

2015/CORN/SOLSTICE/ANTHEM/FMC PROGRAMS/OHIO STATE/

Trial ID: 15FMCCORN Location: Western Branch Big E Trial Year: 2015
 Protocol ID: PYRX.COR.15.JPR.05 Investigator: Dr. Mark M. Loux
 Project ID: Study Director: Anthony Dobbels
 Sponsor Contact: Joe Reed, FMC

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 °: 39.85726 N
Longitude of LL Corner °: -83.67007 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
Description: Seed Consultants RR / LL

Corn

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

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

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:** ABUTH *Abutilon theophrasti*
Common Name: velvetleaf

Pest 4 Type: W **Code:** CHEAL *Chenopodium album*
Common Name: Common lambsquarters

Pest 5 Type: W **Code:** AMARE *Amaranthus retroflexus*
Common Name: Redroot pigweed

Pest 6 Type: W **Code:** IPOHE *Ipomoea hederacea*
Common Name: Ivyleaf morningglory

Pest 7 Type: W **Code:** SIDSP *Sida spinosa*
Common Name: Prickly sida

Pest 8 Type: W **Code:** HIBTR *Hibiscus trionum*
Common Name: Venice mallow

Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 30 FT
Treated Plot Area: 300 FT2 **Treatments:** 12
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

pH: 5.9

CEC: 17.44

Texture: SIL silt loam

Soil Name: Kokomo

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	5-15-2015	6-3-2015
Appl. Start Time:	11:00 AM	9:30 AM	9:15 AM
Appl. Stop Time:	11:20 AM	10:00 AM	9:30 AM
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	EPO	MPOST
Application Placement:	BROSOI	BROFOL	BROFOL
Applied By:	Ackley	Ackley	Bethel
Air Temperature, Unit:	73 F	66 F	60 F
% Relative Humidity:	45	73	85
Wind Velocity, Unit:	10 MPH	6 MPH	4 MPH
Wind Direction:	SW	E	NNE
Dew Presence (Y/N):	N no	N no	Y yes
Soil Temperature, Unit:	58 F	60 F	59 F
Soil Moisture:	DRY	NORMAL	WET
% Cloud Cover:	40	60	100
Next Moisture Occurred On:	5-5-2015	5-16-2015	6-5-2015
Time to Next Moisture, Unit:	14 HR	1 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		BBCH	
Stage Majority, Percent:	12	100	15			
Height, Unit:	3	IN	15	IN		

Pest Stage At Each Application

	A		B		C	
Pest 1 Code, Type, Scale:	SETFA	W	SETFA	W	SETFA	W
Stage Majority, Percent:			12	100	12	90
Stage Minimum, Percent:					12	90
Stage Maximum, Percent:					13	10
Height, Unit:			0.5	IN	3	IN
Height Minimum, Maximum:			0.25	0.5	2	5
Density, Unit:			125	M2	2	M2
Pest 2 Code, Type, Scale:	AMBTR	W	AMBTR	W	AMBTR	W
Stage Majority, Percent:			09	90	16	90
Stage Minimum, Percent:			09	90	14	10
Stage Maximum, Percent:			10	10	16	90
Diameter, Unit:			1	IN		
Height, Unit:			2	IN	4	IN
Height Minimum, Maximum:			1	2	3	4
Density, Unit:			50	M2	2	M2
Pest 3 Code, Type, Scale:	ABUTH	W	ABUTH	W	ABUTH	W
Stage Majority, Percent:			09	100	13	80
Stage Minimum, Percent:					13	80
Stage Maximum, Percent:					14	20
Height, Unit:			0.25	IN	2	IN
Height Minimum, Maximum:			0.25	0.5	1	2
Density, Unit:			10	M2	3	M2
Pest 4 Code, Type, Scale:	CHEAL	W	CHEAL	W	CHEAL	W
Stage Majority, Percent:			12	90	14	60
Stage Minimum, Percent:			10	10	14	60
Stage Maximum, Percent:			12	90	16	40
Diameter, Unit:			0.5	IN		
Height, Unit:			0.5	IN	1	IN
Height Minimum, Maximum:			0.25	0.5	0.5	1
Density, Unit:			6	M2	2	M2
Pest 5 Code, Type, Scale:	AMARE	W	AMARE	W	AMARE	W
Stage Majority, Percent:			11	90		
Stage Minimum, Percent:			09	10		
Stage Maximum, Percent:			11	90		
Diameter, Unit:			0.25	IN		
Height, Unit:			0.25	IN		
Height Minimum, Maximum:			0.25	0.33		
Density, Unit:			4	M2		
Pest 6 Code, Type, Scale:	IPOHE	W	IPOHE	W	IPOHE	W
Stage Majority, Percent:					10	100
Height, Unit:					0.5	IN
Height Minimum, Maximum:					0.25	0.5
Density, Unit:					1	M2
Pest 7 Code, Type, Scale:	SIDSP	W	SIDSP	W	SIDSP	W
Stage Majority, Percent:					10	90
Stage Minimum, Percent:					10	90
Stage Maximum, Percent:					11	10
Height, Unit:					0.5	IN
Height Minimum, Maximum:					0.5	0.5
Density, Unit:					1	M2
Pest 8 Code, Type, Scale:	HIBTR	W	HIBTR	W	HIBTR	W
Stage Majority, Percent:					12	100
Stage Minimum, Percent:					12	100
Stage Maximum, Percent:					100	
Height, Unit:					2	IN
Height Minimum, Maximum:					0.5	2
Density, Unit:					3	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	3 Liters	2 Liters
Propellant:	CO2	CO2	CO2

