9	10	11	12
1	Harness Xtra 5.6	2.6 qt/a		A	PRE		0 b	83 b-e	68 bcd	100 a
1	Roundup PowerMax	32 oz/a		C	POST					
1	Class Act Next Gen	2.5 % v/v		C	POST					
2	Degree Xtra	3 qt/a		A	PRE		0 b	89 a-d	71 a-d	100 a
2	Roundup PowerMax	32 oz/a		C	POST					
2	Class Act Next Gen	2.5 % v/v		C	POST					
3	Tripleflex	1.5 qt/a		A	PRE		0 b	78 def	68 bcd	100 a
3	Atrazine	1 qt/a		A	PRE					
3	Roundup PowerMax	32 oz/a		C	POST					
3	Class Act Next Gen	2.5 % v/v		C	POST					
4	Harness Xtra 5.6	2 qt/a		A	PRE		0 b	80 c-f	70 bcd	100 a
4	Balance Flexx	3 oz/a		A	PRE					
4	Roundup PowerMax	32 oz/a		C	POST					
4	Class Act Next Gen	2.5 % v/v		C	POST					
5	Degree Xtra	2.3 qt/a		A	PRE		0 b	92 abc	68 bcd	100 a
5	Balance Flexx	3 oz/a		A	PRE					
5	Roundup PowerMax	32 oz/a		C	POST					
5	Class Act Next Gen	2.5 % v/v		C	POST					
6	Corvus	4 lb ai/a		A	PRE		0 b	31 g	21 e	100 a
6	Atrazine	1 qt/a		A	PRE					
7	Lumax EZ	3 qt/a		A	PRE		0 b	15 h	15 e	75 a
8	Halex GT	2 qt/a		B	EPO		0 b	68 f	65 cd	74 a
8	Class Act Next Gen	2.5 % v/v		B	EPO					
9	Atrazine	1 qt/a		A	PRE		0 b	70 ef	63 d	100 a
9	Halex GT	2.5 qt/a		B	EPO					
9	Class Act Next Gen	2.5 % v/v		B	EPO					

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Pest Name		Giant foxtail	Giant ragweed	Common lambsqu>
Crop Code	ZEAMX			
BBCH Scale	BCOR			
Crop Scientific Name	Zea mays			
Crop Name	Corn			
Rating Date	6-17-2015	6-17-2015	6-17-2015	6-17-2015
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	ACKLEY	ACKLEY	ACKLEY	ACKLEY
Rating Timing				
Days After First/Last Applic.	44 14	44 14	44 14	44 14
Trt-Eval Interval	14 DA-C	14 DA-C	14 DA-C	14 DA-C
Plant-Eval Interval	45 DP-1	45 DP-1	45 DP-1	45 DP-1
Days After Emergence	39 DE-1	39 DE-1	39 DE-1	39 DE-1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	Appl Description	9	10	11	12
10	Realm Q 4 oz					0 b	92 abc	69 bcd	100 a
10	Rimsulfuron	1.2 oz/a		A	PRE				
10	Mesotrione	2.5 oz/a		A	PRE				
10	Isoxadifen-ethyl	0.3 oz/a		A	PRE				
10	Cinch ATZ	2.6 qt/a		A	PRE				
10	Abundit Extra	47 oz/a		C	POST				
10	Class Act Next Gen	2.5 % v/v		C	POST				
11	Degree Xtra	2.5 qt/a		A	PRE	10 a	99 a	74 a-d	100 a
11	Roundup PowerMax	32 oz/a		C	POST				
11	Impact	0.75 oz/a		C	POST				
11	Warrant	48 oz/a		C	POST				
11	Class Act Next Gen	2.5 % v/v		C	POST				
12	Degree Xtra	2.5 qt/a		A	PRE	0 b	94 ab	79 ab	100 a
12	Roundup PowerMax	32 oz/a		C	POST				
12	Impact	0.75 oz/a		C	POST				
12	Class Act Next Gen	2.5 % v/v		C	POST				
13	Degree Xtra	2.5 qt/a		A	PRE	0 b	89 a-d	76 abc	100 a
13	Roundup PowerMax	32 oz/a		C	POST				
13	Status	3 oz/a		C	POST				
13	Class Act Next Gen	2.5 % v/v		C	POST				
14	Degree Xtra	2.5 qt/a		A	PRE	0 b	98 a	82 a	100 a
14	Roundup PowerMax	32 oz/a		C	POST				
14	Tripleflex	1.5 qt/a		C	POST				
14	Class Act Next Gen	2.5 % v/v		C	POST				
LSD P=.05						.	13.5	11.4	19.5
Standard Deviation						0.0	9.4	7.9	13.6
CV						0.0	12.24	12.53	14.16
Grand Mean						0.7	76.8	63.4	96.3
Bartlett's X2						0.0	33.733	15.987	28.72
P(Bartlett's X2)						.	0.001*	0.192	0.001*
Skewness						3.3836*	-1.8632*	-1.9296*	-5.3774*
Kurtosis						9.8045*	3.2236*	3.8288*	32.4842*
Replicate F						0.000	3.477	4.718	1.072
Replicate Prob(F)						1.0000	0.0251	0.0068	0.3725
Treatment F						0.000	28.192	25.324	1.860
Treatment Prob(F)						1.0000	0.0001	0.0001	0.0685

