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Fall Burndown Plus Residual FMC

Trial ID: 13FALLSOY2 Location: Trial Year: 2013
 Protocol ID: 13FALLSOY2 Investigator: Dr. Mark M. Loux
 Project ID: Study Director:
 Sponsor Contact: Joe Reed, FMC

Crop Description

Crop 1: GLXMA Glycine max
Variety: Seed Consultants SC9362RR
Description: RR

Soybean

BBCH Scale: BSOY

Planting Rate, Unit: 150000 S/A
Depth, Unit: 0.5 IN
Row Spacing, Unit: 15 IN
Soil Temperature, Unit: 56 F
Soil Moisture: SLIWET slightly wet, moist
Seed Bed: MEDTRA medium/trashy

Planting Date: May-6-2013
Planting Method: PLANTD planted
Planting Equipment: PP Plot Planter
Emergence Date: May-17-2013

Pest Description

- Pest 1 Type:** W **Code:** STEME *Stellaria media*
Common Name: Common chickweed
- Pest 2 Type:** W **Code:** LAMPU *Lamium purpureum*
Common Name: Purple deadnettel
- Pest 3 Type:** W **Code:** AMBTR *Ambrosia trifida*
Common Name: Giant ragweed
- Pest 4 Type:** W **Code:** SENGL *Senecio glabellus*
Common Name: Cressleaf groundsel
- Pest 5 Type:** W **Code:** CAPBP *Capsella bursa-pastoris*
Common Name: Shepherd's purse
- Pest 6 Type:** W **Code:** RANAB *Ranunculus abortivus*
Common Name: Smallflower buttercup
- Pest 7 Type:** W **Code:** VERAR *Veronica arvensis*
Common Name: Corn speedwell
- Pest 8 Type:** W **Code:** ERYRE *Erysimum repandum*
Common Name: Bushy wallflower
- Pest 9 Type:** W **Code:** ERICA *Conyza canadensis*
Common Name: Canada horseweed

Site and Design

Treated Plot Width: 6.67 FT
Treated Plot Length: 30 FT
Treated Plot Area: 200.1 FT² **Treatments:** 12
Replications: 3
Untreated Arrangement: INCLUDED single control randomized in each block

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

Soil Description

Description Name: G-8
% OM: 2 **Texture:** SICL silty clay loam
pH: 6.1 **Soil Name:** Kokomo
CEC: 14.9 **Fert. Level:** G good
Soil Drainage: G good

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Application Description

	A	B	C	D
Application Date:	Nov-9-2012	May-7-2013	Jun-4-2013	Jun-25-2013
Appl. Start Time:	10:00 A.M	8:45 AM	8:00 AM	10:00 AM
Appl. Stop Time:	10:30 AM	9:00 AM	8:20 AM	10:30 AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	FALL	PRE	POST	LPO
Application Placement:	BROFOL	BROFOL	BROFOL	BROFOL
Applied By:	Reeb	Dobbels	Dobbels	Bethel
Air Temperature, Unit:	54 F	63 F	61 F	80 f
% Relative Humidity:	68	86	58	77
Wind Velocity, Unit:	5.5 MPH	3 MPH	1 MPH	6 MPH
Wind Direction:	S	E	SE	S
Dew Presence (Y/N):	N no	N no	Y yes	N no
Soil Temperature, Unit:	40 F	54 F	60 F	72 F
Soil Moisture:	MOIST	MOIST	NORMAL	MOIST
% Cloud Cover:	0	90	10	15
Next Moisture Occurred On:	Nov-12-2012	May-9-2013	Jun-7-2013	Jun-26-2013
Time to Next Moisture, Unit:		2 DAY	3 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:			DESC	BBCH
Stage Majority, Percent:			13 100	16 100
Height, Unit:			10 IN	15 IN
Height Minimum, Maximum:			8 12	15 18

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Type, Scale:	STEME W	STEME W	STEME W	STEME W
Stage Majority, Percent:	19 100	67 100		
Diameter, Unit:	1.5 IN	6 IN		
Height, Unit:	1 IN	6 IN		
Height Minimum, Maximum:	0.5 1	6 8		
Density, Unit:	10.6 M2			
Pest 2 Code, Type, Scale:	LAMPU W	LAMPU W	LAMPU W	LAMPU W
Stage Majority, Percent:	19 80	67 100		
Stage Minimum, Percent:	14 20			
Stage Maximum, Percent:	19 80			
Diameter, Unit:	0.5 IN			
Height, Unit:	1.5 IN	6 IN		
Height Minimum, Maximum:	1.5 3	6 8		
Density, Unit:	21.6 M2			
Pest 3 Code, Type, Scale:	AMBTR W	AMBTR W	AMBTR W	AMBTR W
Stage Majority, Percent:		14 100		
Height, Unit:		2 IN		
Height Minimum, Maximum:		2 3		
Density, Unit:	21.2 M2			
Pest 4 Code, Type, Scale:	SENGL W	SENGL W	SENGL W	SENGL W
Stage Majority, Percent:		67 100		
Height, Unit:		20 IN		
Height Minimum, Maximum:		20 20		
Density, Unit:	4 M2			
Pest 5 Code, Type, Scale:	CAPBP W	CAPBP W	CAPBP W	CAPBP W
Stage Majority, Percent:		67 100		
Height, Unit:		20 IN		
Height Minimum, Maximum:		20 20		
Density, Unit:	5.3 M2			
Pest 6 Code, Type, Scale:	RANAB W	RANAB W	RANAB W	RANAB W
Stage Majority, Percent:		67 100		
Height, Unit:		6 IN		
Height Minimum, Maximum:		6 8		
Pest 7 Code, Type, Scale:	VERAR W	VERAR W	VERAR W	VERAR W
Density, Unit:	1.3 M2			
Pest 8 Code, Type, Scale:	ERYRE W	ERYRE W	ERYRE W	ERYRE W
Density, Unit:	1.3 M2			
Pest 9 Code, Type, Scale:	ERICA W	ERICA W	ERICA W	ERICA W
Density, Unit:	1.3 M2			