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Location: Western Branch Big E Trial Year: 2015
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Table with columns for Pest Type, Crop Code, Rating Date, Rating Type, Rating Unit, Number of Subsamples, Rating Timing, Days After First/Last Applic., Trt-Eval Interval, Plant-Eval Interval, Days After Emergence, Number of Decimals, and Weed names (W Weed).

Main data table with columns: Trt No., Treatment Name, Appl Code, Appl Description, and columns 1-6 representing different treatments or replicates.

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.
Could not calculate LSD (% mean diff) for columns 15,16,23,31 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	ZEAMX	ZEAMX			
BBCH Scale	BCOR	BCOR	BCOR			
Crop Scientific Name	Zea mays	Zea mays	Zea mays			
Crop Name	Corn	Corn	Corn			
Rating Date	5-18-2015	5-18-2015	6-3-2015	6-3-2015	6-3-2015	6-3-2015
Rating Type	PHYNEC	PHYBLE	PHYNEC	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1
Rating Timing				AT POST	AT POST	AT POST
Days After First/Last Applic.				30 19	30 19	30 19
Trt-Eval Interval	3 DA-B	3 DA-B	0 DA-C	0 DA-C	0 DA-C	0 DA-C
Plant-Eval Interval	15 DP-1	15 DP-1	31 DP-1	31 DP-1	31 DP-1	31 DP-1
Days After Emergence	9 DE-1	9 DE-1	25 DE-1	25 DE-1	25 DE-1	25 DE-1
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Appl Code	Appl Description	1	2	3	4	5	6
6	ANTHEM MAXX	B	EPOST	15 a	0 b	2 bcd	77 abc	92 ab	96 ab
6	SOLSTICE	B	EPOST						
6	AATREX	B	EPOST						
6	COC	B	EPOST						
6	ROUNDUP POWERMAX	B	EPOST						
6	N PAK AMS	B	EPOST						
7	ANTHEM MAXX	B	EPOST	10 b	0 b	1 cde	75 abc	70 a-d	92 ab
7	SOLSTICE	B	EPOST						
7	SENCOR	B	EPOST						
7	ROUNDUP POWERMAX	B	EPOST						
7	N PAK AMS	B	EPOST						
8	SOLSTICE	B	EPOST	15 a	0 b	2 b-e	66 b-e	87 abc	100 a
8	AATREX	B	EPOST						
8	COC	B	EPOST						
8	ROUNDUP POWERMAX	B	EPOST						
8	N PAK AMS	B	EPOST						
9	SOLSTICE	B	EPOST	1 c	2 b	1 cde	51 e	65 cd	81 bc
9	SENCOR	B	EPOST						
9	ROUNDUP POWERMAX	B	EPOST						
9	N PAK AMS	B	EPOST						
10	CORVUS	B	EPOST	0 c	11 a	5 a	87 a	92 ab	100 a
10	AATREX	B	EPOST						
10	ROUNDUP POWERMAX	B	EPOST						
10	N PAK AMS	B	EPOST						
11	LEXAR	B	EPOST	1 c	3 b	1 de	83 ab	88 abc	100 a
11	AATREX	B	EPOST						
11	ROUNDUP POWERMAX	C	MPOST						
11	N PAK AMS	C	MPOST						
12	SURESTART	A	PRE	0 c	0 b	1 de	86 a	62 cd	84 abc
12	ROUNDUP POWERMAX	C	MPOST						
12	N PAK AMS	C	MPOST						
LSD P=.05				1.2	2.5	1.5	18.7	26.6	18.0
Standard Deviation				0.8	1.7	1.0	13.0	18.5	12.5
CV				14.68	132.87	56.61	17.82	24.09	13.78
Grand Mean				5.5	1.3	1.9	72.9	76.9	91.0
Bartlett's X2				0.617	2.09	3.947	47.583	33.69	14.901
P(Bartlett's X2)				0.893	0.352	0.95	0.001*	0.001*	0.037*
Skewness				0.5224	2.6625*	0.2967	-1.3523*	-1.5182*	-1.7886*
Kurtosis				-1.5701*	6.156*	-0.967	0.7114	2.8202*	2.766*
Replicate F				0.793	1.249	6.625	1.002	0.882	0.813
Replicate Prob(F)				0.5068	0.3078	0.0013	0.4043	0.4603	0.4961
Treatment F				274.545	13.888	6.084	3.833	2.407	2.490
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0013	0.0253	0.0211