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMARE	ABUTH	IPOHE	
Pest Scientific Name	Amaranthus ret>	Abutilon theop>	Ipomoea heder>	
Pest Name	Redroot pigweed	velvetleaf	Ivyleaf mornin>	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Rating Date	6-17-2015	6-17-2015	6-17-2015	7-1-2015
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	ACKLEY	ACKLEY	ACKLEY	ACKLEY
Rating Timing				
Days After First/Last Applic.	44 14	44 14	44 14	58 28
Trt-Eval Interval	14 DA-C	14 DA-C	14 DA-C	28 DA-C
Plant-Eval Interval	45 DP-1	45 DP-1	45 DP-1	59 DP-1
Days After Emergence	39 DE-1	39 DE-1	39 DE-1	53 DE-1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit	Appl Code	Appl Description	13	14	15	16
1	Harness Xtra 5.6	2.6 qt/a		A	PRE		100 a	100 a	88 a	0 a
1	Roundup PowerMax	32 oz/a		C	POST					
1	Class Act Next Gen	2.5 % v/v		C	POST					
2	Degree Xtra	3 qt/a		A	PRE		100 a	100 a	83 a	0 a
2	Roundup PowerMax	32 oz/a		C	POST					
2	Class Act Next Gen	2.5 % v/v		C	POST					
3	Tripleflex	1.5 qt/a		A	PRE		100 a	100 a	83 a	0 a
3	Atrazine	1 qt/a		A	PRE					
3	Roundup PowerMax	32 oz/a		C	POST					
3	Class Act Next Gen	2.5 % v/v		C	POST					
4	Harness Xtra 5.6	2 qt/a		A	PRE		100 a	100 a	90 a	0 a
4	Balance Flexx	3 oz/a		A	PRE					
4	Roundup PowerMax	32 oz/a		C	POST					
4	Class Act Next Gen	2.5 % v/v		C	POST					
5	Degree Xtra	2.3 qt/a		A	PRE		100 a	100 a	84 a	0 a
5	Balance Flexx	3 oz/a		A	PRE					
5	Roundup PowerMax	32 oz/a		C	POST					
5	Class Act Next Gen	2.5 % v/v		C	POST					
6	Corvus	4 lb ai/a		A	PRE		100 a	100 a	77 a	0 a
6	Atrazine	1 qt/a		A	PRE					
7	Lumax EZ	3 qt/a		A	PRE		75 a	100 a	53 a	0 a
8	Halex GT	2 qt/a		B	EPO		85 a	100 a	78 a	0 a
8	Class Act Next Gen	2.5 % v/v		B	EPO					
9	Atrazine	1 qt/a		A	PRE		100 a	100 a	93 a	0 a
9	Halex GT	2.5 qt/a		B	EPO					
9	Class Act Next Gen	2.5 % v/v		B	EPO					

