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No-Till Extendimax Burndown plus Residual

Trial ID: 17 FMCXTEND
 Protocol ID: 17 FMCXTEND
 Project ID: SULF.SOY.17.JPR.03

Location: F-10 MIDDLE Trial Year: 2017
 Investigator: Dr. Mark M. Loux
 Study Director: Bryan Reeb
 Sponsor Contact: Joe Reed, FMC

General Trial Information

Study Director: Bryan Reeb
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 °: 39.85864 N
Longitude of LL Corner °: 83.6712 W
Altitude of LL Corner, Unit: 1052.00 FT

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: Bryan Reeb
Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: Asgrow AG36X6
Description: Dicamba Tolerant
Planting Rate, Unit: 175000 P/A
Depth, Unit: 1 IN
Row Spacing, Unit: 15 IN
Soil Moisture: GOOD good
Planting Date: May-17-2017
Planting Method: PLANTD planted
Planting Equipment: FE Field Equipment
Emergence Date: May-29-2017

Pest Description

Pest 1 Type: W **Code:** LAMPU *Lamium purpureum*
Common Name: Purple deadnettle

Pest 2 Type: W **Code:** ERYRE *Erysimum repandum*
Common Name: Bushy wallflower

Pest 3 Type: W **Code:** ERICA *Erigeron canadensis*
Common Name: Canada horseweed

Pest 4 Type: W **Code:** SENGL *Senecio glabellus*
Common Name: Cressleaf groundsel

Pest 5 Type: W **Code:** TARSS *Taraxacum sp.*
Common Name: Dandelion

Pest 6 Type: W **Code:** SETFA *Setaria faberi*
Common Name: Giant foxtail

Pest 7 Type: W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed

Pest 8 Type: W **Code:** CIRAR *Cirsium arvense*
Common Name: Canada thistle

Pest 9 Type: W **Code:** ECHCG *Echinochloa crus-galli*
Common Name: Common barnyard grass

Pest10 Type: W **Code:** AMARE *Amaranthus retroflexus*
Common Name: Redroot pigweed

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Site and Design

Treated Plot Width: 10 FT
Treated Plot Length: 30 FT
Treated Plot Area: 300 FT² **Treatments:** 10
Replications: 3

Site Type: FIELD field
Experimental Unit: 1 PLOT plot
Tillage Type: NOTILL no-till
Study Design: RACOB L Randomized Complete Block (RCB)

Soil Description

Description Name: F-10 East
% OM: 3
pH: 6
CEC: 19.5

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

Application Description

	A	B	C	D
Application Date:	May-3-2017	Jun-1-2017	Jun-8-2017	Jul-5-2017
Appl. Start Time:	10:15 AM	10:20 AM	9:19 AM	10:35 AM
Appl. Stop Time:	11:00 AM	10:40 AM	9:40 AM	10:45 AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	ATPL	2" GRASS	4" GRASS	LPO
Application Placement:	BROSOI	BROFOL	BROFOL	BROFOL
Applied By:		ACKLEY	LAMB	REEB
Air Temperature, Unit:	46 F	67 F	63 F	75 F
% Relative Humidity:	62	46	65	57
Wind Velocity, Unit:	7 MPH	5 MPH	8 MPH	3 MPH
Wind Direction:	N	NE	SE	W
Dew Presence (Y/N):	N no	N no	N no	N no
Soil Temperature, Unit:	50 F	58 F	59 F	73 F
Soil Moisture:	SLIWET	SLIDRY	SLIDRY	DRY
% Cloud Cover:		0	40	75
Next Moisture Occurred On:	May-4-2017	Jun-4-2017	Jun-13-2017	Jul-13-2017
Time to Next Moisture, Unit:	1 YR	3 DAY	5 DAY	1 DAY

Crop Stage At Each Application

	A		B		C		D	
Crop 1 Code, BBCH Scale:	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY	GLXMA	BSOY
Stage Scale Used:	BBCH		BBCH		BBCH		BBCH	
Stage Majority, Percent:	12	100	14	100	15	100		
Height, Unit:	2.5	IN	3.5	IN	8	IN		
Height Minimum, Maximum:	2	3	3	4	8	10		

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Pest Stage At Each Application