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	ZEAMX
BBCH Scale				BCOR	BCOR
Crop Scientific Name				Zea mays	Zea mays
Crop Name				Corn	Corn
Rating Date	6-3-2015	6-3-2015	6-3-2015	6-10-2015	6-17-2015
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Rating Timing	AT POST	AT POST	AT POST		
Days After First/Last Applic.	30 19	30 19	30 19	37 7	44 14
Trt-Eval Interval	0 DA-C	0 DA-C	0 DA-C	7 DA-C	14 DA-C
Plant-Eval Interval	31 DP-1	31 DP-1	31 DP-1	38 DP-1	45 DP-1
Days After Emergence	25 DE-1	25 DE-1	25 DE-1	32 DE-1	39 DE-1
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Appl Code	Appl Description	7	8	9	10	11
1	ANTHEM MAXX	A	PRE	100 a	86 a	95 a	0 b	0 a
1	AATREX	A	PRE					
1	ROUNDUP POWERMAX	C	MPOST					
1	N PAK AMS	C	MPOST					
2	ANTHEM MAXX	A	PRE	100 a	93 a	90 a	2 b	0 a
2	AATREX	A	PRE					
2	SOLSTICE	C	MPOST					
2	AATREX	C	MPOST					
2	COC	C	MPOST					
2	ROUNDUP POWERMAX	C	MPOST					
2	N PAK AMS	C	MPOST					
3	ANTHEM MAXX	A	PRE	100 a	100 a	95 a	6 a	1 a
3	AATREX	A	PRE					
3	SOLSTICE	C	MPOST					
3	SENCOR	C	MPOST					
3	ROUNDUP POWERMAX	C	MPOST					
3	N PAK AMS	C	MPOST					
4	ANTHEM MAXX	A	PRE	100 a	100 a	98 a	0 b	0 a
4	AATREX	A	PRE					
4	SOLSTICE	B	EPOST					
4	AATREX	B	EPOST					
4	COC	B	EPOST					
4	ROUNDUP POWERMAX	B	EPOST					
4	N PAK AMS	B	EPOST					
5	ANTHEM MAXX	A	PRE	100 a	100 a	100 a	2 b	0 a
5	AATREX	A	PRE					
5	SOLSTICE	B	EPOST					
5	SENCOR	B	EPOST					
5	COC	B	EPOST					
5	ROUNDUP POWERMAX	B	EPOST					
5	N PAK AMS	B	EPOST					

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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	ZEAMX			
BBCH Scale				BCOR	BCOR			
Crop Scientific Name				Zea mays	Zea mays			
Crop Name				Corn	Corn			
Rating Date	6-3-2015	6-3-2015	6-3-2015	6-10-2015	6-17-2015			
Rating Type	CONTRO	CONTRO	CONTRO	PHYGEN	PHYGEN			
Rating Unit	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1			
Rating Timing	AT POST	AT POST	AT POST					
Days After First/Last Applic.	30 19	30 19	30 19	37 7	44 14			
Trt-Eval Interval	0 DA-C	0 DA-C	0 DA-C	7 DA-C	14 DA-C			
Plant-Eval Interval	31 DP-1	31 DP-1	31 DP-1	38 DP-1	45 DP-1			
Days After Emergence	25 DE-1	25 DE-1	25 DE-1	32 DE-1	39 DE-1			
Number of Decimals	0	0	0	0	0			
Trt No.	Treatment Name	Appl Code	Appl Description	7	8	9	10	11
6	ANTHEM MAXX	B	EPOST	100 a	100 a	100 a	0 b	0 a
6	SOLSTICE	B	EPOST					
6	AATREX	B	EPOST					
6	COC	B	EPOST					
6	ROUNDUP POWERMAX	B	EPOST					
6	N PAK AMS	B	EPOST					
7	ANTHEM MAXX	B	EPOST	100 a	100 a	91 a	0 b	0 a
7	SOLSTICE	B	EPOST					
7	SENCOR	B	EPOST					
7	ROUNDUP POWERMAX	B	EPOST					
7	N PAK AMS	B	EPOST					
8	SOLSTICE	B	EPOST	100 a	100 a	91 a	0 b	0 a
8	AATREX	B	EPOST					
8	COC	B	EPOST					
8	ROUNDUP POWERMAX	B	EPOST					
8	N PAK AMS	B	EPOST					
9	SOLSTICE	B	EPOST	98 a	98 a	93 a	0 b	0 a
9	SENCOR	B	EPOST					
9	ROUNDUP POWERMAX	B	EPOST					
9	N PAK AMS	B	EPOST					
10	CORVUS	B	EPOST	100 a	100 a	100 a	1 b	0 a
10	AATREX	B	EPOST					
10	ROUNDUP POWERMAX	B	EPOST					
10	N PAK AMS	B	EPOST					
11	LEXAR	B	EPOST	100 a	100 a	99 a	0 b	0 a
11	AATREX	B	EPOST					
11	ROUNDUP POWERMAX	C	MPOST					
11	N PAK AMS	C	MPOST					
12	SURESTART	A	PRE	100 a	90 a	96 a	0 b	0 a
12	ROUNDUP POWERMAX	C	MPOST					
12	N PAK AMS	C	MPOST					
LSD P=.05				2.1	10.0	11.0	1.7	1.0
Standard Deviation				1.4	6.9	7.6	1.2	0.7
CV				1.45	7.12	7.97	150.08	692.82
Grand Mean				99.8	97.2	95.6	0.8	0.1
Bartlett's X2				0.0	4.577	6.663	1.828	0.0
P(Bartlett's X2)				.	0.206	0.573	0.609	.
Skewness				-6.9282*	-3.2193*	-1.3383*	3.0415*	6.9282*
Kurtosis				48.0*	11.3383*	-0.0225	10.8793*	48.0*
Replicate F				1.000	1.665	1.929	1.161	1.000
Replicate Prob(F)				0.4051	0.1936	0.1441	0.3393	0.4051
Treatment F				1.000	1.950	0.948	7.884	1.000
Treatment Prob(F)				0.4671	0.0683	0.5097	0.0001	0.4671

