

The Ohio State University

DPX R5W13 applied as a burndown

Trial ID: 13 NTBURN
Protocol ID: 13 NTBURN
Project ID: US 117/13/01

Location: Western Branch Trial Year: 2013
Investigator: Dr. Mark M. Loux
Study Director: Bryan Reeb
Sponsor Contact: Marsha Martin, Dupont

Crop Description

Crop 1: GLXMA Glycine max
Variety: Asgrow 3533
Description: Round Up Ready

BBCH Scale: BSOY

Planting Date: Apr-27-2013
Planting Method: PLANTD planted
Planting Equipment: PP Plot Planter
Emergence Date: May-17-2013

Planting Rate, Unit: 135000 S/A
Depth, Unit: 0.75 IN
Row Spacing, Unit: 15 IN
Soil Temperature, Unit: 54 F
Soil Moisture: SLIWET slightly wet, moist
Seed Bed: FINTRA fine/trashy

Pest Description

- Pest 1 Type:** W **Code:** LAMPU Lamium purpureum
Common Name: Purple deadnettel
- Pest 2 Type:** W **Code:** STEME Stellaria media
Common Name: Common chickweed
- Pest 3 Type:** W **Code:** ERPSS Erophila sp.
Common Name: Whitlowgrass
- Pest 4 Type:** W **Code:** ERYRE Erysimum repandum
Common Name: Bushy wallflower
- Pest 5 Type:** W **Code:** CAPBP Capsella bursa-pastoris
Common Name: Shepherd's purse
- Pest 6 Type:** W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed
- Pest 7 Type:** W **Code:** SETFA Setaria faberi
Common Name: Giant foxtail
- Pest 8 Type:** W **Code:** VERAR Veronica arvensis
Common Name: Corn speedwell
- Pest 9 Type:** W **Code:** ERICA Conyza canadensis
Common Name: Canada horseweed
- Pest10 Type:** W **Code:** TAROF Taraxacum officinale
Common Name: Common dandelion
- Pest11 Type:** W **Code:** ERPSS Erophila sp.
Common Name: Whitlowgrass

Site and Design

Treated Plot Width: 6.67 FT
Treated Plot Length: 30 FT
Treated Plot Area: 200.1 FT2
Replications: 3

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: F-9 West
% OM: 2
pH: 6.2
CEC: 9.7
Texture: SICL silty clay loam
Soil Name: Kokomo
Fert. Level: G good
Soil Drainage: G good

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	Application Description			
	A	B	C	D
Application Date:	Apr-3-2013	Apr-22-2013	Apr-27-2013	May-29-2013
Appl. Start Time:	12:00 pm	1:30 PM	12:15 PM	8:00 PM
Appl. Stop Time:	12:30 PM	2:00 PM	12:50 PM	8:30 AM
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	30 EPP	7 EPP	ATPL	POST
Application Placement:	BROSOI	BROSOI	BROSOI	BROFOL
Applied By:	Reeb	REEB	REEB	DOBBELS
Air Temperature, Unit:	41.1 F	62 F	65 F	79 F
% Relative Humidity:	29	49	42	51
Wind Velocity, Unit:	3.6 MPH	4 MPH	6.5 MPH	7 MPH
Wind Direction:	NW	E	E	SW
Dew Presence (Y/N):	N no	N no	N no	N no
Soil Temperature, Unit:	39 F	51 F	54 F	80 F
Soil Moisture:	GOOD	MOIST	MOIST	DRY
% Cloud Cover:	10	0	50	33
Next Moisture Occurred On:	Apr-10-2013	Apr-24-2013	Apr-28-2013	May-31-2013

	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
Stage Majority, Percent:				11 100
Height, Unit:				3 IN
Height Minimum, Maximum:				2 3