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	Application Equipment			
	A	B	C	D
Appl. Equipment:	6 foot boom	6 foot boom	6 foot boom	Tractor
Equipment Type:	SPRBAC	SPRBAC	SPRBAC	SPTRMO
Operation Pressure, Unit:	46 PSI	46 PSI	46 PSI	40 PSI
Nozzle Type:	AI XR	AI XR	AI XR	AI
Nozzle Size:	110015	110015	110015	11002
Nozzle Spacing, Unit:	18 IN	18 IN	18 IN	20 IN
Boom Length, Unit:	6 FT	6 FT	6 FT	20 FT
Boom Height, Unit:	20 IN	20 IN	20 IN	20 IN
Ground Speed, Unit:	3 MPH	3 MPH	3 MPH	3.8 MPH
Carrier:	WATER	WATER	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GAL/AC
Mix Size, Unit:	1 Liters	1 Liters	1 Liters	10 gallons
Propellant:	CO2	CO2	CO2	PUMROL
Tank Mix (Y/N):				N no

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 Protocol ID: 13FALLSOY2 Investigator: Dr. Mark M. Loux
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Pest Code	LAMPU	STEME	RANAB	AMBTR	STEME	LAMPU
Crop Code						
Rating Date	Apr-23-2013	Apr-23-201	Apr-23-2013	Apr-23-201	May-7-201	May-7-2013
Rating Type	CONTRO	CONTRO ³	CONTRO	CONTRO ³	CONTRO ³	CONTRO
Rating Unit	%	%	%	%	%	%
Days After First/Last Applic.	165 165	165 165	165 165	165 165	179 179	179 179
Trt-Eval Interval	-14 DA-A	-14 DA-A	-14 DA-A	-14 DA-A	0 DA-A	0 DA-A
Plant-Eval Interval	-13 DP-1	-13 DP-1	-13 DP-1	-13 DP-1	1 DP-1	1 DP-1
Days After Emergence	-24 DE-1	-24 DE-1	-24 DE-1	-24 DE-1	-10 DE-1	-10 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Growth Stage	Appl Code	1	2	3	4	5	6
1	UNTREATED					0 b	0 b	0 c	0 a	0 b	0 b
1	ROUNDUP POWERMAX	32 oz/a		28 DAPL C							
1	N-PAK AMS	2.5 % v/v		28 DAPL C							
1	ROUNDUP POWERMAX	32 oz/a		21 DAC D							
1	N-PAK AMS	2.5 % v/v		21 DAC D							
2	AUTHORITY XL	4 oz/a		FALL A		99 a	77 a	100 a	50 a	93 a	100 a
2	WEEDMASTER	1.5 pt/a		FALL A							
2	ROUNDUP POWERMAX	32 oz/a		FALL A							
2	N-PAK AMS	2.5 % v/v		FALL A							
2	Sharpen	1 oz/a		AT PL B							
2	MSO	1 % v/v		AT PL B							
2	ROUNDUP POWERMAX	32 oz/a		28 DAPL C							
2	Firstrate	0.3 oz/a		28 DAPL C							
2	N-PAK AMS	2.5 % v/v		28 DAPL C							
2	ROUNDUP POWERMAX	32 oz/a		21 DAC D							
2	N-PAK AMS	2.5 % v/v		21 DAC D							
3	AUTHORITY MTZ	14 oz/a		FALL A		93 a	97 a	37 b	12 a	100 a	97 a
3	WEEDMASTER	1.5 pt/a		FALL A							
3	ROUNDUP POWERMAX	32 oz/a		FALL A							
3	N-PAK AMS	2.5 % v/v		FALL A							
3	Sharpen	1 oz/a		AT PL B							
3	MSO	1 % v/v		AT PL B							
3	Roundup PowerMax	32 oz/a		28 DAPL C							
3	Firstrate	0.3 oz/a		28 DAPL C							
3	N-PAK AMS	2.5 % v/v		28 DAPL C							
3	ROUNDUP POWERMAX	32 oz/a		21 DAC D							
3	N-PAK AMS	2.5 % v/v		21 DAC D							
4	COMMAND 3ME	2.33 pt/a		FALL A		100 a	100 a	63 ab	4 a	100 a	100 a
4	WEEDMASTER	1.5 pt/a		FALL A							
4	ROUNDUP POWERMAX	32 oz/a		FALL A							
4	N-PAK AMS	2.5 % v/v		FALL A							
4	Sharpen	1 oz/a		AT PL B							
4	MSO	1 % v/v		AT PL B							
4	Roundup PowerMax	39.2 oz/a		28 DAPL C							
4	Firstrate	0.3 oz/a		28 DAPL C							
4	N-PAK AMS	2.5 % v/v		28 DAPL C							
4	ROUNDUP POWERMAX	32 oz/a		21 DAC D							
4	N-PAK AMS	2.5 % v/v		21 DAC D							

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
 t=Mean descriptions are reported in transformed data units, and are not de-transformed.
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Missing data estimates are included in columns: Yates=4,8; Average=10