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	AMARE	ABUTH
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Chenopodium album	Amaranthus retrofractus	Abutilon theophrasti
Pest Name	Giant foxtail	Giant ragweed	Common lambsquarters	Redroot pigweed	velvetleaf
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	6-17-2015	6-17-2015	6-17-2015	6-17-2015	6-17-2015
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Rating Timing					
Days After First/Last Applic.	44 14	44 14	44 14	44 14	44 14
Trt-Eval Interval	14 DA-C	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	45 DP-1
Days After Emergence	39 DE-1	39 DE-1	39 DE-1	39 DE-1	39 DE-1
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Appl Code	Appl Description	12	13	14	15	16
1	ANTHEM MAXX	A	PRE	86 ab	85 a	100 a	100 a	100 a
1	AATREX	A	PRE					
1	ROUNDUP POWERMAX	C	MPOST					
1	N PAK AMS	C	MPOST					
2	ANTHEM MAXX	A	PRE	91 a	87 a	100 a	100 a	100 a
2	AATREX	A	PRE					
2	SOLSTICE	C	MPOST					
2	AATREX	C	MPOST					
2	COC	C	MPOST					
2	ROUNDUP POWERMAX	C	MPOST					
2	N PAK AMS	C	MPOST					
3	ANTHEM MAXX	A	PRE	81 bc	84 ab	100 a	100 a	100 a
3	AATREX	A	PRE					
3	SOLSTICE	C	MPOST					
3	SENCOR	C	MPOST					
3	ROUNDUP POWERMAX	C	MPOST					
3	N PAK AMS	C	MPOST					
4	ANTHEM MAXX	A	PRE	64 d	70 bc	85 a	100 a	100 a
4	AATREX	A	PRE					
4	SOLSTICE	B	EPOST					
4	AATREX	B	EPOST					
4	COC	B	EPOST					
4	ROUNDUP POWERMAX	B	EPOST					
4	N PAK AMS	B	EPOST					
5	ANTHEM MAXX	A	PRE	64 d	64 c	91 a	100 a	100 a
5	AATREX	A	PRE					
5	SOLSTICE	B	EPOST					
5	SENCOR	B	EPOST					
5	COC	B	EPOST					
5	ROUNDUP POWERMAX	B	EPOST					
5	N PAK AMS	B	EPOST					

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	SETFA	AMBTR	CHEAL	AMARE	ABUTH
Pest Scientific Name	Setaria faberi	Ambrosia trifida	Chenopodium album	Amaranthus retrofractus	Abutilon theophrasti
Pest Name	Giant foxtail	Giant ragweed	Common lambsquarters	Redroot pigweed	velvetleaf
Crop Code					
BBCH Scale					
Crop Scientific Name					
Crop Name					
Rating Date	6-17-2015	6-17-2015	6-17-2015	6-17-2015	6-17-2015
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Rating Timing					
Days After First/Last Applic.	44 14	44 14	44 14	44 14	44 14
Trt-Eval Interval	14 DA-C	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	45 DP-1
Days After Emergence	39 DE-1	39 DE-1	39 DE-1	39 DE-1	39 DE-1
Number of Decimals	0	0	0	0	0