	A		B		C		D	
Pest 1 Code, Type, Scale:	LAMPU	W	LAMPU	W	LAMPU	W	LAMPU	W
Stage Majority, Percent:	89	100						
Height, Unit:	4	IN						
Height Minimum, Maximum:	3	5						
Density, Unit:	12	m2						
Pest 2 Code, Type, Scale:	ERYRE	W	ERYRE	W	ERYRE	W	ERYRE	W
Stage Majority, Percent:	89	100						
Height, Unit:	11	IN						
Height Minimum, Maximum:	10	12						
Density, Unit:	35	m2						
Pest 3 Code, Type, Scale:	ERICA	W	ERICA	W	ERICA	W	ERICA	W
Stage Majority, Percent:	30	100	40	100	40	100		
Diameter, Unit:	4	IN						
Height, Unit:	3	IN	12.5	IN	12.5	IN		
Height Minimum, Maximum:	1	5	12	13	12	13		
Density, Unit:	61	m2						
Pest 4 Code, Type, Scale:	SENGL	W	SENGL	W	SENGL	W	SENGL	W
Stage Majority, Percent:	65	100	63	100	63	100		
Height, Unit:	16	IN	8	IN	8	IN		
Height Minimum, Maximum:	15	17	6	10	6	10		
Density, Unit:	5	m2						
Pest 5 Code, Type, Scale:	TARSS	W	TARSS	W	TARSS	W	TARSS	W
Stage Majority, Percent:	69	100	65	100	65	100		
Diameter, Unit:	11	IN	9	IN	9	IN		
Height, Unit:	4	IN						
Height Minimum, Maximum:	3	5						
Density, Unit:	1	m2						
Pest 6 Code, Type, Scale:	SETFA	W	SETFA	W	SETFA	W	SETFA	W
Stage Majority, Percent:	12	100	14	100	14	100	14	100
Height, Unit:	1	IN	2	IN	3	IN	7	IN
Height Minimum, Maximum:	1	1.5	2	3			5	9
Density, Unit:	1	m2						
Pest 7 Code, Type, Scale:	AMBTR	W	AMBTR	W	AMBTR	W	AMBTR	W
Stage Majority, Percent:	14	100	17	100	17	100		
Height, Unit:	2	IN	2	IN	4	IN		
Height Minimum, Maximum:	2	3	2	3	3	4		
Density, Unit:	1	m2						
Pest 8 Code, Type, Scale:	CIRAR	W	CIRAR	W	CIRAR	W	CIRAR	W
Stage Majority, Percent:			30	100	30	100		
Diameter, Unit:			4	IN	4	IN		
Height, Unit:			5	IN	5	IN		
Pest 9 Code, Type, Scale:	ECHCG	W	ECHCG	W	ECHCG	W	ECHCG	W
Stage Majority, Percent:			13	100	13	80	14	100
Height, Unit:			2	IN	3	IN	5	IN
Height Minimum, Maximum:			2	3	2	3	4	7
Pest10 Code, Type, Scale:	AMARE	W	AMARE	W	AMARE	W	AMARE	W
Stage Majority, Percent:							14	100
Height, Unit:							2.5	IN
Height Minimum, Maximum:							1	4

Application Equipment

	A		B		C		D	
Appl. Equipment:	6'	BACKPACK	10'	BACKPACK	10'	BACKPACK	10'	BACKPACK
Equipment Type:	BACCAI		BACCAI		BACCAI		BACCAI	
Operation Pressure, Unit:	44	PSI	46	PSI	46	PSI	46	PSI
Nozzle Type:	TTI		TTI		TTI		TTI	
Nozzle Size:	11015		11015		11015		11015	
Nozzle Spacing, Unit:	18	IN	18	IN	18	IN	18	IN
Nozzles/Row:	4		4		4		4	
Boom Length, Unit:	6.67	FT	10	FT	10	FT	10	FT
Boom Height, Unit:	20	IN	20	IN	20	IN	20	IN
Ground Speed, Unit:	3	MPH	3	MPH	3	MPH	3	MPH
Carrier:	WATER		WATER		WATER		WATER	
Spray Volume, Unit:	15	gal/ac	15	gal/ac	15	gal/ac	15	gal/ac
Mix Size, Unit:	1	liters	2	liters	2	liters	2	liters
Propellant:	COMCO2		COMCO2		COMCO2		COMCO2	

Date By Notes

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Jul-24-2017 Reeb overlaid with roundup to clean up for harvest