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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:	19	100	65	100	65	100		
Diameter, Unit:	1.5	IN	3	IN	3	IN		
Height, Unit:	1.5	IN	4	IN	4.5	IN		
Height Minimum, Maximum:	0.5	1.5	3	4	3	5		
Density, Unit:	16	M2						
Pest 2 Code, Type, Scale:	STEME	W	STEME	W	STEME	W	STEME	W
Stage Majority, Percent:	19	100	65	100	65	100		
Diameter, Unit:	2.5	IN	7	IN	9	IN		
Height, Unit:	1	IN	1	IN	1.5	IN		
Height Minimum, Maximum:	0.5	1	0.5	1	1	2		
Density, Unit:	6.6	M2						
Pest 3 Code, Type, Scale:	ERPSS	W	ERPSS	W	ERPSS	W	ERPSS	W
Stage Majority, Percent:	65	100						
Diameter, Unit:	1	IN						
Height, Unit:	1	IN						
Height Minimum, Maximum:	0.5	1						
Pest 4 Code, Type, Scale:	ERYRE	W	ERYRE	W	ERYRE	W	ERYRE	W
Stage Majority, Percent:	19	100	19	100	65	100		
Diameter, Unit:	2.5	IN	6	IN	6	IN		
Height, Unit:	0.5	IN	1	IN	6	IN		
Density, Unit:	6.6	M2						
Pest 5 Code, Type, Scale:	CAPBP	W	CAPBP	W	CAPBP	W	CAPBP	W
Stage Majority, Percent:			65	100	65	100		
Diameter, Unit:			6	IN	6	IN		
Height, Unit:			12	IN	12	IN		
Height Minimum, Maximum:			10	12	9	12		
Pest 6 Code, Type, Scale:	AMBTR	W	AMBTR	W	AMBTR	W	AMBTR	W
Stage Majority, Percent:			10D	100	12	100	16	100
Height, Unit:			1	IN	2	IN	3	IN
Height Minimum, Maximum:			0.5	1	1	2	2	4
Density, Unit:	2.6	M2						
Pest 7 Code, Type, Scale:	SETFA	W	SETFA	W	SETFA	W	SETFA	W
Stage Majority, Percent:							14	100
Height, Unit:							2	IN
Height Minimum, Maximum:							2	4
Density, Unit:	30.5	M2						
Pest 8 Code, Type, Scale:	VERAR	W	VERAR	W	VERAR	W	VERAR	W
Density, Unit:	6.6	M2						
Pest 9 Code, Type, Scale:	ERICA	W	ERICA	W	ERICA	W	ERICA	W
Density, Unit:	1.3	M2						
Pest10 Code, Type, Scale:	TAROF	W	TAROF	W	TAROF	W	TAROF	W
Density, Unit:	1.3	M2						
Pest11 Code, Type, Scale:	ERPSS	W	ERPSS	W	ERPSS	W	ERPSS	W
Density, Unit:	2.6	M2						

Application Equipment

	A		B		C		D	
Appl. Equipment:	Backpack	Backpack	Backpack	Backpack	Backpack	Backpack	TRACTOR	
Equipment Type:	SPRBAC	SPRBAC	SPRBAC	SPRBAC	SPRBAC	SPTRMO		
Operation Pressure, Unit:	44	PSI	48	PSI	48	PSI	33	PSI
Nozzle Type:	AIXR	AIXR	AIXR	AIXR	AIXR	AIXR		
Nozzle Size:	110015	110015	110015	110015	110015	110015		
Nozzle Spacing, Unit:	18	IN	18	IN	18	IN	20	IN
Boom Length, Unit:	6	FT	6	FT	6	FT	10	FT
Boom Height, Unit:	18	IN	18	IN	18	IN	18	IN
Ground Speed, Unit:	3	MPH	3	MPH	3	MPH	6	MPH
Carrier:	WATER	WATER	WATER	WATER	WATER	WATER		
Spray Volume, Unit:	15	gal/ac	15	gal/ac	15	gal/ac	15	gal/ac
Mix Size, Unit:	1	Liters	1	Liters	1	Liters	10	gallons
Propellant:	COMCO2	COMCO2	COMCO2	COMCO2	COMCO2	PUMROL		

