

# Purdue University

## Dandelion Control Timing Study with Glyphosate and 2,4-D

Trial ID: 04F-WBURN-DANDTIM  
Location: Woodburn

Study Dir.: Dr. Bill Johnson  
Investigator: Dr. Bill Johnson

### GENERAL TRIAL INFORMATION

Study Director: Dr. Bill Johnson  
Investigator: Dr. Bill Johnson

### TRIAL LOCATION

City: Woodburn  
State/Prov.: IN  
Postal Code: 46797

Unit: ft

### COOPERATOR/LANDOWNER

Cooperator: Roger Hadley, II

Phone No: 260-632-5505

Address 1: 5505 Bull Rapids Rd.  
City: Woodburn  
State/Prov: IN  
Postal Code: 46797

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

### CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	TAROF	DANDELION, COMMON	TARAXACUM OFFICINALE WEBER IN WIGGERS

Crop 1: GLXMA SOYBEAN

Planting Method: DRILLED

Row Spacing: 15 IN

Emergence Date: 14/May/2004

### SITE AND DESIGN

Plot Width, Unit: 10 FT Plot Length, Unit: 30 FT Reps: 4  
Tillage Type: no-till Study Design: RANDOMIZED COMPLETE BLOCK

	Previous Crops	Previous Pesticides	Year
1.	field corn		2004

### MAINTENANCE

Field Prep./Maintenance:

June 4, 2004 - Blanket maintenance application made to entire study area with 15' sprayer mounted on 4-wheeler.

Fusion @ 14 oz/acre  
Flexstar @ 1 pt/acre  
Outlook @ 7 oz/acre  
MSO @ 1% v/v  
AMS @ 2.5 #/acre

### SOIL DESCRIPTION

% OM: 3 Texture: medium/fine (silt loam/silty clay loam)  
pH: 6.5 Soil Name: Hoytville-Nappanee  
CEC: 18 Fert. Level: good

### APPLICATION DESCRIPTION

	A	B	C	D	E	F	G
Application Date:	17/Nov/2004	1/Apr/2005	11/Apr/2005	21/Apr/2005	29/Apr/2005		
Time of Day:	1300 EST	840-855	900-930	1030-1040	845-900		
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	FALBD(A)	APR-1(B)	APR-10(C)	APR-20(D)	APR-30(E)	MAY-10(F)	MAY-20(G)
Applic. Placement:	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL
Air Temp., Unit:	56 F	55 F	63 F	54 F	52 F	F	F
% Relative Humidity:	95	59	42	78	53.8		
Wind Velocity, Unit:	6.5 MPH	4 MPH	8 MPH	4.5 MPH	4 MPH	MPH	MPH
Soil Temp., Unit:	48 F	38 F	49 F	50 F	44 F	F	F
Soil Moisture:	WET	wet	dry	moist/wet	wet	wet surf	dry surf
% Cloud Cover:	100	50	20	100	100	100	100

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### CROP STAGE AT EACH APPLICATION

	A	B	C	D	E	F	G
<b>Crop 1 Code, Stage:</b>	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA	GLXMA
<b>Stage Scale:</b>	na	na	na	na	na	planted	VC
<b>Height, Unit:</b>						na	2 IN

### WEED STAGE AT EACH APPLICATION

	A	B	C	D	E	
<b>Weed 1 Code, Stage:</b>	TAROF 18-20 Lf	TAROF 12-16	TAROF 12-18	TAROF 50%f1,bud	TAROF 75%f1,25b	
<b>Stage Scale:</b>	12-16"	4-7"	7-10"	6-12"	8-12"	
<b>Density, Unit:</b>	6 YD2	3 YD2	3 YD2	5-20 YD2	30 YD2	
	F	G				
<b>Weed 1 Code, Stage:</b>	TAROF	TAROF				
<b>Stage Scale:</b>						
<b>Density, Unit:</b>	YD2	YD2				