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed
Pest Code	ERICA	AMBTR	ERYRE	SENGL	TARSS
Pest Name	Canada horsewe>	Giant ragweed	Bushy wallflow>	Cressleaf grou>	Dandelion
Rating Date	May-16-2017	May-16-2017	May-16-2017	May-16-2017	May-16-2017
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Number of Subsamples	1	1	1	1	1
Days After First/Last Applic.	13 13	13 13	13 13	13 13	13 13
Trt-Eval Interval	13 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A
Days After Emergence	-13 DE-1	-13 DE-1	-13 DE-1	-13 DE-1	-13 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate	Appl Unit Code	1	2	3	4	5
1	Authority MTZ (F-4242)	11 oz/a		A	63.3 b	100.0 a	60.0 abc	96.7 ab	46.7 ab
	1 Xtendimax	22 oz/a		A					
	1 Roundup Power Max	32 oz/a		A					
	1 Xtendimax	22 oz/a		C					
	1 Roundup Power Max	32 oz/a		C					
2	Authority MTZ	12 oz/a		A	68.3 ab	100.0 a	66.7 ab	94.0 ab	56.7 a
	2 Xtendimax	22 oz/a		A					
	2 Roundup Power Max	32 oz/a		A					
	2 Xtendimax	22 oz/a		C					
	2 Roundup Power Max	32 oz/a		C					
3	Authority XL	4 oz/a		A	71.7 ab	100.0 a	53.3 bc	100.0 a	50.0 ab
	3 Anthem Maxx	3 oz/a		A					
	3 Xtendimax	22 oz/a		A					
	3 Roundup Power Max	32 oz/a		A					
	3 Xtendimax	22 oz/a		C					
	3 Roundup Power Max	32 oz/a		C					
4	Authority MTZ	12 oz/a		A	73.3 a	100.0 a	78.3 a	95.0 ab	33.3 b
	4 Anthem Maxx	3 oz/a		A					
	4 Xtendimax	22 oz/a		A					
	4 Roundup Power Max	32 oz/a		A					
	4 Xtendimax	22 oz/a		C					
	4 Roundup Power Max	32 oz/a		C					
5	Authority XL	4 oz/a		A	66.7 ab	100.0 a	43.3 c	95.0 ab	39.4 ab
	5 Xtendimax	22 oz/a		A					
	5 Roundup Power Max	32 oz/a		A					
	5 Anthem Maxx	3 oz/a		C					
	5 Xtendimax	22 oz/a		C					
	5 Roundup Power Max	32 oz/a		C					
6	Authority MTZ	12 oz/a		A	71.7 ab	100.0 a	63.3 abc	86.7 b	43.3 ab
	6 Xtendimax	22 oz/a		A					
	6 Roundup Power Max	32 oz/a		A					
	6 Anthem Maxx	3 oz/a		C					
	6 Xtendimax	22 oz/a		C					
	6 Roundup Power Max	32 oz/a		C					
7	Rowel	3 oz/a		A	71.7 ab	100.0 a	56.7 abc	95.0 ab	50.6 ab
	7 Xtendimax	22 oz/a		A					
	7 Roundup Power Max	32 oz/a		A					
	7 Xtendimax	22 oz/a		C					
	7 Roundup Power Max	32 oz/a		C					

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.
 Missing data estimates are included in columns: Yates=5,11,12
 Could not calculate LSD (% mean diff) for columns 2,20,25 because error mean square = 0.

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Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	ERICA	AMBTR	ERYRE	SENGL	TARSS			
Pest Name	Canada horsewe>	Giant ragweed	Bushy wallflow>	Cressleaf grou>	Dandelion			
Rating Date	May-16-2017	May-16-2017	May-16-2017	May-16-2017	May-16-2017			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1			
Days After First/Last Applic.	13 13	13 13	13 13	13 13	13 13			
Trt-Eval Interval	13 DA-A	13 DA-A	13 DA-A	13 DA-A	13 DA-A			
Days After Emergence	-13 DE-1	-13 DE-1	-13 DE-1	-13 DE-1	-13 DE-1			
Trt Treatment	Other Rate	Other Rate	Appl Unit Code	1	2	3	4	5
8 Anthem Maxx	3 oz/a		B	0.0 c	0.0 b	0.0 d	0.0 c	0.0 c
8 Xtendimax	22 oz/a		B					
8 Roundup Power Max	32 oz/a		B					
8 Xtendimax	22 oz/a		D					
8 Roundup Power Max	32 oz/a		D					
9 Warrant	3 pt/a		B	0.0 c	0.0 b	0.0 d	0.0 c	0.0 c
9 Xtendimax	22 oz/a		B					
9 Roundup Power Max	32 oz/a		B					
9 Xtendimax	22 oz/a		D					
9 Roundup Power Max	32 oz/a		D					
10 UTC				0.0 c	0.0 b	0.0 d	0.0 c	0.0 c
LSD P=.05				8.43	.	22.10	10.80	18.58
Standard Deviation				4.92	0.00	12.88	6.29	10.73
CV				10.1	0.0	30.56	9.5	33.54
Bartlett's X2				7.739	0.0	11.639	4.573	0.195
P(Bartlett's X2)				0.258	.	0.071	0.47	0.996
Replicate F				1.690	0.000	0.487	1.215	0.120
Replicate Prob(F)				0.2126	1.0000	0.6224	0.3199	0.8876
Treatment F				141.057	0.000	16.755	159.015	13.745
Treatment Prob(F)				0.0001	1.0000	0.0001	0.0001	0.0001

