

Ohio State University
Horticulture and Crop Science

WEED CONTROL IN ROUNDUP READY SOYBEAN II

Trial ID: 02RRS2 Study Dir.: Anthony F. Dobbels
Location: WESTERN BRANCH F-8 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.	SETFA FOXTAIL, GIANT	SETERIA FABERI
2.	AMBTR RAGWEED, GIANT	AMBROSIA TRIFIDA L.
3.	AMBEL RAGWEED, COMMON	AMBROSIA ELATIOR L.
4.	ABUTH VELVETLEAF	ABUTILON THEOPHRASTI MEDIK.
5.	AMARE PIGWEED, REDROOT	AMARANTHUS RETROFLEXUS L.
6.	CHEAL LAMBSQUARTERS, COMMON	CHENOPODIUM ALBUM L.
7.	POLPY SMARTWEED, PENNSYLVANIA	POLYGONUM PENNSYLVANICUM L.

Crop 1: GLXMA SOYBEAN Variety: SEED CONSULTANTS SC9341RR
 Planting Date: 05-20-02 Planting Method: KINZE 2000
 Rate: 155509 SEED/A Depth: 0.75 IN
 Row Spacing: 15 IN Seed Bed: CONVENTIONAL

SITE AND DESIGN

Plot Width, Unit: 10 FT Plot Length, Unit: 40 FT Reps: 4
 Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% OM: 4.6 Texture: silty clay loam
 pH: 5.7 Soil Name: kokomo
 CEC: 23

APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	05-23-02	06-10-02	06-17-02	07-01-02
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	EPO	POST	LPO
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	58 F	90 F	72 F	81 F
% Relative Humidity:	53	37	40	75
Wind Velocity, Unit:	8 SW	3 SW	10 W	1 SW
Soil Temp., Unit:	50 F	84 F	61 F	74 F
Soil Moisture:	DRY/MOIST	DRY/MOIST	DRY/MOIST	DRY/DRY
% Cloud Cover:	0	40	20	0

CROP STAGE AT EACH APPLICATION

	A	B	C	D
Crop 1 Code, Stage:	GLXMA	GLXMA 4"	GLXMA 6"	GLXMA 12"
Stage Scale:		1 TRI	2 TRI	8 TRI

WEED STAGE AT EACH APPLICATION

	A	B	C	D
Weed 1 Code, Stage:	SETFA	SETFA 1-2"	SETFA 4-6"	SETFA 12-20"
Stage Scale:		2 LVS	4 LVS	8 LVS
Density, Unit:	35 M2	35 M2	35 M2	35 M2
Weed 2 Code, Stage:	AMBTR	AMBTR 2-4"	AMBTR 4-12"	AMBTR 8-34"
Stage Scale:		2-6 LVS	8-12 LVS	> 12 LVS
Density, Unit:	20.5 M2	20.5 M2	20.5 M2	20.5 M2
Weed 3 Code, Stage:	AMBEL	AMBEL 1-3"	AMBEL 4"	AMBEL 12-16"
Stage Scale:		2-6 LVS	6 LVS	>12 LVS
Density, Unit:	3.5 M2	3.5 M2	3.5 M2	3.5 M2
Weed 4 Code, Stage:	ABUTH	ABUTH 1-2"	ABUTH 2"	ABUTH 8"
Stage Scale:		2 LVS	4 LVS	10 LVS
Density, Unit:	.5 M2	.5 M2	.5 M2	.5 M2
Weed 5 Code, Stage:	AMARE	AMARE 1-2"	AMARE 1-2"	AMARE 6"
Stage Scale:		2-4 LVS	6 LVS	8 LVS
Density, Unit:	18 M2	18 M2	18 M2	18 M2
Weed 6 Code, Stage:	CHEAL	CHEAL 0.5"	CHEAL 1-2"	CHEAL 4-6"
Stage Scale:		2 LVS	4-6 LVS	8 LVS
Density, Unit:	22.7 M2	22.7 M2	22.7 M2	22.7 M2
Weed 7 Code, Stage:	POLPY	POLPY 1"	POLPY 2-3"	POLPY 4"
Stage Scale:		3 LVS	3 LVS	6 LVS

APPLICATION EQUIPMENT

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

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Weed Code
Crop Code
Rating Data Type
Rating Unit
Rating Date
Trt-Eval Interval
ARM Action Codes
Subsamples, Dec.

