

# Ohio State University Horticulture and Crop Science

GLYPHOSATE FORMULATION TRIAL

2007-01-09-02

Trial ID: 07GLYFORM  
Location: WESTERN BRANCH

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

### GENERAL TRIAL INFORMATION

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

### TRIAL LOCATION

**State/Prov.:** Ohio **Trial Status:** Complete  
**Country:** USA **Initiation Date:** Apr/01/2007  
**Conducted Under GLP (Y/N):** N **Conducted Under GEP (Y/N):** N

### CROP AND WEED DESCRIPTION

Weed Code	Common Name	Scientific Name
1. AMBTR	Giant ragweed	Ambrosia trifida
2. TAROF	Common dandelion	Taraxacum officinale

**Crop 1:** . **Variety:** .  
**Planting Date:** Jun/04/2007

### SITE AND DESIGN

**Plot Width, Unit:** 6.67 FT **Plot Length, Unit:** 30 FT **Reps:** 3  
**Tillage Type:** NO-TILL **Study Design:** RANDOMIZED COMPLETE BLOCK

### SOIL DESCRIPTION

<b>% OM:</b> 2.0	<b>Texture:</b> SILT LOAM
<b>pH:</b> 6.2	<b>Soil Name:</b> CROSBY
<b>CEC:</b> 14	

**Overall Moisture Conditions:** POOR

### APPLICATION DESCRIPTION

A

**Application Date:** May/18/2007  
**Time of Day:** 9:30 AM  
**Application Method:** SPRAY  
**Application Timing:** POST  
**Applic. Placement:** BROADCAST  
**Air Temp., Unit:** 53 F  
**% Relative Humidity:** 60  
**Wind Velocity, Unit:** 8 MPH  
**Soil Temp., Unit:** 52 F  
**Soil Moisture:** WET/MOIST  
**% Cloud Cover:** 10

### CROP STAGE AT EACH APPLICATION

A

**Stage Scale:** .

### WEED STAGE AT EACH APPLICATION

A

**Weed 1 Code, Stage:** AMBTR 4-12"  
**Stage Scale:** 6-14 LVS  
**Density, Unit:** 24 M2  
**Weed 2 Code, Stage:** TAROF 8" DIA  
**Stage Scale:** >12 LVS  
**Density, Unit:** 2 M2

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## 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

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Weed Code	AMBTR	TAROF	AMBTR	TAROF
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date	May/29/2007	May/29/2007	Jun/08/2007	Jun/08/2007
Trt-Eval Interval	11 DA-A	11 DA-A	21 DA-A	21 DA-A
# Subsamples, Dec.	0	0	0	0

Trt No.	Treatment Name	Rate	Product	Product	Appl	1	2	3	4
		Rate Unit	Rate	Rate Unit	Code				
1	MON 76111	0.38 lb ae/a	12.2 oz/a	B		47 a	53 a	43 a	42 ab
1	AMS	5 % v/v	4 qt/a						
2	MON 76351	0.38 lb ae/a	10.8 oz/a	B		47 a	37 a	50 a	40 b
2	AMS	5 % v/v	4 qt/a						
3	MON 76105	0.38 lb ae/a	10.8 oz/a	B		50 a	37 a	45 a	43 ab
3	AMS	5 % v/v	4 qt/a						
4	MON 76165	0.38 lb ae/a	10.8 oz/a	B		47 a	37 a	47 a	48 ab
4	AMS	5 % v/v	4 qt/a						
5	MON 79789	0.38 lb ae/a	10.8 oz/a	B		47 a	40 a	48 a	43 ab
5	AMS	5 % v/v	4 qt/a						
6	MON 76204	0.38 lb ae/a	10.8 oz/a	B		43 a	40 a	48 a	48 ab
6	AMS	5 % v/v	4 qt/a						
7	MON 79770	0.38 lb ae/a	10.8 oz/a	B		42 a	38 a	47 a	47 ab
7	AMS	5 % v/v	4 qt/a						
8	MON 79831	0.38 lb ae/a	10.8 oz/a	B		43 a	32 a	40 a	42 ab
8	AMS	5 % v/v	4 qt/a						
9	MON 76111	0.56 lb ae/a	18 oz/a	A		48 a	43 a	58 a	50 ab
9	AMS	5 % v/v	4 qt/a						
10	MON 76351	0.56 lb ae/a	16 oz/a	A		52 a	48 a	57 a	60 ab
10	AMS	5 % v/v	4 qt/a						
11	MON 76105	0.56 lb ae/a	16 oz/a	A		52 a	55 a	53 a	64 ab
11	AMS	5 % v/v	4 qt/a						
12	MON 76165	0.56 lb ae/a	16 oz/a	A		52 a	40 a	58 a	67 a
12	AMS	5 % v/v	4 qt/a						
13	MON 79789	0.56 lb ae/a	16 oz/a	A		48 a	45 a	55 a	48 ab
13	AMS	5 % v/v	4 qt/a						
14	MON 76204	0.56 lb ae/a	16 oz/a	A		48 a	37 a	52 a	43 ab
14	AMS	5 % v/v	4 qt/a						
15	MON 79770	0.56 lb ae/a	16 oz/a	A		52 a	50 a	57 a	63 ab
15	AMS	5 % v/v	4 qt/a						
16	MON 79831	0.56 lb ae/a	16 oz/a	A		43 a	42 a	50 a	57 ab
16	AMS	5 % v/v	4 qt/a						
17	MON 79614	0.56 lb ae/a	14.3 oz/a	A		50 a	43 a	45 a	57 ab
17	LI 100	0.25 % v/v	6.4 oz/a	A					
17	AMS	5 % v/v	4 qt/a						
18	MON 79616	0.56 lb ae/a	17 oz/a	A		48 a	40 a	62 a	61 ab
18	AMS	5 % v/v	4 qt/a						

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# Subsamples, Dec.	0	0	0	0

Trt No.	Treatment Name	Rate	Product	Product	Appl Code	1	2	3	4
		Rate Unit	Rate	Rate					
19	MON 79685	0.56 lb ae/a	18 oz/a		A	52 a	42 a	53 a	53 ab
19	AMS	5 % v/v	4 qt/a						
20	UTC					0 b	0 b	0 b	0 c
21	DURANAGO	0.56 lb ae/a	18 oz/a		A	53 a	50 a	57 a	61 ab
21	AMS	5 % v/v	4 qt/a						
22	TOUCHDOWN TOTAL	0.56 lb ae/a	18 oz/a			48 a	45 a	50 a	51 ab
22	AMS	5 % v/v	4 qt/a						
23	GLYPHOS XTRA	0.56 lb ae/a	24 oz/a			53 a	40 a	58 a	51 ab
23	AMS	5 % v/v	4 qt/a						
24	MAKAZE	0.56 lb ae/a	24 oz/a			47 a	40 a	52 a	56 ab
24	AMS	5 % v/v	4 qt/a						
LSD (P=.05)						8.7	13.0	12.2	14.0
Standard Deviation						5.3	7.9	7.4	8.5
CV						11.43	19.4	14.97	17.05
Bartlett's X2						20.817	13.865	17.17	8.891
P(Bartlett's X2)						0.47	0.677	0.642	0.975
Replicate F						3.767	1.688	6.422	1.625
Replicate Prob(F)						0.0305	0.1988	0.0035	0.2099
Treatment F						11.560	5.181	7.739	7.251
Treatment Prob(F)						0.0001	0.0001	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.