### APPLICATION EQUIPMENT

	A	B	C	D	E	F
<b>Appl. Equipment:</b>	CO2 Backp					
<b>Operating Pressure:</b>	26-27 psi					
<b>Nozzle Type:</b>	XR VS	VS	VS	VS	VS	VS
<b>Nozzle Size:</b>	8002	8002	8002	8002	8002	8002
<b>Nozzle Spacing, Unit:</b>	20 IN					
<b>Boom Length, Unit:</b>	10 FT					
<b>Ground Speed, Unit:</b>	3 MPH					
<b>Carrier:</b>	water	water	water	water	water	water
<b>Spray Volume, Unit:</b>	15 gpa					
<b>Propellant:</b>	CO2	CO2	CO2	CO2	CO2	CO2
	G					
<b>Appl. Equipment:</b>	CO2 Backp					
<b>Operating Pressure:</b>						
<b>Nozzle Type:</b>	VS					
<b>Nozzle Size:</b>	8002					
<b>Nozzle Spacing, Unit:</b>	20 IN					
<b>Boom Length, Unit:</b>	10 FT					
<b>Ground Speed, Unit:</b>	3 MPH					
<b>Carrier:</b>	water					
<b>Spray Volume, Unit:</b>	15 gpa					
<b>Propellant:</b>	CO2					

Trt No	Treatment Application Comment
1	Intermittent light mist/rain before & during application
2	Intermittent light mist/rain before & during application
3	Intermittent light mist/rain before & during application

Trial Comments

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November 17, 2004 Application:	Growth stage: vegetative	Residue cover: 90% corn harvest residue	April 1, 2004 Application:
April 9, 2004 Application:	Growth stage: buds observed in crown	Residue cover: 60% corn harvest residue	
April 20, 2004 Application:	Growth stage: early bud formation	Residue cover: 60% corn harvest residue	
April 30, 2004 Application (light drizzle):	Growth stage: 50% bud / 50% flowering	Residue cover: 50% corn harvest residue	
planted May 6, 2004 - no emergence yet):	Growth stage: flowering	Residue cover: not recorded	May 11, 2004 Application (soybean
Application:	Growth stage: seed fallen off	Residue cover: 40% corn residue	May 20, 2004
Rating:	Growth stage: flowering again	Residue cover: 30-40% corn residue	June 4, 2004
111, and 122 are most likely due to drift from the May 20 applications to plots 119, 120, & 121 (soybeans were planted 5/6/2004). Plot layout involved each rep consisting of 2 blocks (i.e., plots 101-111 and 112-122 arranged south to north with plots 101-111 on the east side of the study area).	New dandelion seedlings are present in all plots. Plants are <1.5 in DIA at a density of 10-12 per sq ft.	Crop injury observations in plots 109, 110,	
collected from 2 rows (15-inch rows) by 30 feet. Total area represented is 75 sq. ft. (30' x 2.5').	October 7, 2004	Post harvest dandelion counts. Physical counts	