	GLXMA	GLXMA	GLXMA
	WEIGHT	MOISTURE	YIELD
	LBS	PERCENT	BU/ACRE
	10-01-02	10-01-02	10-01-02
	HARVEST	HARVEST	HARVEST
			TY1
	0	0	1

Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	GLXMA WEIGHT	GLXMA MOISTURE	GLXMA YIELD
1	BAS 455	2.6	PT/A	PRE	A	16 ab	14 abc	46.4 ab
1	EXTREME	3	PT/A	POST	C			
1	NIS	3.2	OZ/A	POST				
1	AMS	2.4	QT/A	POST				
2	PYTHON	8	OZ/A	PRE	A	20 a	13 bc	58.0 a
2	GLYPHOMAX PLUS	2	PT/A	POST	C			
2	AMS	3.2	QT/A	POST				
3	FIRSTRATE	0.3	OZ/A	PRE	A	19 a	14 abc	55.7 a
3	GLYPHOMAX PLUS	2	PT/A	POST	C			
3	AMS	3.2	QT/A	POST				
4	BOUNDARY	1.5	PT/A	PRE	A	19 a	13 bc	54.4 a
4	TOUCHDOWN IQ	1	QT/A	POST	C			
4	AMS	4	QT/A	POST				
5	ROUNDUP ULTRA MAX	26	OZ/A	EPO	B	8 c	10 c	20.6 c
5	AMS	4	QT/A	EPO				
6	GLYPHOMAX PLUS	1.5	PT/A	POST	C	17 ab	14 bc	49.8 a
6	AMS	4	QT/A	POST				
7	GLYPHOMAX PLUS	1.5	PT/A	POST	C	13 b	21 a	34.2 b
7	AIM	0.256	OZ/A	POST	C			
7	AMS	4	QT/A	POST				
8	GLYPHOMAX PLUS	2	PT/A	POST	C	20 a	19 ab	53.1 a
8	AMS	3.2	QT/A	POST				
9	GLYPHOMAX PLUS	2	PT/A	POST	C	17 ab	13 bc	49.0 a
9	FIRSTRATE	0.3	OZ/A	POST				
9	AMS	3.2	QT/A	POST				
10	ROUNDUP ULTRA MAX	26	OZ/A	POST	C	19 a	15 abc	53.1 a
10	AMS	4	QT/A	POST				
11	ROUNDUP ULTRA MAX	26	OZ/A	POST	C	18 a	13 bc	53.7 a
11	AMPLIFY	0.3	OZ/A	POST				
11	AMS	4	QT/A	POST				
12	ROUNDUP ULTRA MAX	26	OZ/A	POST	C	19 a	12 bc	56.6 a
12	AMS	4	QT/A	POST				
12	ROUNDUP ULTRA MAX	26	OZ/A	LPO	D			
12	AMS	4	QT/A	LPO				
13	ROUNDUP ULTRA MAX	26	OZ/A	LPO	D	16 ab	12 bc	47.0 ab
13	AMS	4	QT/A	LPO				
14	UTC					0 d	0 d	0.0 d

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Weed Code			
Crop Code	GLXMA	GLXMA	GLXMA
Rating Data Type	WEIGHT	MOISTURE	YIELD
Rating Unit	LBS	PERCENT	BU/ACRE
Rating Date	10-01-02	10-01-02	10-01-02
Trt-Eval Interval	HARVEST	HARVEST	HARVEST
ARM Action Codes			TY1
# Subsamples, Dec.	0	0	1

Trt	Treatment	Product	Product	Grow	Appl
No.	Name	Rate	Rate Unit	Stg	Code

LSD (P=.05)	4.3	7.4	12.78
Standard Deviation	3.0	5.2	8.94
CV	19.01	39.11	19.82

Means followed by same letter do not significantly differ (P=.05, LSD)