

Ohio State University
Horticulture and Crop Science

POSTEMERGENCE WEED CONTROL IN GLYPHOSATE & ALS RESISTANT COMMON RAGWEED

Trial ID: 08GRALSCORWPO Study Dir.: Anthony F. Dobbels
Location: MARKEY 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. AMBEL Common ragweed *Ambrosia artemisiifolia*

Crop 1: GLXMA SOYBEAN Variety: SEED CONSULTANTS SC9336
Planting Date: May/07/2008 Planting Method: JOHN DEERE 7000
Rate: 188000 SEED/A Depth: 0.75 IN
Row Spacing: 30 IN Seed Bed: NO-TILL

SITE AND DESIGN

Plot Width, Unit: 10 FT Plot Length, Unit: 40 FT Reps: 4
Tillage Type: NO-TILL Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% Sand: 24.4 % OM: 2.0 Texture: SILT LOAM
% Silt: 62.5 pH: 7.3 Soil Name: WESTBORO-SCHAFFER
% Clay: 13.1 CEC: 10.5 Fert. Level: GOOD

APPLICATION DESCRIPTION

	A	B
Application Date:	Jun/11/2008	Jul/02/2008
Time of Day:	9:46 AM	10:00 A.M
Application Method:	SPRAY	SPRAY
Application Timing:	POST	LPO
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	77 F	74 F
% Relative Humidity:	54	58
Wind Velocity, Unit:	4 E	4 SW
Soil Temp., Unit:	69 F	66 F
Soil Moisture:	MOIST/MOI	DRY/MOIST
% Cloud Cover:	0	10

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	GLXMA V2	GLXMA V5
Stage Scale:	DESC	DESC
Height, Unit:	4 IN	6 IN

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	AMBEL 4-8"	AMBEL 1-8"
Stage Scale:	8 28 LVS	2->12 LVS
Density, Unit:	62 M2	62 M2

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	BACKPACK	BACKPACK
Operating Pressure:	53	53
Nozzle Type:	DG	DG
Nozzle Size:	11002	11002
Nozzle Spacing, Unit:	18 IN	18 IN
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	20 GPA	20 GPA
Propellant:	CO2	CO2

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Weed Code		AMBEL	AMBEL	AMBEL
Crop Code	GLXMA			
Rating Data Type	PHYTO	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date	Jun/24/2008	Jun/24/2008	Jul/08/2008	Aug/25/2008
Trt-Eval Interval	13 DA-A	13 DA-A	27 DA-A	54 DA-B
# Subsamples, Dec.	0	0	0	0

Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	1	2	3	4
1	ROUNDUP POWERMAX	42.7	oz/a	EPO	A	0 b	20 d	40 c	13 c
1	AMS	4	qt/a	EPO					
1	ROUNDUP POWERMAX	21.3	oz/a	LPO	B				
1	AMS	4	qt/a	LPO					
2	ROUNDUP POWERMAX	42.7	oz/a	EPO	A	0 b	23 d	45 c	20 c
2	FIRSTRATE	0.3	oz/a	EPO					
2	AMS	4	qt/a	EPO					
2	ROUNDUP POWERMAX	21.3	oz/a	LPO	B				
2	FIRSTRATE	0.3	oz/a	LPO					
2	AMS	4	qt/a	LPO					
3	FLEXSTAR	1.33	pt/a	EPO	A	8 ab	89 ab	71 abc	64 ab
3	SELECT MAX	9	oz/a	EPO					
3	MSO	0.8	qt/a	EPO					
3	AMS	4	qt/a	EPO					
4	FLEXSTAR	1.67	pt/a	EPO	A	8 ab	94 ab	96 a	78 a
4	SELECT MAX	9	oz/a	EPO					
4	MSO	0.8	qt/a	EPO					
4	AMS	4	qt/a	EPO					
5	FLEXSTAR	1.33	pt/a	EPO	A	8 ab	96 a	90 ab	83 a
5	ROUNDUP POWERMAX	21.3	oz/a	EPO					
5	MSO	0.8	qt/a	EPO					
5	AMS	4	qt/a	EPO					
6	FLEXSTAR	1.33	pt/a	EPO	A	10 a	95 ab	86 ab	73 ab
6	FIRSTRATE	0.3	oz/a	EPO					
6	SELECT MAX	9	oz/a	EPO					
6	MSO	0.8	qt/a	EPO					
6	AMS	4	qt/a	EPO					
7	FLEXSTAR	1.67	pt/a	EPO	A	12 a	90 ab	92 a	81 a
7	FIRSTRATE	0.3	oz/a	EPO					
7	SELECT MAX	9	oz/a	EPO					
7	MSO	0.8	qt/a	EPO					
7	AMS	4	qt/a	EPO					
8	FLEXSTAR	1	pt/a	EPO	A	8 ab	89 ab	78 ab	66 ab
8	BASAGRAN	1	pt/a	EPO					
8	SELECT MAX	9	oz/a	EPO					
8	MSO	0.8	qt/a	EPO					
8	AMS	4	qt/a	EPO					
9	FLEXSTAR	1	pt/a	EPO	A	5 ab	75 b	55 bc	35 bc
9	BASAGRAN	1	pt/a	EPO					
9	ROUNDUP POWERMAX	21.3	oz/a	EPO					
9	MSO	0.8	qt/a	EPO					
9	AMS	4	qt/a	EPO					
10	FLEXSTAR	1.33	pt/a	EPO	A	10 a	82 ab	78 ab	65 ab
10	SELECT MAX	9	oz/a	EPO					
10	MSO	0.8	qt/a	EPO					
10	AMS	4	qt/a	EPO					
10	COBRA	6	oz/a	LPO	B				
10	MSO	0.8	qt/a	LPO					
10	AMS	4	qt/a	LPO					

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						4		
11	FLEXSTAR	1.33	pt/a	EPO	A	8 ab	89 ab	89 ab
11	SELECT MAX	9	oz/a	EPO				80 a
11	MSO	0.8	qt/a	EPO				
11	AMS	4	qt/a	EPO				
11	COBRA	12	oz/a	LPO	B			
11	MSO	0.8	qt/a	LPO				
11	AMS	4	qt/a	LPO				
12	ROUNDUP POWERMAX	85	oz/a	EPO	A	0 b	40 c	56 bc
12	AMS	4	qt/a	EPO				38 bc
LSD (P=.05)						5.1	13.1	22.3
Standard Deviation						3.0	9.1	15.4
CV						46.21	12.38	21.17
Bartlett's X2						2.352	11.065	19.443
P(Bartlett's X2)						0.885	0.352	0.054
Replicate F						0.992	1.702	1.693
Replicate Prob(F)						0.3882	0.1856	0.1875
Treatment F						5.906	39.755	6.268
Treatment Prob(F)						0.0003	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.