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Pest Code	LAMPU	STEME	RANAB	AMBTR	STEME	LAMPU
Crop Code						
Rating Date	Apr-23-2013	Apr-23-2013	Apr-23-2013	Apr-23-2013	May-7-2013	May-7-2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%
Days After First/Last Applic.	165 165	165 165	165 165	165 165	179 179	179 179
Trt-Eval Interval	-14 DA-A	-14 DA-A	-14 DA-A	-14 DA-A	0 DA-A	0 DA-A
Plant-Eval Interval	-13 DP-1	-13 DP-1	-13 DP-1	-13 DP-1	1 DP-1	1 DP-1
Days After Emergence	-24 DE-1	-24 DE-1	-24 DE-1	-24 DE-1	-10 DE-1	-10 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Growth Stage	Appl Code	1	2	3	4	5	6
5	BROADAXE	25 oz/a		FALL	A	92 a	83 a	100 a	0 a	83 a	87 a
5	WEEDMASTER	1.5 pt/a		FALL	A						
5	ROUNDUP POWERMAX	32 oz/a		FALL	A						
5	N-PAK AMS	2.5 % v/v		FALL	A						
5	Sharpen	1 oz/a		AT PL	B						
5	MSO	1 % v/v		AT PL	B						
5	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C						
5	Firstrate	0.3 oz/a		28 DAPL	C						
5	N-PAK AMS	2.5 % v/v		28 DAPL	C						
5	ROUNDUP POWERMAX	32 oz/a		21 DAC	D						
5	N-PAK AMS	2.5 % v/v		21 DAC	D						
6	F9016-2	8 oz/a		FALL	A	92 a	70 a	100 a	25 a	87 a	90 a
6	WEEDMASTER	1.5 pt/a		FALL	A						
6	ROUNDUP POWERMAX	32 oz/a		FALL	A						
6	N-PAK AMS	2.5 % v/v		FALL	A						
6	Sharpen	1 oz/a		AT PL	B						
6	MSO	1 % v/v		AT PL	B						
6	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C						
6	Firstrate	0.3 oz/a		28 DAPL	C						
6	N-PAK AMS	2.5 % v/v		28 DAPL	C						
6	ROUNDUP POWERMAX	32 oz/a		21 DAC	D						
6	N-PAK AMS	2.5 % v/v		21 DAC	D						
7	ANTHEM	8 oz/a		FALL	A	74 a	67 a	100 a	16 a	77 a	77 a
7	WEEDMASTER	1.5 pt/a		FALL	A						
7	ROUNDUP POWERMAX	32 oz/a		FALL	A						
7	N-PAK AMS	2.5 % v/v		FALL	A						
7	Sharpen	1 oz/a		AT PL	B						
7	MSO	1 % v/v		AT PL	B						
7	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C						
7	Firstrate	0.3 oz/a		28 DAPL	C						
7	N-PAK AMS	2.5 % v/v		28 DAPL	C						
7	ROUNDUP POWERMAX	32 oz/a		21 DAC	D						
7	N-PAK AMS	2.5 % v/v		21 DAC	D						
8	COMMAND 3ME	32 oz/a		FALL	A	100 a	100 a	100 a	19 a	100 a	100 a
8	SENCOR	8 oz/a		FALL	A						
8	WEEDMASTER	1.5 pt/a		FALL	A						
8	ROUNDUP POWERMAX	32 oz/a		FALL	A						
8	N-PAK AMS	2.5 % v/v		FALL	A						
8	Sharpen	1 oz/a		AT PL	B						
8	MSO	1 % v/v		AT PL	B						
8	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C						
8	Firstrate	0.3 oz/a		28 DAPL	C						
8	N-PAK AMS	2.5 % v/v		28 DAPL	C						
8	ROUNDUP POWERMAX	32 oz/a		21 DAC	D						
8	N-PAK AMS	2.5 % v/v		21 DAC	D						
9	COMMAND 3ME	16 oz/a		FALL	A	100 a	100 a	100 a	4 a	100 a	100 a
9	SENCOR	8 oz/a		FALL	A						
9	WEEDMASTER	1.5 pt/a		FALL	A						
9	ROUNDUP POWERMAX	32 oz/a		FALL	A						
9	N-PAK AMS	2.5 % v/v		FALL	A						
9	Sharpen	1 oz/a		AT PL	B						
9	MSO	1 % v/v		AT PL	B						
9	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C						
9	Firstrate	0.3 oz/a		28 DAPL	C						
9	N-PAK AMS	2.5 % v/v		28 DAPL	C						
9	ROUNDUP POWERMAX	32 oz/a		21 DAC	D						
9	N-PAK AMS	2.5 % v/v		21 DAC	D						