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Pest Type	O Other	W Weed	W Weed	W Weed	W Weed			
Pest Code		SETFA	AMBTR	ERICA	SENGL			
Pest Name		Giant foxtail	Giant ragweed	Canada horsewee>	Cressleaf grou>			
Rating Date	May-30-2017	May-30-2017	May-30-2017	May-30-2017	May-30-2017			
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1			
Days After First/Last Applic.	27 27	27 27	27 27	27 27	27 27			
Trt-Eval Interval	27 DA-A	27 DA-A	27 DA-A	27 DA-A	27 DA-A			
Days After Emergence	1 DE-1	1 DE-1	1 DE-1	1 DE-1	1 DE-1			
Trt Treatment	Other	Other	Appl					
No. Name	Rate	Rate	Unit Code	6	7	8	9	10
1 Authority MTZ (F-4242)	11 oz/a		A	0.0 a	0.0 d	63.3 a	78.3 b	100.0 a
1 Xtendimax	22 oz/a		A					
1 Roundup Power Max	32 oz/a		A					
1 Xtendimax	22 oz/a		C					
1 Roundup Power Max	32 oz/a		C					
2 Authority MTZ	12 oz/a		A	1.7 a	20.0 c	73.3 a	78.3 b	96.7 b
2 Xtendimax	22 oz/a		A					
2 Roundup Power Max	32 oz/a		A					
2 Xtendimax	22 oz/a		C					
2 Roundup Power Max	32 oz/a		C					
3 Authority XL	4 oz/a		A	1.0 a	60.0 a	81.7 a	81.7 a	100.0 a
3 Anthem Maxx	3 oz/a		A					
3 Xtendimax	22 oz/a		A					
3 Roundup Power Max	32 oz/a		A					
3 Xtendimax	22 oz/a		C					
3 Roundup Power Max	32 oz/a		C					
4 Authority MTZ	12 oz/a		A	1.7 a	43.3 ab	70.0 a	80.0 ab	100.0 a
4 Anthem Maxx	3 oz/a		A					
4 Xtendimax	22 oz/a		A					
4 Roundup Power Max	32 oz/a		A					
4 Xtendimax	22 oz/a		C					
4 Roundup Power Max	32 oz/a		C					
5 Authority XL	4 oz/a		A	1.0 a	40.0 b	80.0 a	80.0 ab	100.0 a
5 Xtendimax	22 oz/a		A					
5 Roundup Power Max	32 oz/a		A					
5 Anthem Maxx	3 oz/a		C					
5 Xtendimax	22 oz/a		C					
5 Roundup Power Max	32 oz/a		C					
6 Authority MTZ	12 oz/a		A	1.0 a	40.0 b	70.0 a	80.0 ab	100.0 a
6 Xtendimax	22 oz/a		A					
6 Roundup Power Max	32 oz/a		A					
6 Anthem Maxx	3 oz/a		C					
6 Xtendimax	22 oz/a		C					
6 Roundup Power Max	32 oz/a		C					
7 Rowel	3 oz/a		A	1.7 a	50.0 ab	60.0 a	81.7 a	100.0 a
7 Xtendimax	22 oz/a		A					
7 Roundup Power Max	32 oz/a		A					
7 Xtendimax	22 oz/a		C					
7 Roundup Power Max	32 oz/a		C					