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Weed Code								TAROF	TAROF	GLXMA	TAROF	TAROF	TAROF	
Crop Code								Control	Control	Control	Control	Control	Densities	
Rating Data Type								%	%	%	%	%	count	
Rating Unit								1/Apr/2005	29/Apr/2005	1/Jun/2005	1/Jun/2005	30/Jun/2005		
Rating Date										VC,unifo				
Crop Stage										1-2"				
Crop Stage Scale											12-20"			
Weed Stage														
Assessed By								12-16	8-12"					
Tri-Eval Interval								WGJ+EO	EC+RD					
								135 DA-A	163 DA-A	196 DA-A	196 DA-A			
Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	Plot	1	2	3	4	5	6
1	2,4-D Ester	1	lb ai/a			FALPRE	A	101	98	85	0	60	60	2
								304	78	75	0	50	10	3
								503	60	60	0	70	20	3
								801	85	90	0	70	20	4
								Mean =	80	78	0	63	28	3
2	Roundup Weathermax AMS	0.77	lb ae/a			FALPRE	A	102	55	20	0	0	0	2
								310	93	10	0	30	20	0
		2.5	lb/a			FALPRE	A	602	88	40	0	10	0	5
								705	93	45	0	58	5	4
		Mean =	82	29	0	25	6	2						
3	2,4-D Ester Roundup Weathermax AMS	1	lb ai/a			FALPRE	A	103	80	75	0	85	70	3
								410	94	85	0	85	47	3
		0.77	lb ae/a			FALPRE	A	504	78	70	0	80	60	1
								708	70	75	0	80	40	3
		2.5	lb/a			FALPRE	A	Mean =	81	76	0	83	54	2
4	2,4-D Ester	1	lb ai/a			APR-1	B	104		40	0	73	65	3
								302		50	0	60	27	3
								611		20	0	25	0	7
								808		55	0	85	20	7
								Mean =	.	41	0	61	28	5
5	Roundup Weathermax AMS	0.77	lb ae/a			APR-1	B	105		90	0	78	50	1
								407		80	0	25	33	4
		2.5	lb/a			APR-1	B	601		85	0	45	15	5
								704		65	0	35	0	2
		Mean =	.	80	0	46	25	3						
6	Roundup Weathermax 2,4-D Ester AMS	0.77	lb ae/a			APR-1	B	106		80	0	88	70	3
								402		80	0	60	30	5
		1	lb ai/a			APR-1	B	506		45	0	70	30	2
								711		40	0	60	5	5
		2.5	lb/a			APR-1	B	Mean =	.	61	0	70	34	3
7	2,4-D Ester	1	lb ai/a			APR-10	C	107		45	0	90	85	0
								411		50	0	78	60	2
								507		30	0	60	10	3
								703		20	0	60	15	4
								Mean =	.	36	0	72	43	2
8	Roundup Weathermax AMS	0.77	lb ae/a			APR-10	C	108		65	0	95	95	0
								404		30	0	85	60	1
		2.5	lb/a			APR-10	C	610		35	0	88	5	7
								810		35	0	68	5	7
		Mean =	.	41	0	84	41	4						
9	Roundup Weathermax 2,4-D Ester AMS	0.77	lb ae/a			APR-10	C	109		40	0	95	85	1
								303		80	0	90	65	3
		1	lb ai/a			APR-10	C	505		85	0	95	95	1
								809		50	0	73	15	5
		2.5	lb/a			APR-10	C	Mean =	.	64	0	88	65	2

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Weed Code Crop Code Rating Data Type Rating Unit Rating Date Crop Stage Crop Stage Scale Weed Stage Assessed By Tri-Eval Interval								TAROF Control % 1/Apr/2005  12-16 WGJ+EO 135 DA-A	TAROF Control % 29/Apr/2005  8-12" EC+RD 163 DA-A	GLXMA Control % 1/Jun/2005 VC,unifo 1-2" 196 DA-A	TAROF Control % 1/Jun/2005  12-20" 196 DA-A	TAROF Control % 30/Jun/2005	TAROF	Densities count
Trt No.	Treatment Name	Rate Rate	Unit Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	Plot	1	2	3	4	5	6
10	2,4-D Ester	1	lb ai/a			APR-20	D	110 307 508 811		30 15 10 20	0 0 0 0	78 50 30 40	75 0 0 0	1 3 5 9
Mean =								.	19	0	50	19	4	
11	Roundup Weathermax AMS	0.77 2.5	lb ae/a lb/a			APR-20 APR-20	D D	111 309 606 807		25 0 20 10	0 0 0 0	93 95 98 93	98 60 90 60	1 1 1 3
Mean =								.	14	0	95	77	1	
12	Roundup Weathermax 2,4-D Ester AMS	0.77 1 2.5	lb ae/a lb ai/a lb/a			APR-20 APR-20 APR-20	D D D	211 401 608 709		30 25 20 10	0 0 0 0	99 90 85 85	95 85 65 55	7 2 3 4
Mean =								.	21	0	90	75	4	
13	2,4-D Ester	1	lb ai/a			APR-30	E	202 301 605 710			5 0 0 0	60 70 93 75	60 65 90 55	2 1 1 2
Mean =								.	.	1	75	68	1	
14	Roundup Weathermax AMS	0.77 2.5	lb ae/a lb/a			APR-30 APR-30	E E	203 308 502 806			0 0 0 0	90 85 90 78	25 50 70 25	3 5 2 3
Mean =								.	.	0	86	43	3	
15	Roundup Weathermax 2,4-D Ester AMS	0.77 1 2.5	lb ae/a lb ai/a lb/a			APR-30 APR-30 APR-30	E E E	204 305 510 804			0 0 0 0	90 93 85 92	99 95 95 90	0 0 0 1
Mean =								.	.	0	90	95	0	
16	2,4-D Ester	1	lb ai/a			MAY-10	F	205 311 501 805					65 75 50 40	1 1 5 5
Mean =								.	.	.	.	58	3	
17	Roundup Weathermax AMS	0.77 2.5	lb ae/a lb/a			MAY-10 MAY-10	F F	206 406 604 803					50 50 45 60	4 6 2 11
Mean =								.	.	.	.	51	5	
18	Roundup Weathermax 2,4-D Ester AMS	0.77 1 2.5	lb ae/a lb ai/a lb/a			MAY-10 MAY-10 MAY-10	F F F	207 405 607 802					50 45 55 55	6 1 2 13
Mean =								.	.	.	.	51	5	