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Pest Code		LAMPU	STEME	RANAB	AMBTR	STEME	LAMPU				
Crop Code		Apr-23-2013	Apr-23-201 ³	Apr-23-2013	Apr-23-201 ³	May-7-201 ³	May-7-2013				
Rating Date											
Rating Type		CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit		%	%	%	%	%	%				
Days After First/Last Applic.		165 165	165 165	165 165	165 165	179 179	179 179				
Trt-Eval Interval		-14 DA-A	-14 DA-A	-14 DA-A	-14 DA-A	0 DA-A	0 DA-A				
Plant-Eval Interval		-13 DP-1	-13 DP-1	-13 DP-1	-13 DP-1	1 DP-1	1 DP-1				
Days After Emergence		-24 DE-1	-24 DE-1	-24 DE-1	-24 DE-1	-10 DE-1	-10 DE-1				
Trt No.	Treatment Name	Other Rate	Other Rate Unit	Growth Stage	Appl Code	1	2	3	4	5	6
10	COMMAND 3ME	10.6 oz/a		FALL	A	100 a	100 a	100 a	25 a	100 a	100 a
10	SENCOR	8 oz/a		FALL	A						
10	WEEDMASTER	1.5 pt/a		FALL	A						
10	ROUNDUP POWERMAX	32 oz/a		FALL	A						
10	N-PAK AMS	2.5 % v/v		FALL	A						
10	Sharpen	1 oz/a		AT PL	B						
10	MSO	1 % v/v		AT PL	B						
10	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C						
10	Firstrate	0.3 oz/a		28 DAPL	C						
10	N-PAK AMS	2.5 % v/v		28 DAPL	C						
10	ROUNDUP POWERMAX	32 oz/a		21 DAC	D						
10	N-PAK AMS	2.5 % v/v		21 DAC	D						
11	COMMAND 3ME	8 oz/a		FALL	A	100 a	100 a	67 ab	4 a	100 a	100 a
11	SENCOR	8 oz/a		FALL	A						
11	WEEDMASTER	1.5 pt/a		FALL	A						
11	ROUNDUP POWERMAX	32 oz/a		FALL	A						
11	N-PAK AMS	2.5 % v/v		FALL	A						
11	Sharpen	1 oz/a		AT PL	B						
11	MSO	1 % v/v		AT PL	B						
11	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C						
11	Firstrate	0.3 oz/a		28 DAPL	C						
11	N-PAK AMS	2.5 % v/v		28 DAPL	C						
11	ROUNDUP POWERMAX	32 oz/a		21 DAC	D						
11	N-PAK AMS	2.5 % v/v		21 DAC	D						
12	COMMAND 3ME	16 oz/a		FALL	A	100 a	100 a	93 a	9 a	100 a	100 a
12	SENCOR	5.3 oz/a		FALL	A						
12	WEEDMASTER	1.5 pt/a		FALL	A						
12	ROUNDUP POWERMAX	32 oz/a		FALL	A						
12	N-PAK AMS	2.5 % v/v		FALL	A						
12	Sharpen	1 oz/a		AT PL	B						
12	MSO	1 % v/v		AT PL	B						
12	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C						
12	Firstrate	0.3 oz/a		28 DAPL	C						
12	N-PAK AMS	2.5 % v/v		28 DAPL	C						
12	ROUNDUP POWERMAX	32 oz/a		21 DAC	D						
12	N-PAK AMS	2.5 % v/v		21 DAC	D						
LSD (P=.05)						19.4t	20.1	25.4	33.3t	18.4	16.9
Standard Deviation						11.4t	11.9	15.0	19.6t	10.9	10.0
CV						15.16	14.37	18.75	104.22	12.54	11.39
Bartlett's X2						7.248	3.845	2.257	2.666	2.517	4.36
P(Bartlett's X2)						0.123	0.427	0.521	0.976	0.472	0.225
Skewness						-2.0078*	-1.8585*	-1.4472*	0.4956	-2.3736*	-2.5146*
Kurtosis						3.1083*	2.5774*	0.6413	-1.2149	4.6393*	5.2889*
Replicate F						3.690	4.793	1.148	1.301	3.667	2.099
Replicate Prob(F)						0.0415	0.0187	0.3355	0.2934	0.0422	0.1464
Treatment F						15.214	17.907	14.195	1.352	20.564	24.618
Treatment Prob(F)						0.0001	0.0001	0.0001	0.2656	0.0001	0.0001

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Pest Code	CAPBP		RANAB		AMBTR		SENGL		STEME		AMBTR	
Crop Code												
Rating Date	May-7-201		May-7-2013		May-7-201		May-7-201		May-21-201		May-21-2013	
Rating Type	3		3		3		3		3		3	
Rating Unit	CONTRO		CONTRO		CONTRO		CONTRO		CONTRO		CONTRO	
Days After First/Last Applic.	% 179 179		% 179 179		% 179 179		% 179 179		% 193 14		% 193 14	
Trt-Eval Interval	0 DA-A		0 DA-A		0 DA-A		0 DA-A		14 DA-A		14 DA-A	
Plant-Eval Interval	1 DP-1		1 DP-1		1 DP-1		1 DP-1		15 DP-1		15 DP-1	
Days After Emergence	-10 DE-1		-10 DE-1		-10 DE-1		-10 DE-1		4 DE-1		4 DE-1	

Trt Treatment No. Name	Other Rate	Other Rate Unit	Growth Stage	Appl Code	7	8	9	10	11	12
1 UNTREATED					0 b	0 d	0 a	0 c	0 b	0 c
1 ROUNDUP POWERMAX	32 oz/a		28 DAPL C							
1 N-PAK AMS	2.5 % v/v		28 DAPL C							
1 ROUNDUP POWERMAX	32 oz/a		21 DAC D							
1 N-PAK AMS	2.5 % v/v		21 DAC D							
2 AUTHORITY XL	4 oz/a		FALL A		100 a	93 a	51 a	80 b	87 a	70 ab
2 WEEDMASTER	1.5 pt/a		FALL A							
2 ROUNDUP POWERMAX	32 oz/a		FALL A							
2 N-PAK AMS	2.5 % v/v		FALL A							
2 Sharpen	1 oz/a		AT PL B							
2 MSO	1 % v/v		AT PL B							
2 ROUNDUP POWERMAX	32 oz/a		28 DAPL C							
2 Firstrate	0.3 oz/a		28 DAPL C							
2 N-PAK AMS	2.5 % v/v		28 DAPL C							
2 ROUNDUP POWERMAX	32 oz/a		21 DAC D							
2 N-PAK AMS	2.5 % v/v		21 DAC D							
3 AUTHORITY MTZ	14 oz/a		FALL A		100 a	50 bc	19 a	100 a	93 a	70 ab
3 WEEDMASTER	1.5 pt/a		FALL A							
3 ROUNDUP POWERMAX	32 oz/a		FALL A							
3 N-PAK AMS	2.5 % v/v		FALL A							
3 Sharpen	1 oz/a		AT PL B							
3 MSO	1 % v/v		AT PL B							
3 Roundup PowerMax	32 oz/a		28 DAPL C							
3 Firstrate	0.3 oz/a		28 DAPL C							
3 N-PAK AMS	2.5 % v/v		28 DAPL C							
3 ROUNDUP POWERMAX	32 oz/a		21 DAC D							
3 N-PAK AMS	2.5 % v/v		21 DAC D							
4 COMMAND 3ME	2.33 pt/a		FALL A		100 a	33 c	4 a		100 a	57 ab
4 WEEDMASTER	1.5 pt/a		FALL A							
4 ROUNDUP POWERMAX	32 oz/a		FALL A							
4 N-PAK AMS	2.5 % v/v		FALL A							
4 Sharpen	1 oz/a		AT PL B							
4 MSO	1 % v/v		AT PL B							
4 Roundup PowerMax	39.2 oz/a		28 DAPL C							
4 Firstrate	0.3 oz/a		28 DAPL C							
4 N-PAK AMS	2.5 % v/v		28 DAPL C							
4 ROUNDUP POWERMAX	32 oz/a		21 DAC D							
4 N-PAK AMS	2.5 % v/v		21 DAC D							