Trt	Treatment	Appl	Appl	12	13	14	15	16
No.	Name	Code	Description					
6	ANTHEM MAXX	B	EPOST	65 d	83 ab	93 a	100 a	100 a
6	SOLSTICE	B	EPOST					
6	AATREX	B	EPOST					
6	COC	B	EPOST					
6	ROUNDUP POWERMAX	B	EPOST					
6	N PAK AMS	B	EPOST					
7	ANTHEM MAXX	B	EPOST	50 e	60 c	98 a	100 a	100 a
7	SOLSTICE	B	EPOST					
7	SENCOR	B	EPOST					
7	ROUNDUP POWERMAX	B	EPOST					
7	N PAK AMS	B	EPOST					
8	SOLSTICE	B	EPOST	50 e	70 bc	93 a	100 a	100 a
8	AATREX	B	EPOST					
8	COC	B	EPOST					
8	ROUNDUP POWERMAX	B	EPOST					
8	N PAK AMS	B	EPOST					
9	SOLSTICE	B	EPOST	53 e	60 c	95 a	100 a	100 a
9	SENCOR	B	EPOST					
9	ROUNDUP POWERMAX	B	EPOST					
9	N PAK AMS	B	EPOST					
10	CORVUS	B	EPOST	76 c	79 ab	100 a	100 a	100 a
10	AATREX	B	EPOST					
10	ROUNDUP POWERMAX	B	EPOST					
10	N PAK AMS	B	EPOST					
11	LEXAR	B	EPOST	82 abc	80 ab	100 a	100 a	100 a
11	AATREX	B	EPOST					
11	ROUNDUP POWERMAX	C	MPOST					
11	N PAK AMS	C	MPOST					
12	SURESTART	A	PRE	85 ab	81 ab	100 a	100 a	100 a
12	ROUNDUP POWERMAX	C	MPOST					
12	N PAK AMS	C	MPOST					
LSD P=.05				8.5	14.5	11.3	.	.
Standard Deviation				5.9	10.1	7.8	0.0	0.0
CV				8.39	13.38	8.14	0.0	0.0
Grand Mean				70.5	75.2	96.1	100.0	100.0
Bartlett's X2				5.472	11.523	5.096	0.0	0.0
P(Bartlett's X2)				0.791	0.242	0.404	.	.
Skewness				0.1109	0.3302	-2.3664*	.	.
Kurtosis				-1.0543	-0.3884	4.2956*	.	.
Replicate F				10.130	1.350	6.108	0.000	0.000
Replicate Prob(F)				0.0001	0.2750	0.0020	1.0000	1.0000
Treatment F				25.111	3.905	1.585	0.000	0.000
Treatment Prob(F)				0.0001	0.0011	0.1492	1.0000	1.0000

Pest Type	W Weed	W Weed	W Weed	W Weed
Pest Code	IPOHE	SETFA	AMBTR	CHEAL
Pest Scientific Name	Ipomoea hederata>	Setaria faberi	Ambrosia trifida>	Chenopodium album>
Pest Name	Ivyleaf morning>	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	7-1-2015	7-1-2015	7-1-2015
Rating Type	CONTRO	PHYGEN	CONTRO	CONTRO
Rating Unit	%	%	%	%
Number of Subsamples	1	1	1	1
Rating Timing				
Days After First/Last Applic.	44 14	58 28	58 28	58 28
Trt-Eval Interval	14 DA-C	28 DA-C	28 DA-C	28 DA-C
Plant-Eval Interval	45 DP-1	59 DP-1	59 DP-1	59 DP-1
Days After Emergence	39 DE-1	53 DE-1	53 DE-1	53 DE-1
Number of Decimals	0	0	0	0

Trt No.	Treatment Name	Appl Code	Appl Description	17	18	19	20	21
1	ANTHEM MAXX	A	PRE	100 a	0 a	89 a	89 a	100 a
1	AATREX	A	PRE					
1	ROUNDUP POWERMAX	C	MPOST					
1	N PAK AMS	C	MPOST					
2	ANTHEM MAXX	A	PRE	99 a	0 a	91 a	90 a	100 a
2	AATREX	A	PRE					
2	SOLSTICE	C	MPOST					
2	AATREX	C	MPOST					
2	COC	C	MPOST					
2	ROUNDUP POWERMAX	C	MPOST					
2	N PAK AMS	C	MPOST					
3	ANTHEM MAXX	A	PRE	100 a	1 a	85 a	86 ab	100 a
3	AATREX	A	PRE					
3	SOLSTICE	C	MPOST					
3	SENCOR	C	MPOST					
3	ROUNDUP POWERMAX	C	MPOST					
3	N PAK AMS	C	MPOST					
4	ANTHEM MAXX	A	PRE	85 a	0 a	66 b	75 bc	85 a
4	AATREX	A	PRE					
4	SOLSTICE	B	EPOST					
4	AATREX	B	EPOST					
4	COC	B	EPOST					
4	ROUNDUP POWERMAX	B	EPOST					
4	N PAK AMS	B	EPOST					
5	ANTHEM MAXX	A	PRE	100 a	0 a	66 b	64 cd	91 a
5	AATREX	A	PRE					
5	SOLSTICE	B	EPOST					
5	SENCOR	B	EPOST					
5	COC	B	EPOST					
5	ROUNDUP POWERMAX	B	EPOST					
5	N PAK AMS	B	EPOST					