Pest Type	W Weed	W Weed	W Weed	
Pest Code	AMARE	ABUTH	IPOHE	
Pest Scientific Name	Amaranthus ret>	Abutilon theop>	Ipomoea heder>	
Pest Name	Redroot pigweed	velvetleaf	Ivyleaf mornin>	
Crop Code				ZEAMX
BBCH Scale				BCOR
Crop Scientific Name				Zea mays
Crop Name				Corn
Rating Date	6-17-2015	6-17-2015	6-17-2015	7-1-2015
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	ACKLEY	ACKLEY	ACKLEY	ACKLEY
Rating Timing				
Days After First/Last Applic.	44 14	44 14	44 14	58 28
Trt-Eval Interval	14 DA-C	14 DA-C	14 DA-C	28 DA-C
Plant-Eval Interval	45 DP-1	45 DP-1	45 DP-1	59 DP-1
Days After Emergence	39 DE-1	39 DE-1	39 DE-1	53 DE-1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	Appl Description	13	14	15	16
10	Realm Q 4 oz					93 a	100 a	100 a	0 a
10	Rimsulfuron	1.2 oz/a		A	PRE				
10	Mesotrione	2.5 oz/a		A	PRE				
10	Isoxadifen-ethyl	0.3 oz/a		A	PRE				
10	Cinch ATZ	2.6 qt/a		A	PRE				
10	Abundit Extra	47 oz/a		C	POST				
10	Class Act Next Gen	2.5 % v/v		C	POST				
11	Degree Xtra	2.5 qt/a		A	PRE	100 a	100 a	95 a	0 a
11	Roundup PowerMax	32 oz/a		C	POST				
11	Impact	0.75 oz/a		C	POST				
11	Warrant	48 oz/a		C	POST				
11	Class Act Next Gen	2.5 % v/v		C	POST				
12	Degree Xtra	2.5 qt/a		A	PRE	100 a	100 a	100 a	0 a
12	Roundup PowerMax	32 oz/a		C	POST				
12	Impact	0.75 oz/a		C	POST				
12	Class Act Next Gen	2.5 % v/v		C	POST				
13	Degree Xtra	2.5 qt/a		A	PRE	100 a	100 a	100 a	0 a
13	Roundup PowerMax	32 oz/a		C	POST				
13	Status	3 oz/a		C	POST				
13	Class Act Next Gen	2.5 % v/v		C	POST				
14	Degree Xtra	2.5 qt/a		A	PRE	100 a	100 a	96 a	0 a
14	Roundup PowerMax	32 oz/a		C	POST				
14	Tripleflex	1.5 qt/a		C	POST				
14	Class Act Next Gen	2.5 % v/v		C	POST				
LSD P=.05						21.3	.	30.3	.
Standard Deviation						14.9	0.0	21.2	0.0
CV						15.38	0.0	24.35	0.0
Grand Mean						96.6	100.0	86.9	0.0
Bartlett's X2						5.301	0.0	21.2	0.0
P(Bartlett's X2)						0.071	.	0.02*	.
Skewness						-5.5037*	.	-2.3119*	.
Kurtosis						33.5961*	.	5.9088*	.
Replicate F						1.044	0.000	0.846	0.000
Replicate Prob(F)						0.3842	1.0000	0.4773	1.0000
Treatment F						1.039	0.000	1.457	0.000
Treatment Prob(F)						0.4370	1.0000	0.1793	1.0000

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	AMARE
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Redroot pigweed
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	7-1-2015	7-1-2015	7-1-2015	7-1-2015
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	ACKLEY	ACKLEY	ACKLEY	ACKLEY
Rating Timing				
Days After First/Last Applic.	58 28	58 28	58 28	58 28
Trt-Eval Interval	28 DA-C	28 DA-C	28 DA-C	28 DA-C
Plant-Eval Interval	59 DP-1	59 DP-1	59 DP-1	59 DP-1
Days After Emergence	53 DE-1	53 DE-1	53 DE-1	53 DE-1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit	Appl Code	Appl Description	17	18	19	20
1	Harness Xtra 5.6	2.6 qt/a		A	PRE		84 bcd	79 a	100 a	100 a
1	Roundup PowerMax	32 oz/a		C	POST					
1	Class Act Next Gen	2.5 % v/v		C	POST					
2	Degree Xtra	3 qt/a		A	PRE		90 a-d	78 a	100 a	100 a
2	Roundup PowerMax	32 oz/a		C	POST					
2	Class Act Next Gen	2.5 % v/v		C	POST					
3	Tripleflex	1.5 qt/a		A	PRE		83 bcd	78 a	100 a	100 a
3	Atrazine	1 qt/a		A	PRE					
3	Roundup PowerMax	32 oz/a		C	POST					
3	Class Act Next Gen	2.5 % v/v		C	POST					
4	Harness Xtra 5.6	2 qt/a		A	PRE		84 bcd	80 a	100 a	100 a
4	Balance Flexx	3 oz/a		A	PRE					
4	Roundup PowerMax	32 oz/a		C	POST					
4	Class Act Next Gen	2.5 % v/v		C	POST					
5	Degree Xtra	2.3 qt/a		A	PRE		94 ab	78 a	100 a	100 a
5	Balance Flexx	3 oz/a		A	PRE					
5	Roundup PowerMax	32 oz/a		C	POST					
5	Class Act Next Gen	2.5 % v/v		C	POST					
6	Corvus	4 lb ai/a		A	PRE		31 e	17 b	100 a	100 a
6	Atrazine	1 qt/a		A	PRE					
7	Lumax EZ	3 qt/a		A	PRE		13 f	30 b	75 a	75 a
8	Halex GT	2 qt/a		B	EPO		78 d	75 a	100 a	100 a
8	Class Act Next Gen	2.5 % v/v		B	EPO					
9	Atrazine	1 qt/a		A	PRE		80 cd	73 a	100 a	100 a
9	Halex GT	2.5 qt/a		B	EPO					
9	Class Act Next Gen	2.5 % v/v		B	EPO					