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Pest Code	CAPBP	RANAB	AMBTR	SENGL	STEME	AMBTR
Crop Code						
Rating Date	May-7-201	May-7-2013	May-7-201	May-7-201	May-21-201	May-21-2013
Rating Type	3		3	3	3	
Rating Unit	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Days After First/Last Applic.	%	%	%	%	%	%
Trt-Eval Interval	179 179	179 179	179 179	179 179	193 14	193 14
Plant-Eval Interval	0 DA-A	0 DA-A	0 DA-A	0 DA-A	14 DA-A	14 DA-A
Days After Emergence	1 DP-1	1 DP-1	1 DP-1	1 DP-1	15 DP-1	15 DP-1
	-10 DE-1	-10 DE-1	-10 DE-1	-10 DE-1	4 DE-1	4 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Growth Stage	Appl Code	7	8	9	10	11	12
5	BROADAXE	25 oz/a		FALL	A	80 a	73 ab	4 a		77 a	57 ab
5	WEEDMASTER	1.5 pt/a		FALL	A						
5	ROUNDUP POWERMAX	32 oz/a		FALL	A						
5	N-PAK AMS	2.5 % v/v		FALL	A						
5	Sharpen	1 oz/a		AT PL	B						
5	MSO	1 % v/v		AT PL	B						
5	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C						
5	Firstrate	0.3 oz/a		28 DAPL	C						
5	N-PAK AMS	2.5 % v/v		28 DAPL	C						
5	ROUNDUP POWERMAX	32 oz/a		21 DAC	D						
5	N-PAK AMS	2.5 % v/v		21 DAC	D						
6	F9016-2	8 oz/a		FALL	A	97 a	93 a	43 a		80 a	67 ab
6	WEEDMASTER	1.5 pt/a		FALL	A						
6	ROUNDUP POWERMAX	32 oz/a		FALL	A						
6	N-PAK AMS	2.5 % v/v		FALL	A						
6	Sharpen	1 oz/a		AT PL	B						
6	MSO	1 % v/v		AT PL	B						
6	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C						
6	Firstrate	0.3 oz/a		28 DAPL	C						
6	N-PAK AMS	2.5 % v/v		28 DAPL	C						
6	ROUNDUP POWERMAX	32 oz/a		21 DAC	D						
6	N-PAK AMS	2.5 % v/v		21 DAC	D						
7	ANTHEM	8 oz/a		FALL	A	67 a	93 a	39 a	100 a	70 a	87 a
7	WEEDMASTER	1.5 pt/a		FALL	A						
7	ROUNDUP POWERMAX	32 oz/a		FALL	A						
7	N-PAK AMS	2.5 % v/v		FALL	A						
7	Sharpen	1 oz/a		AT PL	B						
7	MSO	1 % v/v		AT PL	B						
7	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C						
7	Firstrate	0.3 oz/a		28 DAPL	C						
7	N-PAK AMS	2.5 % v/v		28 DAPL	C						
7	ROUNDUP POWERMAX	32 oz/a		21 DAC	D						
7	N-PAK AMS	2.5 % v/v		21 DAC	D						
8	COMMAND 3ME	32 oz/a		FALL	A	100 a	100 a	8 a	100 a	100 a	70 ab
8	SENCOR	8 oz/a		FALL	A						
8	WEEDMASTER	1.5 pt/a		FALL	A						
8	ROUNDUP POWERMAX	32 oz/a		FALL	A						
8	N-PAK AMS	2.5 % v/v		FALL	A						
8	Sharpen	1 oz/a		AT PL	B						
8	MSO	1 % v/v		AT PL	B						
8	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C						
8	Firstrate	0.3 oz/a		28 DAPL	C						
8	N-PAK AMS	2.5 % v/v		28 DAPL	C						
8	ROUNDUP POWERMAX	32 oz/a		21 DAC	D						
8	N-PAK AMS	2.5 % v/v		21 DAC	D						
9	COMMAND 3ME	16 oz/a		FALL	A	100 a	93 a	7 a	100 a	93 a	63 ab
9	SENCOR	8 oz/a		FALL	A						
9	WEEDMASTER	1.5 pt/a		FALL	A						
9	ROUNDUP POWERMAX	32 oz/a		FALL	A						
9	N-PAK AMS	2.5 % v/v		FALL	A						
9	Sharpen	1 oz/a		AT PL	B						
9	MSO	1 % v/v		AT PL	B						
9	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C						
9	Firstrate	0.3 oz/a		28 DAPL	C						
9	N-PAK AMS	2.5 % v/v		28 DAPL	C						
9	ROUNDUP POWERMAX	32 oz/a		21 DAC	D						
9	N-PAK AMS	2.5 % v/v		21 DAC	D						