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Pest Type	O Other	W Weed	W Weed	W Weed	W Weed			
Pest Code	SETFA	AMBTR	ERICA	SENGL				
Pest Name	Giant foxtail	Giant ragweed	Canada horsewee>	Cressleaf grou>				
Rating Date	May-30-2017	May-30-2017	May-30-2017	May-30-2017	May-30-2017			
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1			
Days After First/Last Applic.	27 27	27 27	27 27	27 27	27 27			
Trt-Eval Interval	27 DA-A	27 DA-A	27 DA-A	27 DA-A	27 DA-A			
Days After Emergence	1 DE-1	1 DE-1	1 DE-1	1 DE-1	1 DE-1			
Trt Treatment	Other	Other	Appl					
No. Name	Rate	Rate	Unit Code	6	7	8	9	10
8 Anthem Maxx	3 oz/a		B	0.0 a	0.0 d	0.0 b	0.0 c	0.0 c
8 Xtendimax	22 oz/a		B					
8 Roundup Power Max	32 oz/a		B					
8 Xtendimax	22 oz/a		D					
8 Roundup Power Max	32 oz/a		D					
9 Warrant	3 pt/a		B	0.0 a	0.0 d	0.0 b	0.0 c	0.0 c
9 Xtendimax	22 oz/a		B					
9 Roundup Power Max	32 oz/a		B					
9 Xtendimax	22 oz/a		D					
9 Roundup Power Max	32 oz/a		D					
10 UTC				0.0 a	0.0 d	0.0 b	0.0 c	0.0 c
LSD P=.05				3.21	17.90	21.88	2.76	3.13
Standard Deviation				1.87	10.43	12.75	1.61	1.83
CV				233.85	41.19	25.59	2.88	2.62
Bartlett's X2				1.369	1.587	2.075	0.0	0.0
P(Bartlett's X2)				0.928	0.811	0.913	.	.
Replicate F				0.714	0.490	0.989	3.857	1.000
Replicate Prob(F)				0.5029	0.6207	0.3914	0.0404	0.3874
Treatment F				0.470	15.796	22.589	1729.429	2081.000
Treatment Prob(F)				0.8762	0.0001	0.0001	0.0001	0.0001

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Pest Type	W Weed	O Other	W Weed	W Weed	W Weed			
Pest Code	TARSS		SETFA	AMBTR	ERICA			
Pest Name	Dandelion		Giant foxtail	Giant ragweed	Canada horsewe>			
Rating Date	May-30-2017	Jun-12-2017	Jun-12-2017	Jun-12-2017	Jun-12-2017			
Rating Type	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1			
Days After First/Last Applic.	27 27	40 4	40 4	40 4	40 4			
Trt-Eval Interval	27 DA-A							
Days After Emergence	1 DE-1	14 DE-1	14 DE-1	14 DE-1	14 DE-1			
Trt Treatment	Other Rate	Other Rate	Appl Unit Code	11	12	13	14	15
1 Authority MTZ (F-4242)	11 oz/a		A	50.0 b	0.0 b	70.0 c	90.7 cd	78.3 b
1 Xtendimax	22 oz/a		A					
1 Roundup Power Max	32 oz/a		A					
1 Xtendimax	22 oz/a		C					
1 Roundup Power Max	32 oz/a		C					
2 Authority MTZ	12 oz/a		A	51.7 b	0.0 b	76.7 bc	93.3 bc	81.7 ab
2 Xtendimax	22 oz/a		A					
2 Roundup Power Max	32 oz/a		A					
2 Xtendimax	22 oz/a		C					
2 Roundup Power Max	32 oz/a		C					
3 Authority XL	4 oz/a		A	88.3 a	0.0 b	80.0 b	86.7 d	83.3 a
3 Anthem Maxx	3 oz/a		A					
3 Xtendimax	22 oz/a		A					
3 Roundup Power Max	32 oz/a		A					
3 Xtendimax	22 oz/a		C					
3 Roundup Power Max	32 oz/a		C					
4 Authority MTZ	12 oz/a		A	40.0 b	0.7 ab	75.0 bc	80.0 e	78.3 b
4 Anthem Maxx	3 oz/a		A					
4 Xtendimax	22 oz/a		A					
4 Roundup Power Max	32 oz/a		A					
4 Xtendimax	22 oz/a		C					
4 Roundup Power Max	32 oz/a		C					
5 Authority XL	4 oz/a		A	76.7 a	2.0 a	78.3 b	90.0 cd	81.7 ab
5 Xtendimax	22 oz/a		A					
5 Roundup Power Max	32 oz/a		A					
5 Anthem Maxx	3 oz/a		C					
5 Xtendimax	22 oz/a		C					
5 Roundup Power Max	32 oz/a		C					
6 Authority MTZ	12 oz/a		A	50.0 b	2.0 a	73.3 bc	98.0 ab	81.7 ab
6 Xtendimax	22 oz/a		A					
6 Roundup Power Max	32 oz/a		A					
6 Anthem Maxx	3 oz/a		C					
6 Xtendimax	22 oz/a		C					
6 Roundup Power Max	32 oz/a		C					
7 Rowel	3 oz/a		A	84.1 a	0.0 b	76.7 bc	91.7 cd	83.3 a
7 Xtendimax	22 oz/a		A					
7 Roundup Power Max	32 oz/a		A					
7 Xtendimax	22 oz/a		C					
7 Roundup Power Max	32 oz/a		C					