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Pest Type	W Weed	W Weed	W Weed	W Weed				
Pest Code	SETFA	AMBTR	CHEAL	AMARE				
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Chenopodium al>	Amaranthus ret>				
Pest Name	Giant foxtail	Giant ragweed	Common lambsqu>	Redroot pigweed				
Crop Code								
BBCH Scale								
Crop Scientific Name								
Crop Name								
Rating Date	7-1-2015	7-1-2015	7-1-2015	7-1-2015				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%				
Number of Subsamples	1	1	1	1				
Assessed By	ACKLEY	ACKLEY	ACKLEY	ACKLEY				
Rating Timing								
Days After First/Last Applic.	58 28	58 28	58 28	58 28				
Trt-Eval Interval	28 DA-C	28 DA-C	28 DA-C	28 DA-C				
Plant-Eval Interval	59 DP-1	59 DP-1	59 DP-1	59 DP-1				
Days After Emergence	53 DE-1	53 DE-1	53 DE-1	53 DE-1				
Number of Decimals	0	0	0	0				
Trt Treatment No. Name	Other Rate	Other Rate Unit	Appl Code	Appl Description	17	18	19	20
10 Realm Q 4 oz					92 abc	76 a	100 a	100 a
10 Rimsulfuron	1.2 oz/a		A	PRE				
10 Mesotrione	2.5 oz/a		A	PRE				
10 Isoxadifen-ethyl	0.3 oz/a		A	PRE				
10 Cinch ATZ	2.6 qt/a		A	PRE				
10 Abundit Extra	47 oz/a		C	POST				
10 Class Act Next Gen	2.5 % v/v		C	POST				
11 Degree Xtra	2.5 qt/a		A	PRE	98 a	80 a	100 a	100 a
11 Roundup PowerMax	32 oz/a		C	POST				
11 Impact	0.75 oz/a		C	POST				
11 Warrant	48 oz/a		C	POST				
11 Class Act Next Gen	2.5 % v/v		C	POST				
12 Degree Xtra	2.5 qt/a		A	PRE	94 ab	83 a	100 a	100 a
12 Roundup PowerMax	32 oz/a		C	POST				
12 Impact	0.75 oz/a		C	POST				
12 Class Act Next Gen	2.5 % v/v		C	POST				
13 Degree Xtra	2.5 qt/a		A	PRE	90 a-d	81 a	100 a	100 a
13 Roundup PowerMax	32 oz/a		C	POST				
13 Status	3 oz/a		C	POST				
13 Class Act Next Gen	2.5 % v/v		C	POST				
14 Degree Xtra	2.5 qt/a		A	PRE	98 a	86 a	100 a	100 a
14 Roundup PowerMax	32 oz/a		C	POST				
14 Tripleflex	1.5 qt/a		C	POST				
14 Class Act Next Gen	2.5 % v/v		C	POST				
LSD P=.05					12.7	14.6	19.4	19.4
Standard Deviation					8.9	10.2	13.5	13.5
CV					11.22	14.41	13.79	13.78
Grand Mean					79.0	70.8	98.2	98.2
Bartlett's X2					39.29	35.761	23.197	0.0
P(Bartlett's X2)					0.001*	0.001*	0.001*	.
Skewness					-2.1967*	-2.4413*	-7.4151*	-7.4162*
Kurtosis					4.175*	5.3056*	54.9884*	55.0*
Replicate F					2.700	0.353	0.967	0.974
Replicate Prob(F)					0.0592	0.7875	0.4181	0.4149
Treatment F					32.900	16.028	0.972	0.974
Treatment Prob(F)					0.0001	0.0001	0.4945	0.4927