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Pest Code	CAPBP	RANAB	AMBTR	SENGL	STEME	AMBTR
Crop Code						
Rating Date	May-7-201	May-7-2013	May-7-201	May-7-201	May-21-201	May-21-2013
Rating Type	3		3	3	3	
Rating Unit	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Days After First/Last Applic.	%	%	%	%	%	%
Trt-Eval Interval	179 179	179 179	179 179	179 179	193 14	193 14
Plant-Eval Interval	0 DA-A	0 DA-A	0 DA-A	0 DA-A	14 DA-A	14 DA-A
Days After Emergence	1 DP-1	1 DP-1	1 DP-1	1 DP-1	15 DP-1	15 DP-1
	-10 DE-1	-10 DE-1	-10 DE-1	-10 DE-1	4 DE-1	4 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Growth Stage	Appl Code	7	8	9	10	11	12
10	COMMAND 3ME	10.6	oz/a	FALL	A	100 a	83 a	19 a	100 a	100 a	57 ab
10	SENCOR	8	oz/a	FALL	A						
10	WEEDMASTER	1.5	pt/a	FALL	A						
10	ROUNDUP POWERMAX	32	oz/a	FALL	A						
10	N-PAK AMS	2.5	% v/v	FALL	A						
10	Sharpen	1	oz/a	AT PL	B						
10	MSO	1	% v/v	AT PL	B						
10	ROUNDUP POWERMAX	32	oz/a	28 DAPL	C						
10	Firstrate	0.3	oz/a	28 DAPL	C						
10	N-PAK AMS	2.5	% v/v	28 DAPL	C						
10	ROUNDUP POWERMAX	32	oz/a	21 DAC	D						
10	N-PAK AMS	2.5	% v/v	21 DAC	D						
11	COMMAND 3ME	8	oz/a	FALL	A	100 a	38 c	4 a	100 a	100 a	53 b
11	SENCOR	8	oz/a	FALL	A						
11	WEEDMASTER	1.5	pt/a	FALL	A						
11	ROUNDUP POWERMAX	32	oz/a	FALL	A						
11	N-PAK AMS	2.5	% v/v	FALL	A						
11	Sharpen	1	oz/a	AT PL	B						
11	MSO	1	% v/v	AT PL	B						
11	ROUNDUP POWERMAX	32	oz/a	28 DAPL	C						
11	Firstrate	0.3	oz/a	28 DAPL	C						
11	N-PAK AMS	2.5	% v/v	28 DAPL	C						
11	ROUNDUP POWERMAX	32	oz/a	21 DAC	D						
11	N-PAK AMS	2.5	% v/v	21 DAC	D						
12	COMMAND 3ME	16	oz/a	FALL	A	100 a	63 abc	17 a	100 a	93 a	73 ab
12	SENCOR	5.3	oz/a	FALL	A						
12	WEEDMASTER	1.5	pt/a	FALL	A						
12	ROUNDUP POWERMAX	32	oz/a	FALL	A						
12	N-PAK AMS	2.5	% v/v	FALL	A						
12	Sharpen	1	oz/a	AT PL	B						
12	MSO	1	% v/v	AT PL	B						
12	ROUNDUP POWERMAX	32	oz/a	28 DAPL	C						
12	Firstrate	0.3	oz/a	28 DAPL	C						
12	N-PAK AMS	2.5	% v/v	28 DAPL	C						
12	ROUNDUP POWERMAX	32	oz/a	21 DAC	D						
12	N-PAK AMS	2.5	% v/v	21 DAC	D						
LSD (P=.05)						21.6	24.4	34.6t	0.0	26.0	19.3
Standard Deviation						12.8	13.9	20.5t	0.0	15.3	11.4
CV						14.7	20.58	92.11	0.0	18.53	18.86
Bartlett's X2						4.458	0.989	4.147	0.0	7.429	9.01
P(Bartlett's X2)						0.108	0.963	0.94	.	0.191	0.531
Skewness						-2.2536*	-0.811	0.4044	-1.6625*	-1.9932*	-1.2608*
Kurtosis						3.7891*	-0.7001	-0.986	1.0355	2.8679*	2.6602*
Replicate F						2.261	9.764	3.317	0.000	3.730	1.117
Replicate Prob(F)						0.1279	0.0022	0.0551	1.0000	0.0403	0.3451
Treatment F						15.819	15.271	1.395	0.000	9.961	10.381
Treatment Prob(F)						0.0001	0.0001	0.2430	1.0000	0.0001	0.0001