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Pest Code	STEME	LAMPU	CAPBP	ERYRE	AMBTR	LAMPU	STEME				
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA				
Rating Date	Apr-26-2013	Apr-26-2013	Apr-26-2013	Apr-26-2013	Apr-26-2013	May-9-2013	May-9-2013				
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO				
Rating Unit	%	%	%	%	%	%	%				
Days After First/Last Applic.	23 4	23 4	23 4	23 4	23 4	36 12	36 12				
Plant-Eval Interval	-1 DP-1	-1 DP-1	-1 DP-1	-1 DP-1	-1 DP-1	12 DP-1	12 DP-1				
Days After Emergence	-21 DE-1	-21 DE-1	-21 DE-1	-21 DE-1	-21 DE-1	-8 DE-1	-8 DE-1				
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	1	2	3	4	5	6	7
1	Canopy EX @ 1.5oz				100	92	100	100	67	100	100
	1 Classic	0.34 oz ai/a	A								
	1 Express	0.10 oz ai/a	A								
	1 Abundit Extra	0.75 lb ae/a	A								
	1 2,4-D Ester	0.5 lb ai/a	A								
	1 N-pak ams	3.0 % v/v	A								
	1 Envive @ 3.5oz										
	1 Classic	0.32 oz ai/a	C								
	1 Thifensulfuron	0.10 oz/a	C								
	1 Valor SX	0.064 lb ai/a	C								
	1 N-pak ams	3.0 % v/v	C								
	1 COC	1 % v/v	C								
	1 Abundit Extra	0.75 lb ae/a	D								
	1 N-pak ams	3.0 % v/v	D								
2	Canopy EX @ 1.5oz				96	99	100	99	85	-99999	-99999
	2 Classic	0.34 oz ai/a	A								
	2 Express	0.10 oz ai/a	A								
	2 Abundit Extra	0.75 lb ae/a	A								
	2 2,4-D Ester	0.5 lb ai/a	A								
	2 N-pak ams	3.0 % v/v	A								
	2 Canopy	0.188 lb ai/a	C								
	2 Cinch	0.955 lb ai/a	C								
	2 N-pak ams	3.0 % v/v	C								
	2 COC	1 % v/v	C								
	2 Abundit Extra	0.75 lb ae/a	D								
	2 N-pak ams	3.0 % v/v	D								
3	Canopy EX @ 1.5oz				100	100	100	100	43	100	100
	3 Classic	0.34 oz ai/a	A								
	3 Express	0.10 oz ai/a	A								
	3 Abundit Extra	0.75 lb ae/a	A								
	3 2,4-D Ester	0.5 lb ai/a	A								
	3 N-pak ams	3.0 % v/v	A								
	3 DPX R5W13 @ 8oz										
	3 Classic	0.3125 oz ai/a	C								
	3 Sencor DF	0.223 lb ai/a	C								
	3 Valor SX	0.064 lb ai/a	C								
	3 N-pak ams	3.0 % v/v	C								
	3 COC	1 % v/v	C								
	3 Abundit Extra	0.75 lb ae/a	D								
	3 N-pak ams	3.0 % v/v	D								
4	Envive @ 3.5oz				27	40	37	29		91	100
	4 Classic	0.32 oz ai/a	B								
	4 Thifensulfuron	0.10 oz/a	B								
	4 Valor SX	0.064 lb ai/a	B								
	4 Abundit Extra	0.75 lb ae/a	B								
	4 2,4-D Ester	0.5 lb ai/a	B								
	4 N-pak ams	3.0 % v/v	B								
	4 Abundit Extra	0.75 lb ae/a	D								
	4 N-pak ams	3.0 % v/v	D								

t=Mean descriptions are reported in transformed data units, and are not de-transformed.
 Missing data estimates are included in columns: Yates=1,2,3,4,5,6,7