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	ABUTH	IPOHE	SETFA	AMBTR
Pest Scientific Name	Abutilon theop>	Ipomoea heder>	Setaria faberi	Ambrosia trifi>
Pest Name	velvetleaf	Ivyleaf mornin>	Giant foxtail	Giant ragweed
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	7-1-2015	7-1-2015	7-28-2015	7-28-2015
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	ACKLEY	ACKLEY	Dobbels	Dobbels
Rating Timing				
Days After First/Last Applic.	58 28	58 28	85 55	85 55
Trt-Eval Interval	28 DA-C	28 DA-C	55 DA-C	55 DA-C
Plant-Eval Interval	59 DP-1	59 DP-1	86 DP-1	86 DP-1
Days After Emergence	53 DE-1	53 DE-1	80 DE-1	80 DE-1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit	Appl Code	Appl Description	21	22	23	24
1	Harness Xtra 5.6	2.6 qt/a		A	PRE		100 a	90 a	82 abc	60 b
1	Roundup PowerMax	32 oz/a		C	POST					
1	Class Act Next Gen	2.5 % v/v		C	POST					
2	Degree Xtra	3 qt/a		A	PRE		100 a	85 a	84 ab	60 b
2	Roundup PowerMax	32 oz/a		C	POST					
2	Class Act Next Gen	2.5 % v/v		C	POST					
3	Tripleflex	1.5 qt/a		A	PRE		100 a	88 a	79 bc	68 ab
3	Atrazine	1 qt/a		A	PRE					
3	Roundup PowerMax	32 oz/a		C	POST					
3	Class Act Next Gen	2.5 % v/v		C	POST					
4	Harness Xtra 5.6	2 qt/a		A	PRE		100 a	90 a	78 bc	66 ab
4	Balance Flexx	3 oz/a		A	PRE					
4	Roundup PowerMax	32 oz/a		C	POST					
4	Class Act Next Gen	2.5 % v/v		C	POST					
5	Degree Xtra	2.3 qt/a		A	PRE		100 a	86 a	84 ab	61 b
5	Balance Flexx	3 oz/a		A	PRE					
5	Roundup PowerMax	32 oz/a		C	POST					
5	Class Act Next Gen	2.5 % v/v		C	POST					
6	Corvus	4 lb ai/a		A	PRE		100 a	74 a	30 d	15 c
6	Atrazine	1 qt/a		A	PRE					
7	Lumax EZ	3 qt/a		A	PRE		100 a	55 a	23 d	25 c
8	Halex GT	2 qt/a		B	EPO		100 a	83 a	70 c	68 ab
8	Class Act Next Gen	2.5 % v/v		B	EPO					
9	Atrazine	1 qt/a		A	PRE		100 a	93 a	70 c	58 b
9	Halex GT	2.5 qt/a		B	EPO					
9	Class Act Next Gen	2.5 % v/v		B	EPO					

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Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	ABUTH	IPOHE	SETFA	AMBTR
Pest Scientific Name	Abutilon theop>	Ipomoea heder>	Setaria faberi	Ambrosia trifi>
Pest Name	velvetleaf	Ivyleaf mornin>	Giant foxtail	Giant ragweed
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	7-1-2015	7-1-2015	7-28-2015	7-28-2015
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	ACKLEY	ACKLEY	Dobbels	Dobbels
Rating Timing				
Days After First/Last Applic.	58 28	58 28	85 55	85 55
Trt-Eval Interval	28 DA-C	28 DA-C	55 DA-C	55 DA-C
Plant-Eval Interval	59 DP-1	59 DP-1	86 DP-1	86 DP-1
Days After Emergence	53 DE-1	53 DE-1	80 DE-1	80 DE-1
Number of Decimals	0	0	0	0