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Pest Type	W Weed	W Weed	W Weed	W Weed			
Pest Code	IPOHE	SETFA	AMBTR	CHEAL			
Pest Scientific Name	Ipomoea hederata>	Setaria faberi	Ambrosia trifida>	Chenopodium al-			
Pest Name	Ivyleaf mornin>	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	7-1-2015	7-1-2015	7-1-2015			
Rating Type	CONTRO	PHYGEN	CONTRO	CONTRO			
Rating Unit	%	%	%	%			
Number of Subsamples	1	1	1	1			
Rating Timing							
Days After First/Last Applic.	44 14	58 28	58 28	58 28			
Trt-Eval Interval	14 DA-C	28 DA-C	28 DA-C	28 DA-C			
Plant-Eval Interval	45 DP-1	59 DP-1	59 DP-1	59 DP-1			
Days After Emergence	39 DE-1	53 DE-1	53 DE-1	53 DE-1			
Number of Decimals	0	0	0	0			
Trt Treatment	Appl Code	Appl Description	17	18	19	20	21
6 ANTHEM MAXX	B	EPOST	100 a	0 a	69 b	85 ab	93 a
6 SOLSTICE	B	EPOST					
6 AATREX	B	EPOST					
6 COC	B	EPOST					
6 ROUNDUP POWERMAX	B	EPOST					
6 N PAK AMS	B	EPOST					
7 ANTHEM MAXX	B	EPOST	100 a	0 a	50 c	60 d	98 a
7 SOLSTICE	B	EPOST					
7 SENCOR	B	EPOST					
7 ROUNDUP POWERMAX	B	EPOST					
7 N PAK AMS	B	EPOST					
8 SOLSTICE	B	EPOST	95 a	0 a	50 c	73 bcd	93 a
8 AATREX	B	EPOST					
8 COC	B	EPOST					
8 ROUNDUP POWERMAX	B	EPOST					
8 N PAK AMS	B	EPOST					
9 SOLSTICE	B	EPOST	95 a	0 a	53 c	63 cd	95 a
9 SENCOR	B	EPOST					
9 ROUNDUP POWERMAX	B	EPOST					
9 N PAK AMS	B	EPOST					
10 CORVUS	B	EPOST	88 a	0 a	81 a	84 ab	100 a
10 AATREX	B	EPOST					
10 ROUNDUP POWERMAX	B	EPOST					
10 N PAK AMS	B	EPOST					
11 LEXAR	B	EPOST	99 a	0 a	86 a	83 ab	100 a
11 AATREX	B	EPOST					
11 ROUNDUP POWERMAX	C	MPOST					
11 N PAK AMS	C	MPOST					
12 SURESTART	A	PRE	95 a	0 a	85 a	84 ab	100 a
12 ROUNDUP POWERMAX	C	MPOST					
12 N PAK AMS	C	MPOST					
LSD P=.05			12.0	1.0	10.4	13.9	11.3
Standard Deviation			8.3	0.7	7.2	9.7	7.8
CV			8.68	692.82	9.94	12.46	8.14
Grand Mean			96.2	0.1	72.5	77.8	96.1
Bartlett's X2			13.813	0.0	8.914	11.046	5.096
P(Bartlett's X2)			0.032*	.	0.445	0.354	0.404
Skewness			-2.2273*	6.9282*	-0.1683	0.0217	-2.3664*
Kurtosis			3.5649*	48.0*	-1.285	-0.7802	4.2956*
Replicate F			0.968	1.000	4.866	0.727	6.108
Replicate Prob(F)			0.4192	0.4051	0.0065	0.5431	0.0020
Treatment F			1.519	1.000	18.647	4.891	1.585
Treatment Prob(F)			0.1713	0.4671	0.0001	0.0002	0.1492