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The Ohio State University

Pest Type	W Weed	O Other	W Weed	W Weed	W Weed		
Pest Code	TARSS		SETFA	AMBTR	ERICA		
Pest Name	Dandelion		Giant foxtail	Giant ragweed	Canada horsewe>		
Rating Date	May-30-2017	Jun-12-2017	Jun-12-2017	Jun-12-2017	Jun-12-2017		
Rating Type	CONTRO	PHYGEN	CONTRO	CONTRO	CONTRO		
Rating Unit	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1		
Days After First/Last Applic.	27 27	40 4	40 4	40 4	40 4		
Trt-Eval Interval	27 DA-A						
Days After Emergence	1 DE-1	14 DE-1	14 DE-1	14 DE-1	14 DE-1		
Trt Treatment	Other Other	Appl					
No. Name	Rate Rate	Unit Code	11	12	13	14	15
8 Anthem Maxx	3 oz/a	B	0.0 c	0.0 b	90.0 a	95.0 abc	60.0 d
8 Xtendimax	22 oz/a	B					
8 Roundup Power Max	32 oz/a	B					
8 Xtendimax	22 oz/a	D					
8 Roundup Power Max	32 oz/a	D					
9 Warrant	3 pt/a	B	0.0 c	1.0 ab	90.0 a	100.0 a	70.0 c
9 Xtendimax	22 oz/a	B					
9 Roundup Power Max	32 oz/a	B					
9 Xtendimax	22 oz/a	D					
9 Roundup Power Max	32 oz/a	D					
10 UTC			0.0 c	0.0 b	0.0 d	0.0 f	0.0 e
LSD P=.05			21.94	1.52	8.10	5.72	4.14
Standard Deviation			12.74	0.88	4.72	3.33	2.42
CV			28.9	155.5	6.65	4.04	3.46
Bartlett's X2			2.346	0.849	1.466	3.377	0.0
P(Bartlett's X2)			0.672	0.838	0.833	0.497	1.00
Replicate F			0.520	2.232	1.456	1.280	1.000
Replicate Prob(F)			0.6039	0.1378	0.2593	0.3022	0.3874
Treatment F			21.760	2.676	89.394	235.473	337.286
Treatment Prob(F)			0.0001	0.0385	0.0001	0.0001	0.0001

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The Ohio State University

Pest Type	O Other	W Weed	W Weed	W Weed	O Other	W Weed			
Pest Code		SETFA	AMBTR	ERICA		SETFA			
Pest Name		Giant foxtail	Giant ragweed	Canada horsewee>		Giant foxtail			
Rating Date	Jun-21-2017	Jun-21-2017	Jun-21-2017	Jun-21-2017	Jul-7-2017	Jul-7-2017			
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO			
Rating Unit	%	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1	1			
Days After First/Last Applic.	49 13	49 13	49 13	49 13	65 2	65 2			
Trt-Eval Interval									
Days After Emergence	23 DE-1	23 DE-1	23 DE-1	23 DE-1	39 DE-1	39 DE-1			
Trt Treatment	Other Rate	Other Rate	Appl Unit Code	16	17	18	19	20	21
1 Authority MTZ (F-4242)	11 oz/a		A	2.3 ab	23.3 d	96.7 a	86.7 abc	0.0 a	26.7 de
1 Xtendimax	22 oz/a		A						
1 Roundup Power Max	32 oz/a		A						
1 Xtendimax	22 oz/a		C						
1 Roundup Power Max	32 oz/a		C						
2 Authority MTZ	12 oz/a		A	4.3 a	30.0 cd	96.7 a	88.3 ab	0.0 a	20.0 e
2 Xtendimax	22 oz/a		A						
2 Roundup Power Max	32 oz/a		A						
2 Xtendimax	22 oz/a		C						
2 Roundup Power Max	32 oz/a		C						
3 Authority XL	4 oz/a		A	0.0 b	33.3 cd	98.3 a	92.7 a	0.0 a	36.7 cde
3 Anthem Maxx	3 oz/a		A						
3 Xtendimax	22 oz/a		A						
3 Roundup Power Max	32 oz/a		A						
3 Xtendimax	22 oz/a		C						
3 Roundup Power Max	32 oz/a		C						
4 Authority MTZ	12 oz/a		A	2.3 ab	53.3 ab	98.3 a	91.7 a	0.0 a	46.7 bc
4 Anthem Maxx	3 oz/a		A						
4 Xtendimax	22 oz/a		A						
4 Roundup Power Max	32 oz/a		A						
4 Xtendimax	22 oz/a		C						
4 Roundup Power Max	32 oz/a		C						
5 Authority XL	4 oz/a		A	2.0 ab	50.0 b	100.0 a	93.3 a	0.0 a	63.3 ab
5 Xtendimax	22 oz/a		A						
5 Roundup Power Max	32 oz/a		A						
5 Anthem Maxx	3 oz/a		C						
5 Xtendimax	22 oz/a		C						
5 Roundup Power Max	32 oz/a		C						
6 Authority MTZ	12 oz/a		A	4.3 a	66.7 a	100.0 a	90.0 ab	0.0 a	66.7 a
6 Xtendimax	22 oz/a		A						
6 Roundup Power Max	32 oz/a		A						
6 Anthem Maxx	3 oz/a		C						
6 Xtendimax	22 oz/a		C						
6 Roundup Power Max	32 oz/a		C						
7 Rowel	3 oz/a		A	0.0 b	43.3 bc	100.0 a	92.7 a	0.0 a	36.7 cde
7 Xtendimax	22 oz/a		A						
7 Roundup Power Max	32 oz/a		A						
7 Xtendimax	22 oz/a		C						
7 Roundup Power Max	32 oz/a		C						