Trt Treatment No. Name	Other Rate	Other Rate Unit	Appl Code	Appl Description	21	22	23	24
10 Realm Q 4 oz					100 a	100 a	89 ab	61 b
10 Rimsulfuron	1.2 oz/a		A	PRE				
10 Mesotrione	2.5 oz/a		A	PRE				
10 Isoxadifen-ethyl	0.3 oz/a		A	PRE				
10 Cinch ATZ	2.6 qt/a		A	PRE				
10 Abundit Extra	47 oz/a		C	POST				
10 Class Act Next Gen	2.5 % v/v		C	POST				
11 Degree Xtra	2.5 qt/a		A	PRE	100 a	95 a	92 a	68 ab
11 Roundup PowerMax	32 oz/a		C	POST				
11 Impact	0.75 oz/a		C	POST				
11 Warrant	48 oz/a		C	POST				
11 Class Act Next Gen	2.5 % v/v		C	POST				
12 Degree Xtra	2.5 qt/a		A	PRE	100 a	100 a	80 bc	61 b
12 Roundup PowerMax	32 oz/a		C	POST				
12 Impact	0.75 oz/a		C	POST				
12 Class Act Next Gen	2.5 % v/v		C	POST				
13 Degree Xtra	2.5 qt/a		A	PRE	100 a	100 a	84 ab	68 ab
13 Roundup PowerMax	32 oz/a		C	POST				
13 Status	3 oz/a		C	POST				
13 Class Act Next Gen	2.5 % v/v		C	POST				
14 Degree Xtra	2.5 qt/a		A	PRE	100 a	95 a	90 ab	78 a
14 Roundup PowerMax	32 oz/a		C	POST				
14 Tripleflex	1.5 qt/a		C	POST				
14 Class Act Next Gen	2.5 % v/v		C	POST				
LSD P=.05					.	28.9	12.2	13.8
Standard Deviation					0.0	20.2	8.5	9.6
CV					0.0	22.92	11.57	16.52
Grand Mean					100.0	88.0	73.8	58.2
Bartlett's X2					0.0	25.188	27.869	14.589
P(Bartlett's X2)					.	0.005*	0.009*	0.265
Skewness					.	-2.6615*	-2.0678*	-1.9383*
Kurtosis					.	7.7676*	4.2878*	4.7085*
Replicate F					0.000	1.022	5.576	0.373
Replicate Prob(F)					1.0000	0.3938	0.0029	0.7727
Treatment F					0.000	1.434	24.800	12.600
Treatment Prob(F)					1.0000	0.1891	0.0001	0.0001

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	CHEAL	AMARE	ABUTH	IPOHE
Pest Scientific Name	Chenopodium al>	Amaranthus ret>	Abutilon theop>	Ipomoea hedera>
Pest Name	Common lambsqu>	Redroot pigweed	velvetleaf	Ivyleaf mornin>
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	7-28-2015	7-28-2015	7-28-2015	7-28-2015
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	Dobbels	Dobbels	Dobbels	Dobbels
Rating Timing				
Days After First/Last Applic.	85 55	85 55	85 55	85 55
Trt-Eval Interval	55 DA-C	55 DA-C	55 DA-C	55 DA-C
Plant-Eval Interval	86 DP-1	86 DP-1	86 DP-1	86 DP-1
Days After Emergence	80 DE-1	80 DE-1	80 DE-1	80 DE-1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit	Appl Code	Appl Description	25	26	27	28
1	Harness Xtra 5.6	2.6 qt/a		A	PRE		92 ab	100 a	96 a	81 ab
1	Roundup PowerMax	32 oz/a		C	POST					
1	Class Act Next Gen	2.5 % v/v		C	POST					
2	Degree Xtra	3 qt/a		A	PRE		92 ab	100 a	98 a	78 b
2	Roundup PowerMax	32 oz/a		C	POST					
2	Class Act Next Gen	2.5 % v/v		C	POST					
3	Tripleflex	1.5 qt/a		A	PRE		100 a	100 a	95 a	88 ab
3	Atrazine	1 qt/a		A	PRE					
3	Roundup PowerMax	32 oz/a		C	POST					
3	Class Act Next Gen	2.5 % v/v		C	POST					
4	Harness Xtra 5.6	2 qt/a		A	PRE		100 a	100 a	100 a	96 ab
4	Balance Flexx	3 oz/a		A	PRE					
4	Roundup PowerMax	32 oz/a		C	POST					
4	Class Act Next Gen	2.5 % v/v		C	POST					
5	Degree Xtra	2.3 qt/a		A	PRE		100 a	100 a	100 a	90 ab
5	Balance Flexx	3 oz/a		A	PRE					
5	Roundup PowerMax	32 oz/a		C	POST					
5	Class Act Next Gen	2.5 % v/v		C	POST					
6	Corvus	4 lb ai/a		A	PRE		85 b	87 a	100 a	98 ab
6	Atrazine	1 qt/a		A	PRE					
7	Lumax EZ	3 qt/a		A	PRE		38 c	33 b	80 b	25 c
8	Halex GT	2 qt/a		B	EPO		80 b	100 a	100 a	88 ab
8	Class Act Next Gen	2.5 % v/v		B	EPO					
9	Atrazine	1 qt/a		A	PRE		85 b	100 a	100 a	91 ab
9	Halex GT	2.5 qt/a		B	EPO					
9	Class Act Next Gen	2.5 % v/v		B	EPO					

