

(04FUNG2W)

Ohio State University
Horticulture and Crop Science

FUNGICIDE TIMING STUDY

Trial ID: 04FUNG2NW

Study Dir.:

Location: NORTHWEST BRANCH A-1

Investigator: Dr. Mark M. Loux

GENERAL TRIAL INFORMATION

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	Giant foxtail	Setaria faberi
2. CHEAL	Lambsquarters, common	Chenopodium album
3. AMBTR	Ragweed, giant	Ambrosia trifida
4. POLPY	Pennsylvania smartweed	Polygonum pennsylvanicum

Crop 1: GLXMA SOYBEAN

Variety: PIONEER 93B36

Planting Date: 5-10-04

Planting Method: KINZE 2000

Rate: 175386 SEED/A

Depth: 0.75 IN

Row Spacing: 15 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

MAINTENANCE

Field Prep./Maintenance: APPLIED BURNDOWN OF ROUNDUP WEATHERMAX AT 22 OZ/A 5-11-04

SOIL DESCRIPTION

% OM:	3.9	Texture:	silty clay loam	
pH:	6.2	Soil Name:	Kokomo	
CEC:	23			

APPLICATION DESCRIPTION

	A	B	C
Application Date:	5-11-04	6-22-04	7-8-04
Time of Day:	8:00 A.M.	9:00 A.M.	8:00 A.M.
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	4-6"	V-4
Applic. Placement:	BROADCAST	BROADCAST	BROADCAST
Air Temp., Unit:	69 F	73 F	66 F
% Relative Humidity:	73	76	72
Wind Velocity, Unit:	3 W	6 W	8 W
Soil Temp., Unit:	62 F	69 F	69 F
Soil Moisture:	DRY/MOIST	DRY/MOIST	DRY/DRY
% Cloud Cover:	20	70	15

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	GLXMA	GLXMA	GLXMA
Stage Scale:	5 TRI/R1	12 TRI/FL	
Height, Unit:	14 IN	20 IN	

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WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code, Stage:	SETFA	SETFA 14-16"	SETFA 18-24"
Stage Scale:		4 LVS	8 LVS
Density, Unit:		96 M2	96 M2
Weed 2 Code, Stage:	CHEAL	CHEAL 8-10"	CHEAL
Stage Scale:		>12 LVS	
Density, Unit:		2 M2	
Weed 3 Code, Stage:	AMBTR	AMBTR 16-24"	AMBTR 24-36"
Stage Scale:		12 LVS	>12 LVS
Density, Unit:		3 M2	3 M2
Weed 4 Code, Stage:	POLPY	POLPY	POLPY 18-24"
Stage Scale:			>12 LVS
Density, Unit:			1 M2

APPLICATION EQUIPMENT

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

GLYMX WEIGHT LBS	GLYMX MOISTURE PERCENT	GLYMX YIELD BU/ACRE
9-24-04	9-24-04	9-24-04
HARVEST	HARVEST	HARVEST
		TY1
1	1	1

Trt No.	Treatment	Product Rate	Product Rate Unit	Grow Stg	Appl Code	7	8	9
1	ROUNDUP WEATHERMAX	22 oz/a		6-8"	B	16.8 a	9.5 a	67.6 a
1	AMS	4 qt/a		6-8"				
2	ROUNDUP WEATHERMAX	22 oz/a		6-8"	B	15.7 a	10.3 a	62.5 a
2	AMS	4 qt/a		6-8"				
2	ROUNDUP WEATHERMAX	22 oz/a		V-4	C			
2	AMS	4 qt/a		V-4				
3	ROUNDUP WEATHERMAX	22 oz/a		V-4	C	16.1 a	10.7 a	64.1 a
3	AMS	4 qt/a		V-4				
4	ROUNDUP WEATHERMAX	44 oz/a		V-4	C	16.1 a	9.9 a	64.6 a
4	AMS	4 qt/a		V-4				
5	CANOPY XL 3.5 OZ/A					16.6 a	9.9 a	66.5 a
5	CLASSIC	1.34 oz/a		PRE	A			
5	AUTHORITY	2.18 oz/a		PRE				
5	ROUNDUP WEATHERMAX	22 oz/a		6-8"	B			
5	AMS	4 qt/a		6-8"				
6	CANOPY XL 3.5 OZ/A					15.8 a	9.4 a	63.7 a
6	CLASSIC	1.34 oz/a		PRE	A			
6	AUTHORITY	2.18 oz/a		PRE				
6	ROUNDUP WEATHERMAX	22 oz/a		6-8"	B			
6	AMS	4 qt/a		6-8"				
6	ROUNDUP WEATHERMAX	22 oz/a		V-4	C			
6	AMS	4 qt/a		V-4				
7	CANOPY XL 3.5 OZ/A					15.9 a	9.5 a	63.9 a
7	CLASSIC	1.34 oz/a		PRE	A			
7	AUTHORITY	2.18 oz/a		PRE				
7	ROUNDUP WEATHERMAX	22 oz/a		V-4	C			
7	AMS	4 qt/a		V-4				

