

GLYPHOSATE RESISTANT HORSEWEED CONTROL III

Trial ID: 04GRHW3 Study Dir.: Anthony F. Dobbels  
Location: WESTERN BRANCH F-10 Investigator: Dr. Mark M. Loux

GENERAL TRIAL INFORMATION

Study Director: Anthony F. Dobbels  
Investigator: Dr. Mark M. Loux

Conducted Under GLP (Y/N): N Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1. ERICA	Horseweed	Conyza canadensis
2. TAROF	Common dandelion	Taraxacum officinale
3. SENGL	Groundsel, cressleaf	Senecio glabellus
4. STEME	Common chickweed	Stellaria media
5. AMBTR	Giant ragweed	Ambrosia trifida

Crop 1: GLXMA SOYBEAN Variety: DEKALBDBK 38-52  
Planting Date: 4-29-04 Planting Method: JOHN DEERE 7200  
Rate: 155000 SEED/A Depth: 0.5 IN  
Row Spacing: 30 IN Seed Bed: NO-TILL

SITE AND DESIGN

Plot Width, Unit: 10 FT Plot Length, Unit: 30 FT Reps: 3  
Tillage Type: NO-TILL Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% OM: 4.3 Texture: silty clay loam  
pH: 5.9 Soil Name: Kokomo  
CEC: 21

APPLICATION DESCRIPTION

A  
Application Date: 4-16-04  
Time of Day: 11:00 A.M  
Application Method: SPRAY  
Application Timing: SPRING  
Applic. Placement: BROADCAST  
Air Temp., Unit: 66 F  
% Relative Humidity: 44  
Wind Velocity, Unit: 10 S  
Soil Temp., Unit: 50 F  
Soil Moisture: DRY/DRY  
% Cloud Cover: 15

CROP STAGE AT EACH APPLICATION

A  
Crop 1 Code, Stage: GLXMA

WEED STAGE AT EACH APPLICATION

A  
Weed 1 Code, Stage: ERICA 1-3"  
Stage Scale: 10 LVS  
Density, Unit: 41.6 M2  
Weed 2 Code, Stage: TAROF 4-6"  
Stage Scale: >12 LVS  
Density, Unit: 6 M2  
Weed 3 Code, Stage: SENGL 3"  
Stage Scale: >12 LVS  
Density, Unit: .3 M2  
Weed 4 Code, Stage: STEME 12" ROS  
Stage Scale: >12 LVS  
Density, Unit: 19.3 M2  
Weed 5 Code, Stage: AMBTR 1"  
Stage Scale: COTYLEDON  
Density, Unit: 2 M2

APPLICATION EQUIPMENT

A  
Appl. Equipment: BACKPACK  
Operating Pressure: 50  
Nozzle Type: DG  
Nozzle Size: 11002  
Nozzle Spacing, Unit: 18 IN  
Ground Speed, Unit: 3 MPH  
Carrier: WATER  
Spray Volume, Unit: 20 GPA  
Propellant: CO2

(04GRHW3)

Ohio State University  
Horticulture and Crop Science

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Location: WESTERN BRANCH F-10 Investigator: Dr. Mark M. Loux