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Pest Code				SETFA	AMBTR	SETFA	AMBTR	ERICA		
Crop Code										
Rating Date				May-31-2013	May-31-2013	Jun-18-2013	Jun-18-201	Jun-18-2013		
Rating Type				CONTRO	CONTRO	CONTRO	CONTRO	CONTRO		
Rating Unit				%	%	%	%	%		
Days After First/Last Applic.				203 24	203 24	221 14	221 14	221 14		
Trt-Eval Interval				24 DA-A	24 DA-A	14 DA-C	14 DA-C	14 DA-C		
Plant-Eval Interval				25 DP-1	25 DP-1	43 DP-1	43 DP-1	43 DP-1		
Days After Emergence				14 DE-1	14 DE-1	32 DE-1	32 DE-1	32 DE-1		
Trt No.	Treatment Name	Other Rate	Other Rate Unit	Growth Stage	Appl Code	13	14	15	16	17
1	UNTREATED					0 c	0 c	88 a	50 b	53 b
1	ROUNDUP POWERMAX	32 oz/a		28 DAPL C						
1	N-PAK AMS	2.5 % v/v		28 DAPL C						
1	ROUNDUP POWERMAX	32 oz/a		21 DAC D						
1	N-PAK AMS	2.5 % v/v		21 DAC D						
2	AUTHORITY XL	4 oz/a		FALL A		77 a	63 ab	89 a	87 a	100 a
2	WEEDMASTER	1.5 pt/a		FALL A						
2	ROUNDUP POWERMAX	32 oz/a		FALL A						
2	N-PAK AMS	2.5 % v/v		FALL A						
2	Sharpen	1 oz/a		AT PL B						
2	MSO	1 % v/v		AT PL B						
2	ROUNDUP POWERMAX	32 oz/a		28 DAPL C						
2	Firstrate	0.3 oz/a		28 DAPL C						
2	N-PAK AMS	2.5 % v/v		28 DAPL C						
2	ROUNDUP POWERMAX	32 oz/a		21 DAC D						
2	N-PAK AMS	2.5 % v/v		21 DAC D						
3	AUTHORITY MTZ	14 oz/a		FALL A		77 a	60 ab	92 a	88 a	100 a
3	WEEDMASTER	1.5 pt/a		FALL A						
3	ROUNDUP POWERMAX	32 oz/a		FALL A						
3	N-PAK AMS	2.5 % v/v		FALL A						
3	Sharpen	1 oz/a		AT PL B						
3	MSO	1 % v/v		AT PL B						
3	Roundup PowerMax	32 oz/a		28 DAPL C						
3	Firstrate	0.3 oz/a		28 DAPL C						
3	N-PAK AMS	2.5 % v/v		28 DAPL C						
3	ROUNDUP POWERMAX	32 oz/a		21 DAC D						
3	N-PAK AMS	2.5 % v/v		21 DAC D						
4	COMMAND 3ME	2.33 pt/a		FALL A		75 a	57 ab	88 a	75 a	90 a
4	WEEDMASTER	1.5 pt/a		FALL A						
4	ROUNDUP POWERMAX	32 oz/a		FALL A						
4	N-PAK AMS	2.5 % v/v		FALL A						
4	Sharpen	1 oz/a		AT PL B						
4	MSO	1 % v/v		AT PL B						
4	Roundup PowerMax	39.2 oz/a		28 DAPL C						
4	Firstrate	0.3 oz/a		28 DAPL C						
4	N-PAK AMS	2.5 % v/v		28 DAPL C						
4	ROUNDUP POWERMAX	32 oz/a		21 DAC D						
4	N-PAK AMS	2.5 % v/v		21 DAC D						

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Pest Code	SETFA	AMBTR	SETFA	AMBTR	ERICA
Crop Code					
Rating Date	May-31-2013	May-31-2013	Jun-18-2013	Jun-18-2013	Jun-18-2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Days After First/Last Applic.	203 24	203 24	221 14	221 14	221 14
Trt-Eval Interval	24 DA-A	24 DA-A	14 DA-C	14 DA-C	14 DA-C
Plant-Eval Interval	25 DP-1	25 DP-1	43 DP-1	43 DP-1	43 DP-1
Days After Emergence	14 DE-1	14 DE-1	32 DE-1	32 DE-1	32 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Growth Stage	Appl Code	13	14	15	16	17
5	BROADAXE	25 oz/a		FALL	A	60 ab	63 ab	83 a	73 a	100 a
5	WEEDMASTER	1.5 pt/a		FALL	A					
5	ROUNDUP POWERMAX	32 oz/a		FALL	A					
5	N-PAK AMS	2.5 % v/v		FALL	A					
5	Sharpen	1 oz/a		AT PL	B					
5	MSO	1 % v/v		AT PL	B					
5	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C					
5	Firstrate	0.3 oz/a		28 DAPL	C					
5	N-PAK AMS	2.5 % v/v		28 DAPL	C					
5	ROUNDUP POWERMAX	32 oz/a		21 DAC	D					
5	N-PAK AMS	2.5 % v/v		21 DAC	D					
6	F9016-2	8 oz/a		FALL	A	67 ab	73 ab	88 a	82 a	100 a
6	WEEDMASTER	1.5 pt/a		FALL	A					
6	ROUNDUP POWERMAX	32 oz/a		FALL	A					
6	N-PAK AMS	2.5 % v/v		FALL	A					
6	Sharpen	1 oz/a		AT PL	B					
6	MSO	1 % v/v		AT PL	B					
6	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C					
6	Firstrate	0.3 oz/a		28 DAPL	C					
6	N-PAK AMS	2.5 % v/v		28 DAPL	C					
6	ROUNDUP POWERMAX	32 oz/a		21 DAC	D					
6	N-PAK AMS	2.5 % v/v		21 DAC	D					
7	ANTHEM	8 oz/a		FALL	A	73 a	87 a	90 a	90 a	100 a
7	WEEDMASTER	1.5 pt/a		FALL	A					
7	ROUNDUP POWERMAX	32 oz/a		FALL	A					
7	N-PAK AMS	2.5 % v/v		FALL	A					
7	Sharpen	1 oz/a		AT PL	B					
7	MSO	1 % v/v		AT PL	B					
7	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C					
7	Firstrate	0.3 oz/a		28 DAPL	C					
7	N-PAK AMS	2.5 % v/v		28 DAPL	C					
7	ROUNDUP POWERMAX	32 oz/a		21 DAC	D					
7	N-PAK AMS	2.5 % v/v		21 DAC	D					
8	COMMAND 3ME	32 oz/a		FALL	A	63 ab	67 ab	87 a	83 a	100 a
8	SENCOR	8 oz/a		FALL	A					
8	WEEDMASTER	1.5 pt/a		FALL	A					
8	ROUNDUP POWERMAX	32 oz/a		FALL	A					
8	N-PAK AMS	2.5 % v/v		FALL	A					
8	Sharpen	1 oz/a		AT PL	B					
8	MSO	1 % v/v		AT PL	B					
8	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C					
8	Firstrate	0.3 oz/a		28 DAPL	C					
8	N-PAK AMS	2.5 % v/v		28 DAPL	C					
8	ROUNDUP POWERMAX	32 oz/a		21 DAC	D					
8	N-PAK AMS	2.5 % v/v		21 DAC	D					
9	COMMAND 3ME	16 oz/a		FALL	A	53 ab	57 ab	92 a	80 a	100 a
9	SENCOR	8 oz/a		FALL	A					
9	WEEDMASTER	1.5 pt/a		FALL	A					
9	ROUNDUP POWERMAX	32 oz/a		FALL	A					
9	N-PAK AMS	2.5 % v/v		FALL	A					
9	Sharpen	1 oz/a		AT PL	B					
9	MSO	1 % v/v		AT PL	B					
9	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C					
9	Firstrate	0.3 oz/a		28 DAPL	C					
9	N-PAK AMS	2.5 % v/v		28 DAPL	C					
9	ROUNDUP POWERMAX	32 oz/a		21 DAC	D					
9	N-PAK AMS	2.5 % v/v		21 DAC	D					