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Weed Code								
Crop Code					GLYMX	GLYMX	GLYMX	
Rating Data Type					WEIGHT	MOISTURE	YIELD	
Rating Unit					LBS	PERCENT	BU/ACRE	
Rating Date					9-24-04	9-24-04	9-24-04	
Trt-Eval Interval					HARVEST	HARVEST	HARVEST	
ARM Action Codes								TY1
# Subsamples, Dec.					1	1	1	

Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	7	8	9
8	CANOPY XL 3.5 OZ/A					16.0 a	10.2 a	64.0 a
8	CLASSIC	1.34 oz/a		PRE	A			
8	AUTHORITY	2.18 oz/a		PRE				
8	ROUNDUP WEATHERMAX	44 oz/a		V-4	C			
8	AMS	4 qt/a		V-4				
9	GANGSTER 1.8 OZ/A					16.4 a	9.6 a	66.0 a
9	VALOR SX	1.5 oz/a		PRE	A			
9	FIRSTRATE	0.3 oz/a		PRE				
9	ROUNDUP WEATHERMAX	22 oz/a		6-8"	B			
9	AMS	4 qt/a		6-8"				
10	GANGSTER 1.8 OZ/A					16.8 a	9.2 a	67.8 a
10	VALOR SX	1.5 oz/a		PRE	A			
10	FIRSTRATE	0.3 oz/a		PRE				
10	ROUNDUP WEATHERMAX	22 oz/a		6-8"	B			
10	AMS	4 qt/a		6-8"				
10	ROUNDUP WEATHERMAX	22 oz/a		V-4	C			
10	AMS	4 qt/a		V-4				
11	GANGSTER 1.8 OZ/A					16.0 a	9.4 a	64.6 a
11	VALOR SX	1.5 oz/a		PRE	A			
11	FIRSTRATE	0.3 oz/a		PRE				
11	ROUNDUP WEATHERMAX	22 oz/a		V-4	C			
11	AMS	4 qt/a		V-4				
12	GANGSTER 1.8 OZ/A					16.2 a	9.4 a	65.4 a
12	VALOR SX	1.5 oz/a		PRE	A			
12	FIRSTRATE	0.3 oz/a		PRE				
12	ROUNDUP WEATHERMAX	44 oz/a		V-4	C			
12	AMS	4 qt/a		V-4				
13	DOMAIN	16 oz/a		PRE	A	16.1 a	9.7 a	64.9 a
13	CANOPY XL 2.5 OZ/A							
13	CLASSIC	0.96 oz/a		PRE				
13	AUTHORITY	1.55 oz/a		PRE				
13	ROUNDUP WEATHERMAX	22 oz/a		6-8"	B			
13	AMS	4 qt/a		6-8"				

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Weed Code			
Crop Code	GLYMX	GLYMX	GLYMX
Rating Data Type	WEIGHT	MOISTURE	YIELD
Rating Unit	LBS	PERCENT	BU/ACRE
Rating Date	9-24-04	9-24-04	9-24-04
Trt-Eval Interval	HARVEST	HARVEST	HARVEST
ARM Action Codes			TY1
# Subsamples, Dec.	1	1	1

Trt No.	Treatment Name	Product Rate	Product Rate Unit	Grow Stg	Appl Code	7	8	9
14	DOMAIN	16 oz/a		PRE	A	15.7 a	9.5 a	63.4 a
14	CANOPY XL 2.5 OZ/A							
14	CLASSIC	0.96 oz/a		PRE				
14	AUTHORITY	1.55 oz/a		PRE				
14	ROUNDUP WEATHERMAX	22 oz/a		6-8"	B			
14	AMS	4 qt/a		6-8"				
14	ROUNDUP WEATHERMAX	22 oz/a		V-4	C			
14	AMS	4 qt/a		V-4				
15	DOMAIN	16 oz/a		PRE	A	16.1 a	9.7 a	64.8 a
15	CANOPY XL 2.5 OZ/A							
15	CLASSIC	0.96 oz/a		PRE				
15	AUTHORITY	1.55 oz/a		PRE				
15	ROUNDUP WEATHERMAX	22 oz/a		V-4	C			
15	AMS	4 qt/a		V-4				
16	DOMAIN	16 oz/a		PRE	A	16.9 a	9.8 a	68.0 a
16	CANOPY XL 2.5 OZ/A							
16	CLASSIC	0.96 oz/a		PRE				
16	AUTHORITY	1.55 oz/a		PRE				
16	ROUNDUP WEATHERMAX	44 oz/a		V-4	C			
16	AMS	4 qt/a		V-4				
	LSD (P=.05)					1.63	1.00	6.51
	Standard Deviation					0.98	0.60	3.90
	CV					6.04	6.17	6.0
	Replicate F					1.390	1.393	1.181
	Replicate Prob(F)					0.2646	0.2638	0.3210
	Treatment F					0.474	1.314	0.529
	Treatment Prob(F)					0.9358	0.2541	0.9032

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

Column 3: TY1 = 3.872*[7]*(100-[8])/87