The Ohio State University

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	CHEAL	AMARE	ABUTH	IPOHE
Pest Scientific Name	Chenopodium al>	Amaranthus ret>	Abutilon theop>	Ipomoea hedera>
Pest Name	Common lambsqu>	Redroot pigweed	velvetleaf	Ivyleaf mornin>
Crop Code				
BBCH Scale				
Crop Scientific Name				
Crop Name				
Rating Date	7-28-2015	7-28-2015	7-28-2015	7-28-2015
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Assessed By	Dobbels	Dobbels	Dobbels	Dobbels
Rating Timing				
Days After First/Last Applic.	85 55	85 55	85 55	85 55
Trt-Eval Interval	55 DA-C	55 DA-C	55 DA-C	55 DA-C
Plant-Eval Interval	86 DP-1	86 DP-1	86 DP-1	86 DP-1
Days After Emergence	80 DE-1	80 DE-1	80 DE-1	80 DE-1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	Appl Description	25	26	27	28
10	Realm Q 4 oz					100 a	100 a	100 a	95 ab
10	Rimsulfuron	1.2 oz/a		A	PRE				
10	Mesotrione	2.5 oz/a		A	PRE				
10	Isoxadifen-ethyl	0.3 oz/a		A	PRE				
10	Cinch ATZ	2.6 qt/a		A	PRE				
10	Abundit Extra	47 oz/a		C	POST				
10	Class Act Next Gen	2.5 % v/v		C	POST				
11	Degree Xtra	2.5 qt/a		A	PRE	100 a	100 a	100 a	100 a
11	Roundup PowerMax	32 oz/a		C	POST				
11	Impact	0.75 oz/a		C	POST				
11	Warrant	48 oz/a		C	POST				
11	Class Act Next Gen	2.5 % v/v		C	POST				
12	Degree Xtra	2.5 qt/a		A	PRE	89 ab	100 a	100 a	95 ab
12	Roundup PowerMax	32 oz/a		C	POST				
12	Impact	0.75 oz/a		C	POST				
12	Class Act Next Gen	2.5 % v/v		C	POST				
13	Degree Xtra	2.5 qt/a		A	PRE	100 a	100 a	100 a	93 ab
13	Roundup PowerMax	32 oz/a		C	POST				
13	Status	3 oz/a		C	POST				
13	Class Act Next Gen	2.5 % v/v		C	POST				
14	Degree Xtra	2.5 qt/a		A	PRE	100 a	100 a	100 a	90 ab
14	Roundup PowerMax	32 oz/a		C	POST				
14	Tripleflex	1.5 qt/a		C	POST				
14	Class Act Next Gen	2.5 % v/v		C	POST				
LSD P=.05						14.5	19.7	8.6	22.0
Standard Deviation						10.1	13.7	6.0	15.4
CV						11.26	14.58	6.15	17.86
Grand Mean						90.0	94.3	97.8	86.2
Bartlett's X2						18.626	1.46	6.468	25.583
P(Bartlett's X2)						0.005*	0.227	0.091	0.007*
Skewness						-3.0167*	-4.5877*	-4.803*	-2.7727*
Kurtosis						10.8308*	20.5245*	25.1513*	8.1032*
Replicate F						1.748	1.311	0.408	3.951
Replicate Prob(F)						0.1740	0.2855	0.7481	0.0151
Treatment F						10.830	6.783	3.201	5.877
Treatment Prob(F)						0.0001	0.0001	0.0029	0.0001

Pest Type
 Pest Code
 Pest Scientific Name
 Pest Name
 Crop Code
 BBCH Scale
 Crop Scientific Name
 Crop Name
 Rating Date
 Rating Type
 Rating Unit
 Number of Subsamples 1
 Assessed By
 Rating Timing
 Days After First/Last Applic.
 Trt-Eval Interval
 Plant-Eval Interval
 Days After Emergence
 Number of Decimals