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Pest Code	STEME	LAMPU	CAPBP	ERYRE	AMBTR	LAMPU	STEME
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
Rating Date	Apr-26-2013	Apr-26-2013	Apr-26-2013	Apr-26-2013	Apr-26-2013	May-9-2013	May-9-2013
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO
Rating Unit	%	%	%	%	%	%	%
Days After First/Last Applic.	23 4	23 4	23 4	23 4	23 4	36 12	36 12
Plant-Eval Interval	-1 DP-1	-1 DP-1	-1 DP-1	-1 DP-1	-1 DP-1	12 DP-1	12 DP-1
Days After Emergence	-21 DE-1	-21 DE-1	-21 DE-1	-21 DE-1	-21 DE-1	-8 DE-1	-8 DE-1

Trt Treatment	Rate	Unit	Appl Code	1	2	3	4	5	6	7
10 Canopy EX @ 2.2oz				7	3	10	10		50	95
10 Classic	0.0308 lb ai/a	B								
10 Express	0.0094 lb ai/a	B								
10 Abundit Extra	0.75 lb ae/a	B								
10 2,4-D Ester	0.5 lb ai/a	B								
10 N-pak ams	3.0 % v/v	B								
10 Abundit Extra	0.75 lb ae/a	D								
10 N-pak ams	3.0 % v/v	D								
LSD (P=.05)				14.5	12.9	13.2	11.1	51.2	18.7t	13.4t
Standard Deviation				8.4	7.5	7.6	6.3	19.7	10.9t	7.8t
CV				18.73	15.33	16.15	13.51	30.34	13.42	9.14
Bartlett's X2				5.355	2.256	2.627	1.444	0.624	5.704	0.734
P(Bartlett's X2)				0.499	0.944	0.854	0.836	0.732	0.336	0.947
Skewness				0.5747	0.4906	0.7847	0.6783	0.3869	-1.7189*	-1.2118*
Kurtosis				-1.2736	-1.0906	-1.103	-1.3506	-0.6398	1.9594*	-0.0694
Replicate F				6.114	0.869	0.060	1.569	0.407	0.505	0.302
Replicate Prob(F)				0.0100	0.4372	0.9416	0.2427	0.6975	0.6124	0.7430
Treatment F				65.484	67.238	71.376	103.167	3.364	5.004	1.833
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.1712	0.0022	0.1349

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Pest Code	CAPBP	ERYRE	ERICA	LAMPU	STEME	VERAR	ERICA			
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA			
Rating Date	May-9-2013	May-9-2013	May-9-2013	May-23-2013	May-23-2013	May-23-2013	May-23-2013			
Rating Type	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO	CONTRO			
Rating Unit	%	%	%	%	%	%	%			
Days After First/Last Applic.	36 12	36 12	36 12	50 26	50 26	50 26	50 26			
Plant-Eval Interval	12 DP-1	12 DP-1	12 DP-1	26 DP-1	26 DP-1	26 DP-1	26 DP-1			
Days After Emergence	-8 DE-1	-8 DE-1	-8 DE-1	6 DE-1	6 DE-1	6 DE-1	6 DE-1			
Trt Treatment	Rate	Unit	Appl Code	8	9	10	11	12	13	14
10 Canopy EX @ 2.2oz				100	97	100	100	100	99	100
10 Classic	0.0308 lb ai/a	B								
10 Express	0.0094 lb ai/a	B								
10 Abundit Extra	0.75 lb ae/a	B								
10 2,4-D Ester	0.5 lb ai/a	B								
10 N-pak ams	3.0 % v/v	B								
10 Abundit Extra	0.75 lb ae/a	D								
10 N-pak ams	3.0 % v/v	D								
LSD (P=.05)	4.7	3.1	19.3t	8.1	11.4t	15.5t	20.3t			
Standard Deviation	2.7	1.8	11.3t	4.7	6.6t	9.0t	11.8t			
CV	2.75	1.83	13.29	4.75	7.49	10.31	14.55			
Bartlett's X2	0.0	0.0	0.874	3.729	1.529	4.123	3.42			
P(Bartlett's X2)	.	.	0.972	0.053	0.216	0.127	0.636			
Skewness	-5.4772*	-5.4772*	-1.7446*	-5.1801*	-4.6068*	-4.4718*	-1.5445*			
Kurtosis	30.0*	30.0*	1.5823	27.4798*	22.0582*	21.4031*	1.4575			
Replicate F	1.000	1.000	0.725	0.791	0.638	0.624	1.259			
Replicate Prob(F)	0.3874	0.3874	0.4981	0.4686	0.5398	0.5469	0.3077			
Treatment F	1.000	1.000	0.593	0.937	0.891	0.842	1.910			
Treatment Prob(F)	0.4742	0.4742	0.7868	0.5179	0.5514	0.5889	0.1160			