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed		
Pest Code	AMARE	ABUTH	IPOHE	SETFA	AMBTR		
Pest Scientific Name	Amaranthus ret>	Abutilon theop>	Ipomoea hедера>	Setaria faberi	Ambrosia trifi>		
Pest Name	Redroot pigweed	velvetleaf	Ivyleaf mornin>	Giant foxtail	Giant ragweed		
Crop Code							
BBCH Scale							
Crop Scientific Name							
Crop Name							
Rating Date	7-1-2015	7-1-2015	7-1-2015	7-28-2015	7-28-2015		
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1		
Rating Timing							
Days After First/Last Applic.	58 28	58 28	58 28	85 55	85 55		
Trt-Eval Interval	28 DA-C	28 DA-C	28 DA-C	55 DA-C	55 DA-C		
Plant-Eval Interval	59 DP-1	59 DP-1	59 DP-1	86 DP-1	86 DP-1		
Days After Emergence	53 DE-1	53 DE-1	53 DE-1	80 DE-1	80 DE-1		
Number of Decimals	0	0	0	0	0		
Trt Treatment	Appl	Appl					
No. Name	Code	Description	22	23	24	25	26
1 ANTHEM MAXX	A	PRE	100 a	100 a	100 a	89 a	81 ab
1 AATREX	A	PRE					
1 ROUNDUP POWERMAX	C	MPOST					
1 N PAK AMS	C	MPOST					
2 ANTHEM MAXX	A	PRE	100 a	100 a	99 a	89 a	86 a
2 AATREX	A	PRE					
2 SOLSTICE	C	MPOST					
2 AATREX	C	MPOST					
2 COC	C	MPOST					
2 ROUNDUP POWERMAX	C	MPOST					
2 N PAK AMS	C	MPOST					
3 ANTHEM MAXX	A	PRE	100 a	100 a	100 a	85 ab	81 ab
3 AATREX	A	PRE					
3 SOLSTICE	C	MPOST					
3 SENCOR	C	MPOST					
3 ROUNDUP POWERMAX	C	MPOST					
3 N PAK AMS	C	MPOST					
4 ANTHEM MAXX	A	PRE	100 a	100 a	85 a	71 d	82 ab
4 AATREX	A	PRE					
4 SOLSTICE	B	EPOST					
4 AATREX	B	EPOST					
4 COC	B	EPOST					
4 ROUNDUP POWERMAX	B	EPOST					
4 N PAK AMS	B	EPOST					
5 ANTHEM MAXX	A	PRE	100 a	100 a	100 a	75 cd	68 bcd
5 AATREX	A	PRE					
5 SOLSTICE	B	EPOST					
5 SENCOR	B	EPOST					
5 COC	B	EPOST					
5 ROUNDUP POWERMAX	B	EPOST					
5 N PAK AMS	B	EPOST					

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

Trt	Treatment	Appl	Appl					
No.	Name	Code	Description	22	23	24	25	26
6	ANTHEM MAXX	B	EPOST	100 a	100 a	100 a	75 cd	84 a
6	SOLSTICE	B	EPOST					
6	AATREX	B	EPOST					
6	COC	B	EPOST					
6	ROUNDUP POWERMAX	B	EPOST					
6	N PAK AMS	B	EPOST					
7	ANTHEM MAXX	B	EPOST	99 a	100 a	100 a	70 d	60 d
7	SOLSTICE	B	EPOST					
7	SENCOR	B	EPOST					
7	ROUNDUP POWERMAX	B	EPOST					
7	N PAK AMS	B	EPOST					
8	SOLSTICE	B	EPOST	100 a	100 a	95 a	63 e	75 abc
8	AATREX	B	EPOST					
8	COC	B	EPOST					
8	ROUNDUP POWERMAX	B	EPOST					
8	N PAK AMS	B	EPOST					
9	SOLSTICE	B	EPOST	98 a	100 a	95 a	56 e	65 cd
9	SENCOR	B	EPOST					
9	ROUNDUP POWERMAX	B	EPOST					
9	N PAK AMS	B	EPOST					
10	CORVUS	B	EPOST	100 a	100 a	88 a	78 bc	77 abc
10	AATREX	B	EPOST					
10	ROUNDUP POWERMAX	B	EPOST					
10	N PAK AMS	B	EPOST					
11	LEXAR	B	EPOST	100 a	100 a	99 a	87 a	81 ab
11	AATREX	B	EPOST					
11	ROUNDUP POWERMAX	C	MPOST					
11	N PAK AMS	C	MPOST					
12	SURESTART	A	PRE	100 a	100 a	95 a	84 ab	76 abc
12	ROUNDUP POWERMAX	C	MPOST					
12	N PAK AMS	C	MPOST					
LSD P=.05				2.3	.	12.0	6.8	14.4
Standard Deviation				1.6	0.0	8.3	4.7	10.0
CV				1.64	0.0	8.68	6.18	13.11
Grand Mean				99.7	100.0	96.2	76.8	76.3
Bartlett's X2				1.321	0.0	13.813	18.617	11.898
P(Bartlett's X2)				0.25	.	0.032*	0.045*	0.371
Skewness				-5.4791*	.	-2.2273*	-0.6837	0.0498
Kurtosis				31.0744*	.	3.5649*	0.2175	-0.4288
Replicate F				0.716	0.000	0.968	10.291	5.023
Replicate Prob(F)				0.5495	1.0000	0.4192	0.0001	0.0056
Treatment F				0.905	0.000	1.519	19.495	2.576
Treatment Prob(F)				0.5458	1.0000	0.1713	0.0001	0.0176