					ERICA	STEME	TAROF	AMBTR	ERICA	STEME	TAROF	AMBTR	
					CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	
					PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	
					4-29-04	4-29-04	4-29-04	4-29-04	5-13-04	5-13-04	5-13-04	5-13-04	
					13 DA-A	13 DA-A	13 DA-A	13 DA-A	27 DA-A	27 DA-A	27 DA-A	27 DA-A	
					0	0	0	0	0	0	0	0	
Trt	Treatment	Product	Product	Grow	Appl	1	2	3	4	5	6	7	8
No.	Name	Rate	Rate Unit	Stg	Code								
1	VALOR SX	2 oz/a		EPP	A	88	98	70	100	85	100	47	92
	1 2,4-D	1 qt/a		EPP									
	1 NIS	0.4 pt/a		EPP									
2	VALOR SX	2.5 oz/a		EPP	A	95	100	75	100	83	100	63	99
	2 2,4-D	1 qt/a		EPP									
	2 NIS	0.4 pt/a		EPP									
3	VALOR SX	2 oz/a		EPP	A	97	78	73	100	100	67	57	95
	3 FIRSTRATE	0.4 oz/a		EPP									
	3 2,4-D	1 qt/a		EPP									
	3 NIS	0.4 pt/a		EPP									
4	VALOR SX	2.5 oz/a		EPP	A	93	85	85	100	100	73	87	100
	4 FIRSTRATE	0.5 oz/a		EPP									
	4 2,4-D	1 qt/a		EPP									
	4 NIS	0.4 pt/a		EPP									
5	ROUNDUP ORIGINAL MAX	22 oz/a		EPP	A	100	100	75	100	90	98	94	88
	5 2,4-D	1 qt/a		EPP									
	5 AMS	4 qt/a		EPP									
6	ROUNDUP ORIGINAL MAX	22 oz/a		EPP	A	100	97	88	100	70	100	98	83
	6 AMS	4 qt/a		EPP									
7	ROUNDUP WEATHERMAX	22 oz/a		EPP	A	98	100	88	100	60	100	95	70
	7 STARANE	0.66 pt/a		EPP									
	7 AMS	4 qt/a		EPP									
8	UTC					0	0	0	0	0	0	0	0
LSD (P=.05)						7.8	7.3	9.1	0.0	15.7	10.2	14.7	28.2
Standard Deviation						4.4	4.2	5.2	0.0	9.0	5.8	8.4	16.1
CV						5.3	5.05	7.46	0.0	12.2	7.28	12.42	20.56
Replicate F						3.526	3.138	0.467	0.000	1.799	1.141	0.909	1.173
Replicate Prob(F)						0.0575	0.0748	0.6365	1.0000	0.2018	0.3475	0.4255	0.3381
Treatment F						176.714	203.578	93.683	0.000	39.939	108.577	48.105	12.678
Treatment Prob(F)						0.0001	0.0001	0.0001	1.0000	0.0001	0.0001	0.0001	0.0001

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Weed Code		ERICA		STEME		TAROF		AMBTR		SETFA	
Rating Data Type		CONTROL		CONTROL		CONTROL		CONTROL		CONTROL	
Rating Unit		PERCENT		PERCENT		PERCENT		PERCENT		PERCENT	
Rating Date		6-7-04		6-7-04		6-7-04		6-7-04		6-7-04	
Trt-Eval Interval		AT POST		AT POST		AT POST		AT POST		AT POST	
# Subsamples, Dec.		0		0		0		0		0	
Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	9	10	11	12	13	
1	VALOR SX	2 oz/a		EPP	A	80	93	53	47	70	
1	2,4-D	1 qt/a		EPP							
1	NIS	0.4 pt/a		EPP							
2	VALOR SX	2.5 oz/a		EPP	A	67	93	70	30	67	
2	2,4-D	1 qt/a		EPP							
2	NIS	0.4 pt/a		EPP							
3	VALOR SX	2 oz/a		EPP	A	96	37	75	67	77	
3	FIRSTRATE	0.4 oz/a		EPP							
3	2,4-D	1 qt/a		EPP							
3	NIS	0.4 pt/a		EPP							
4	VALOR SX	2.5 oz/a		EPP	A	92	57	82	70	72	
4	FIRSTRATE	0.5 oz/a		EPP							
4	2,4-D	1 qt/a		EPP							
4	NIS	0.4 pt/a		EPP							
5	ROUNDUP ORIGINAL MAX	22 oz/a		EPP	A	80	83	95	17	20	
5	2,4-D	1 qt/a		EPP							
5	AMS	4 qt/a		EPP							
6	ROUNDUP ORIGINAL MAX	22 oz/a		EPP	A	57	70	95	57	20	
6	AMS	4 qt/a		EPP							
7	ROUNDUP WEATHERMAX	22 oz/a		EPP	A	50	93	80	27	0	
7	STARANE	0.66 pt/a		EPP							
7	AMS	4 qt/a		EPP							
8	UTC					0	0	0	0	0	
LSD (P=.05)						25.4	37.7	18.8	51.8	36.5	
Standard Deviation						14.5	21.5	10.7	29.6	20.8	
CV						22.28	32.71	15.59	75.45	51.3	
Replicate F						0.613	0.117	2.285	0.749	1.230	
Replicate Prob(F)						0.5555	0.8906	0.1384	0.4908	0.3220	
Treatment F						13.524	7.266	24.907	2.135	7.849	
Treatment Prob(F)						0.0001	0.0009	0.0001	0.1076	0.0006	