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Pest Code	SETFA	AMBTR	SETFA	AMBTR	ERICA					
Crop Code	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA					
Rating Date	May-23-2013	May-23-2013	Jun-7-2013	Jun-7-2013	Jun-7-2013					
Rating Type	CONTRO	CONTRO	PHYGEN	CONTRO	CONTRO					
Rating Unit	%	%	%	%	%					
Days After First/Last Applic.	50 26	50 26	65 9	65 9	65 9					
Plant-Eval Interval	26 DP-1	26 DP-1	41 DP-1	41 DP-1	41 DP-1					
Days After Emergence	6 DE-1	6 DE-1	21 DE-1	21 DE-1	21 DE-1					
Trt Treatment	Rate	Unit	Appl Code	15	16	17	18	19	20	21
10 Canopy EX @ 2.2oz				40	58	1	98	93	78	
10 Classic	0.0308 lb ai/a	B								
10 Express	0.0094 lb ai/a	B								
10 Abundit Extra	0.75 lb ae/a	B								
10 2,4-D Ester	0.5 lb ai/a	B								
10 N-pak ams	3.0 % v/v	B								
10 Abundit Extra	0.75 lb ae/a	D								
10 N-pak ams	3.0 % v/v	D								
LSD (P=.05)				14.8	31.0	4.1t	3.7	7.8	22.4t	.
Standard Deviation				8.6	18.1	2.4t	2.2	4.6	13.1t	.
CV				15.11	31.69	69.3	2.45	5.34	19.67	.
Bartlett's X2				3.371	7.753	1.043	1.081	5.095	3.939	.
P(Bartlett's X2)				0.849	0.559	0.998	0.897	0.747	0.787	.
Skewness				0.4105	0.395	0.5485	-2.7746*	-2.6773*	-1.4546*	.
Kurtosis				-0.5767	-0.0949	-1.5167	6.1816*	5.8351*	1.656	.
Replicate F				1.449	0.858	27.688	3.353	3.747	0.651	
Replicate Prob(F)				0.2608	0.4406	0.0001	0.0578	0.0436	0.5332	
Treatment F				2.742	1.174	1.807	620.412	130.245	11.599	
Treatment Prob(F)				0.0328	0.3673	0.1363	0.0001	0.0001	0.0001	

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Pest Code

STEME, *Stellaria media*, = US
LAMPU, *Lamium purpureum*, = US
CAPBP, *Capsella bursa-pastoris*, = US
ERYRE, *Erysimum repandum*, = US
AMBTR, *Ambrosia trifida*, = US
ERICA, *Conyza canadensis*, = US
VERAR, *Veronica arvensis*, = US
SETFA, *Setaria faberi*, = US

Crop Code

GLXMA, BSOY, *Glycine max*, = US

Rating Type

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

Rating Unit

% = percent

Plant-Eval Interval

-1 DP-1 = 1 GLXMA Apr-27-2013
12 DP-1 = 1 GLXMA Apr-27-2013
26 DP-1 = 1 GLXMA Apr-27-2013
41 DP-1 = 1 GLXMA Apr-27-2013