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 hederag>
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 1
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	Appl Code	Appl Description	27	28	29	30	31
1	ANTHEM MAXX	A	PRE	100 a	100 a	100 a	100 a	
1	AATREX	A	PRE					
1	ROUNDUP POWERMAX	C	MPOST					
1	N PAK AMS	C	MPOST					
2	ANTHEM MAXX	A	PRE	100 a	100 a	100 a	100 a	
2	AATREX	A	PRE					
2	SOLSTICE	C	MPOST					
2	AATREX	C	MPOST					
2	COC	C	MPOST					
2	ROUNDUP POWERMAX	C	MPOST					
2	N PAK AMS	C	MPOST					
3	ANTHEM MAXX	A	PRE	100 a	100 a	100 a	100 a	
3	AATREX	A	PRE					
3	SOLSTICE	C	MPOST					
3	SENCOR	C	MPOST					
3	ROUNDUP POWERMAX	C	MPOST					
3	N PAK AMS	C	MPOST					
4	ANTHEM MAXX	A	PRE	95 a	100 a	100 a		90 a
4	AATREX	A	PRE					
4	SOLSTICE	B	EPOST					
4	AATREX	B	EPOST					
4	COC	B	EPOST					
4	ROUNDUP POWERMAX	B	EPOST					
4	N PAK AMS	B	EPOST					
5	ANTHEM MAXX	A	PRE	91 a	100 a	100 a		95 a
5	AATREX	A	PRE					
5	SOLSTICE	B	EPOST					
5	SENCOR	B	EPOST					
5	COC	B	EPOST					
5	ROUNDUP POWERMAX	B	EPOST					
5	N PAK AMS	B	EPOST					

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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 heder>			
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 1			
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 Treatment	Appl Code	Appl Description	27	28	29	30	31
6 ANTHEM MAXX	B	EPOST	95 a	100 a	100 a	100 a	
6 SOLSTICE	B	EPOST					
6 AATREX	B	EPOST					
6 COC	B	EPOST					
6 ROUNDUP POWERMAX	B	EPOST					
6 N PAK AMS	B	EPOST					
7 ANTHEM MAXX	B	EPOST	88 a	93 a	100 a		90 a
7 SOLSTICE	B	EPOST					
7 SENCOR	B	EPOST					
7 ROUNDUP POWERMAX	B	EPOST					
7 N PAK AMS	B	EPOST					
8 SOLSTICE	B	EPOST	94 a	100 a	100 a		100 a
8 AATREX	B	EPOST					
8 COC	B	EPOST					
8 ROUNDUP POWERMAX	B	EPOST					
8 N PAK AMS	B	EPOST					
9 SOLSTICE	B	EPOST	85 a	95 a	100 a		95 a
9 SENCOR	B	EPOST					
9 ROUNDUP POWERMAX	B	EPOST					
9 N PAK AMS	B	EPOST					
10 CORVUS	B	EPOST	96 a	100 a	100 a		93 a
10 AATREX	B	EPOST					
10 ROUNDUP POWERMAX	B	EPOST					
10 N PAK AMS	B	EPOST					
11 LEXAR	B	EPOST	100 a	100 a	100 a		95 a
11 AATREX	B	EPOST					
11 ROUNDUP POWERMAX	C	MPOST					
11 N PAK AMS	C	MPOST					
12 SURESTART	A	PRE	100 a	98 a	98 a		85 a
12 ROUNDUP POWERMAX	C	MPOST					
12 N PAK AMS	C	MPOST					
LSD P=.05			12.2	8.0	2.1		13.5 .
Standard Deviation			8.5	5.5	1.4		9.4 .
CV			8.91	5.6	1.45		9.87 .
Grand Mean			95.2	98.8	99.8		95.2 .
Bartlett's X2			26.648	3.038	0.0		13.936 .
P(Bartlett's X2)			0.001*	0.219	.		0.052 .
Skewness			-2.0297*	-4.5887*	-6.9282*		-1.9695* .
Kurtosis			3.5257*	21.5216*	48.0*		3.3127* .
Replicate F			3.669	0.455	1.000		1.196
Replicate Prob(F)			0.0219	0.7158	0.4051		0.3265
Treatment F			1.479	0.818	1.000		1.138
Treatment Prob(F)			0.1864	0.6228	0.4671		0.3650

2015/CORN/SOLSTICE/ANTHEM/FMC PROGRAMS/OHIO STATE/

Trial ID: 15FMCCORN	Location: Western Branch Big E	Trial Year: 2015
Protocol ID: PYRX.COR.15.JPR.05	Investigator: Dr. Mark M. Loux	
Project ID:	Study Director: Anthony Dobbels	
	Sponsor Contact: Joe Reed, FMC	

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

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

Rating Unit

% = percent

Plant-Eval Interval

15 DP-1 = 1 ZEAMX 5-3-2015
 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