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The Ohio State University

Pest Type	O Other	W Weed	W Weed	W Weed	O Other	W Weed				
Pest Code	SETFA	SETFA	AMBTR	ERICA	SETFA	SETFA				
Pest Name	Giant foxtail	Giant ragweed	Canada horsewe>	Giant foxtail	Giant foxtail	Giant foxtail				
Rating Date	Jun-21-2017	Jun-21-2017	Jun-21-2017	Jun-21-2017	Jul-7-2017	Jul-7-2017				
Rating Type	PHYGEN	CONTRO	CONTRO	CONTRO	PHYGEN	CONTRO				
Rating Unit	%	%	%	%	%	%				
Number of Subsamples	1	1	1	1	1	1				
Days After First/Last Applic.	49 13	49 13	49 13	49 13	65 2	65 2				
Trt-Eval Interval										
Days After Emergence	23 DE-1	23 DE-1	23 DE-1	23 DE-1	39 DE-1	39 DE-1				
Trt Treatment	Other Rate	Other Rate	Appl Unit	Code	16	17	18	19	20	21
8 Anthem Maxx	3 oz/a		B		1.0 b	50.0 b	100.0 a	80.0 c	0.0 a	63.3 ab
8 Xtendimax	22 oz/a		B							
8 Roundup Power Max	32 oz/a		B							
8 Xtendimax	22 oz/a		D							
8 Roundup Power Max	32 oz/a		D							
9 Warrant	3 pt/a		B		1.7 b	43.3 bc	100.0 a	83.3 bc	0.0 a	43.3 cd
9 Xtendimax	22 oz/a		B							
9 Roundup Power Max	32 oz/a		B							
9 Xtendimax	22 oz/a		D							
9 Roundup Power Max	32 oz/a		D							
10 UTC					0.0 b	0.0 e	0.0 b	0.0 d	0.0 a	0.0 f
LSD P=.05					2.38	14.43	4.98	7.19	.	18.99
Standard Deviation					1.39	8.41	2.90	4.19	0.00	11.07
CV					77.17	21.38	3.26	5.25	0.0	27.45
Bartlett's X2					3.214	2.573	1.68	2.612	0.0	9.748
P(Bartlett's X2)					0.782	0.765	0.641	0.856	.	0.283
Replicate F					3.783	0.895	0.890	1.487	0.000	7.042
Replicate Prob(F)					0.0425	0.4259	0.4279	0.2526	1.0000	0.0055
Treatment F					4.115	14.743	348.835	137.666	0.000	11.024
Treatment Prob(F)					0.0052	0.0001	0.0001	0.0001	1.0000	0.0001