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	Appl Description
1	Harness Xtra 5.6	2.6 qt/a		A	PRE
1	Roundup PowerMax	32 oz/a		C	POST
1	Class Act Next Gen	2.5 % v/v		C	POST
2	Degree Xtra	3 qt/a		A	PRE
2	Roundup PowerMax	32 oz/a		C	POST
2	Class Act Next Gen	2.5 % v/v		C	POST
3	Tripleflex	1.5 qt/a		A	PRE
3	Atrazine	1 qt/a		A	PRE
3	Roundup PowerMax	32 oz/a		C	POST
3	Class Act Next Gen	2.5 % v/v		C	POST
4	Harness Xtra 5.6	2 qt/a		A	PRE
4	Balance Flexx	3 oz/a		A	PRE
4	Roundup PowerMax	32 oz/a		C	POST
4	Class Act Next Gen	2.5 % v/v		C	POST
5	Degree Xtra	2.3 qt/a		A	PRE
5	Balance Flexx	3 oz/a		A	PRE
5	Roundup PowerMax	32 oz/a		C	POST
5	Class Act Next Gen	2.5 % v/v		C	POST
6	Corvus	4 lb ai/a		A	PRE
6	Atrazine	1 qt/a		A	PRE
7	Lumax EZ	3 qt/a		A	PRE
8	Halex GT	2 qt/a		B	EPO
8	Class Act Next Gen	2.5 % v/v		B	EPO
9	Atrazine	1 qt/a		A	PRE
9	Halex GT	2.5 qt/a		B	EPO
9	Class Act Next Gen	2.5 % v/v		B	EPO

Pest Type
 Pest Code
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 Rating Date
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 Rating Unit
 Number of Subsamples 1
 Assessed By
 Rating Timing
 Days After First/Last Applic.
 Trt-Eval Interval
 Plant-Eval Interval
 Days After Emergence
 Number of Decimals

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Appl Code	Appl Description
10	Realm Q 4 oz				
10	Rimsulfuron	1.2 oz/a		A	PRE
10	Mesotrione	2.5 oz/a		A	PRE
10	Isoxadifen-ethyl	0.3 oz/a		A	PRE
10	Cinch ATZ	2.6 qt/a		A	PRE
10	Abundit Extra	47 oz/a		C	POST
10	Class Act Next Gen	2.5 % v/v		C	POST
11	Degree Xtra	2.5 qt/a		A	PRE
11	Roundup PowerMax	32 oz/a		C	POST
11	Impact	0.75 oz/a		C	POST
11	Warrant	48 oz/a		C	POST
11	Class Act Next Gen	2.5 % v/v		C	POST
12	Degree Xtra	2.5 qt/a		A	PRE
12	Roundup PowerMax	32 oz/a		C	POST
12	Impact	0.75 oz/a		C	POST
12	Class Act Next Gen	2.5 % v/v		C	POST
13	Degree Xtra	2.5 qt/a		A	PRE
13	Roundup PowerMax	32 oz/a		C	POST
13	Status	3 oz/a		C	POST
13	Class Act Next Gen	2.5 % v/v		C	POST
14	Degree Xtra	2.5 qt/a		A	PRE
14	Roundup PowerMax	32 oz/a		C	POST
14	Tripleflex	1.5 qt/a		C	POST
14	Class Act Next Gen	2.5 % v/v		C	POST

LSD P=.05 .
 Standard Deviation .
 CV .
 Grand Mean .
 Bartlett's X2 .
 P(Bartlett's X2) .
 Skewness .
 Kurtosis .

Replicate F
 Replicate Prob(F)
 Treatment F
 Treatment Prob(F)

Monsanto Market Development Corn Trial

Trial ID: 15MONMARK Location: Western Branch Trial Year: 2015
Protocol ID: 15MONMARK Investigator: Dr. Mark M. Loux
Project ID: Study Director: Anthony Dobbels
 Sponsor Contact: Rod Stevenson, Monsanto

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
AMARE, Amaranthus retroflexus, = US
ABUTH, Abutilon theophrasti, = US
IPOHE, Ipomoea hederacea, = US

Crop Code

ZEAMX, BCOR, Zea mays, = US

Rating Type

PHYGEN = phytotoxicity - general / injury
CONTRO = control / burndown or knockdown
PHYNEC = phytotoxicity - necrosis /burn

Rating Unit

% = percent

Plant-Eval Interval

31 DP-1 = 1 ZEAMX 5-3-2015
38 DP-1 = 1 ZEAMX 5-3-2015
45 DP-1 = 1 ZEAMX 5-3-2015
59 DP-1 = 1 ZEAMX 5-3-2015
86 DP-1 = 1 ZEAMX 5-3-2015