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Pest Code	SETFA	AMBTR	SETFA	AMBTR	ERICA
Crop Code					
Rating Date	May-31-2013	May-31-2013	Jun-18-2013	Jun-18-2013	Jun-18-2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%
Days After First/Last Applic.	203 24	203 24	221 14	221 14	221 14
Trt-Eval Interval	24 DA-A	24 DA-A	14 DA-C	14 DA-C	14 DA-C
Plant-Eval Interval	25 DP-1	25 DP-1	43 DP-1	43 DP-1	43 DP-1
Days After Emergence	14 DE-1	14 DE-1	32 DE-1	32 DE-1	32 DE-1

Trt No.	Treatment Name	Other Rate	Other Rate Unit	Growth Stage	Appl Code	13	14	15	16	17
10	COMMAND 3ME	10.6 oz/a		FALL	A	43 b	63 ab	82 a	73 a	93 a
10	SENCOR	8 oz/a		FALL	A					
10	WEEDMASTER	1.5 pt/a		FALL	A					
10	ROUNDUP POWERMAX	32 oz/a		FALL	A					
10	N-PAK AMS	2.5 % v/v		FALL	A					
10	Sharpen	1 oz/a		AT PL	B					
10	MSO	1 % v/v		AT PL	B					
10	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C					
10	Firstrate	0.3 oz/a		28 DAPL	C					
10	N-PAK AMS	2.5 % v/v		28 DAPL	C					
10	ROUNDUP POWERMAX	32 oz/a		21 DAC	D					
10	N-PAK AMS	2.5 % v/v		21 DAC	D					
11	COMMAND 3ME	8 oz/a		FALL	A	53 ab	50 b	83 a	77 a	100 a
11	SENCOR	8 oz/a		FALL	A					
11	WEEDMASTER	1.5 pt/a		FALL	A					
11	ROUNDUP POWERMAX	32 oz/a		FALL	A					
11	N-PAK AMS	2.5 % v/v		FALL	A					
11	Sharpen	1 oz/a		AT PL	B					
11	MSO	1 % v/v		AT PL	B					
11	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C					
11	Firstrate	0.3 oz/a		28 DAPL	C					
11	N-PAK AMS	2.5 % v/v		28 DAPL	C					
11	ROUNDUP POWERMAX	32 oz/a		21 DAC	D					
11	N-PAK AMS	2.5 % v/v		21 DAC	D					
12	COMMAND 3ME	16 oz/a		FALL	A	67 ab	73 ab	92 a	77 a	100 a
12	SENCOR	5.3 oz/a		FALL	A					
12	WEEDMASTER	1.5 pt/a		FALL	A					
12	ROUNDUP POWERMAX	32 oz/a		FALL	A					
12	N-PAK AMS	2.5 % v/v		FALL	A					
12	Sharpen	1 oz/a		AT PL	B					
12	MSO	1 % v/v		AT PL	B					
12	ROUNDUP POWERMAX	32 oz/a		28 DAPL	C					
12	Firstrate	0.3 oz/a		28 DAPL	C					
12	N-PAK AMS	2.5 % v/v		28 DAPL	C					
12	ROUNDUP POWERMAX	32 oz/a		21 DAC	D					
12	N-PAK AMS	2.5 % v/v		21 DAC	D					
LSD (P=.05)						17.4	20.4	12.8	16.2	12.7
Standard Deviation						10.3	12.0	7.6	9.6	7.5
CV						17.44	20.27	8.62	12.29	7.94
Bartlett's X2						1.936	7.568	12.04	3.786	0.312
P(Bartlett's X2)						0.992	0.578	0.361	0.956	0.855
Skewness						-1.3258*	-1.0584*	-0.3316	-0.6916	-2.8355*
Kurtosis						1.8964*	2.2429*	-0.8506	0.0537	7.4816*
Replicate F						3.859	2.085	7.994	0.091	0.786
Replicate Prob(F)						0.0366	0.1482	0.0025	0.9134	0.4682
Treatment F						12.900	9.134	0.739	3.605	9.585
Treatment Prob(F)						0.0001	0.0001	0.6920	0.0051	0.0001

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Fall Burndown Plus Residual FMC

Trial ID: 13FALLSOY2 Location: Trial Year: 2013
Protocol ID: 13FALLSOY2 Investigator: Dr. Mark M. Loux
Project ID: Study Director:
Sponsor Contact: Joe Reed, FMC

Pest Code

LAMPU, Lamium purpureum, = US
STEME, Stellaria media, = US
RANAB, Ranunculus abortivus, = US
AMBTR, Ambrosia trifida, = US
CAPBP, Capsella bursa-pastoris, = US
SENGL, Senecio glabellus, = US
SETFA, Setaria faberi, = US
ERICA, Conyza canadensis, = US

Rating Type

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

Plant-Eval Interval

-13 DP-1 = 1 GLXMA May-6-2013
1 DP-1 = 1 GLXMA May-6-2013
15 DP-1 = 1 GLXMA May-6-2013
25 DP-1 = 1 GLXMA May-6-2013
43 DP-1 = 1 GLXMA May-6-2013