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Pest Type		W Weed	W Weed	W Weed	
Pest Code		ECHCG	AMBTR	ERICA	
Pest Name		Common barnyar>	Giant ragweed	Canada horsewe>	
Rating Date		Jul-7-2017	Jul-7-2017	Jul-7-2017	
Rating Type		CONTRO	CONTRO	CONTRO	
Rating Unit		%	%	%	
Number of Subsamples		1	1	1 1	
Days After First/Last Applic.		65 2	65 2	65 2	
Trt-Eval Interval					
Days After Emergence		39 DE-1	39 DE-1	39 DE-1	
Trt Treatment	Other Other	Appl			
No. Name	Rate Rate	Unit Code	22	23	
			24	25	
1 Authority MTZ (F-4242)	11 oz/a	A	10.0 cd	88.3 ab	100.0 a
1 Xtendimax	22 oz/a	A			
1 Roundup Power Max	32 oz/a	A			
1 Xtendimax	22 oz/a	C			
1 Roundup Power Max	32 oz/a	C			
2 Authority MTZ	12 oz/a	A	0.0 d	93.3 ab	100.0 a
2 Xtendimax	22 oz/a	A			
2 Roundup Power Max	32 oz/a	A			
2 Xtendimax	22 oz/a	C			
2 Roundup Power Max	32 oz/a	C			
3 Authority XL	4 oz/a	A	20.0 bc	86.7 ab	100.0 a
3 Anthem Maxx	3 oz/a	A			
3 Xtendimax	22 oz/a	A			
3 Roundup Power Max	32 oz/a	A			
3 Xtendimax	22 oz/a	C			
3 Roundup Power Max	32 oz/a	C			
4 Authority MTZ	12 oz/a	A	20.0 bc	90.0 ab	100.0 a
4 Anthem Maxx	3 oz/a	A			
4 Xtendimax	22 oz/a	A			
4 Roundup Power Max	32 oz/a	A			
4 Xtendimax	22 oz/a	C			
4 Roundup Power Max	32 oz/a	C			
5 Authority XL	4 oz/a	A	36.7 ab	91.7 ab	100.0 a
5 Xtendimax	22 oz/a	A			
5 Roundup Power Max	32 oz/a	A			
5 Anthem Maxx	3 oz/a	C			
5 Xtendimax	22 oz/a	C			
5 Roundup Power Max	32 oz/a	C			
6 Authority MTZ	12 oz/a	A	50.0 a	81.7 b	100.0 a
6 Xtendimax	22 oz/a	A			
6 Roundup Power Max	32 oz/a	A			
6 Anthem Maxx	3 oz/a	C			
6 Xtendimax	22 oz/a	C			
6 Roundup Power Max	32 oz/a	C			
7 Rowel	3 oz/a	A	13.3 cd	90.0 ab	100.0 a
7 Xtendimax	22 oz/a	A			
7 Roundup Power Max	32 oz/a	A			
7 Xtendimax	22 oz/a	C			
7 Roundup Power Max	32 oz/a	C			

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Pest Type	W Weed	W Weed	W Weed
Pest Code	ECHCG	AMBTR	ERICA
Pest Name	Common barnyar>	Giant ragweed	Canada horsewe>
Rating Date	Jul-7-2017	Jul-7-2017	Jul-7-2017
Rating Type	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%
Number of Subsamples	1	1	1 1
Days After First/Last Applic.	65 2	65 2	65 2
Trt-Eval Interval			
Days After Emergence	39 DE-1	39 DE-1	39 DE-1
Trt Treatment	Other Other	Appl	
No. Name	Rate Rate	Unit Code	
			22
			23
			24
			25
8 Anthem Maxx	3 oz/a	B	26.7 bc
8 Xtendimax	22 oz/a	B	100.0 a
8 Roundup Power Max	32 oz/a	B	95.0 b
8 Xtendimax	22 oz/a	D	
8 Roundup Power Max	32 oz/a	D	
9 Warrant	3 pt/a	B	16.7 cd
9 Xtendimax	22 oz/a	B	100.0 a
9 Roundup Power Max	32 oz/a	B	100.0 a
9 Xtendimax	22 oz/a	D	
9 Roundup Power Max	32 oz/a	D	
10 UTC			0.0 d
			0.0 c
			0.0 c
LSD P=.05			19.56
Standard Deviation			11.40
CV			58.97
Bartlett's X2			5.141
P(Bartlett's X2)			0.399
Replicate F			2.795
Replicate Prob(F)			0.0877
Treatment F			5.573
Treatment Prob(F)			0.0010
			15.19
			8.86
			10.78
			1.389
			0.967
			1.000
			0.3874
			1189.667
			0.0001

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The Ohio State University

No-Till Extendimax Burndown plus Residual

Trial ID: 17 FMCXTEND
Protocol ID: 17 FMCXTEND
Project ID: SULF.SOY.17.JPR.03

Location: F-10 MIDDLE Trial Year: 2017
Investigator: Dr. Mark M. Loux
Study Director: Bryan Reeb
Sponsor Contact: Joe Reed, FMC

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop
O, Other, G-BYRO7, G-OthStg = Other animal or nematode

Pest Code

ERICA, Erigeron canadensis, Canada horseweed = US
AMBTR, Ambrosia trifida, Giant ragweed = US
ERYRE, Erysimum repandum, Bushy wallflower = US
SENGL, Senecio glabellus, Cressleaf groundsel = US
TARSS, Taraxacum sp., Dandelion = US
SETFA, Setaria faberi, Giant foxtail = US
ECHCG, Echinochloa crus-galli, Common barnyard grass = US

Rating Type

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

Rating Unit

% = percent