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Weed Code							TAROF	TAROF	GLXMA	TAROF	TAROF	TAROF		
Crop Code							Control	Control	Control	Control	Control	Densities		
Rating Data Type							%	%	%	%	%	count		
Rating Unit							1/Apr/2005	29/Apr/2005	1/Jun/2005	1/Jun/2005	30/Jun/2005			
Rating Date									VC,unifo					
Crop Stage								8-12"	1-2"					
Crop Stage Scale										12-20"				
Weed Stage														
Assessed By							12-16	8-12"						
Tri-Eval Interval							WGJ+EO	EC+RD						
							135 DA-A	163 DA-A	196 DA-A	196 DA-A				
Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	Plot	1	2	3	4	5	6
19	2,4-D Ester	1	lb ai/a			MAY-20	G	208					40	8
								403					55	4
								511					45	3
								707					50	6
								Mean =	.	.	.	.	48	5
20	Roundup Weathermax	0.77	lb ae/a			MAY-20	G	209					50	4
	AMS	2.5	lb/a			MAY-20	G	306					35	5
								609					15	10
								701					55	1
								Mean =	.	.	.	.	39	5
21	Roundup Weathermax	0.77	lb ae/a			MAY-20	G	210					60	2
	2,4-D Ester	1	lb ai/a			MAY-20	G	408					60	4
	AMS	2.5	lb/a			MAY-20	G	509					55	7
								702					35	4
								Mean =	.	.	.	.	53	4
22	UTC							201	0	7*	0*	9*		4*
								409	0	0	0	0		5
								603	0	0	0	0		7
								706	0	0	0	0		3
								Mean =	0	2	0	2	.	5

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Weed Code								TAROF	TAROF	
Crop Code								COUNT	Control	
Rating Data Type								2-5 YD2	%	
Rating Unit								29/Sep/2005	29/Sep/2005	
Rating Date										
Crop Stage										
Crop Stage Scale										
Weed Stage										
Assessed By								EO, JM	EC	
Tri-Eval Interval										
Tri No.	Treatment Name	Rate	Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	Plot	7	8
1	2,4-D Ester	1	lb ai/a			FALPRE	A	101	6	75
								304	2	50
								503	4	30
								801	7	50
								Mean =	5	51
2	Roundup Weathermax AMS	0.77	lb ae/a			FALPRE	A	102	15	0
								310	0	35
		2.5	lb/a			FALPRE	A	602	11	0
								705	4	30
		Mean =	7	16						
3	2,4-D Ester Roundup Weathermax AMS	1	lb ai/a			FALPRE	A	103	4	60
								410	6	60
		0.77	lb ae/a			FALPRE	A	504	2	65
								708	8	50
		2.5	lb/a			FALPRE	A	Mean =	5	59
4	2,4-D Ester	1	lb ai/a			APR-1	B	104	6	75
								302	3	35
								611	9	0
								808	10	50
								Mean =	7	40
5	Roundup Weathermax AMS	0.77	lb ae/a			APR-1	B	105	4	60
								407	6	10
		2.5	lb/a			APR-1	B	601	9	30
								704	11	0
		Mean =	7	25						
6	Roundup Weathermax 2,4-D Ester AMS	0.77	lb ae/a			APR-1	B	106	3	85
								402	2	40
		1	lb ai/a			APR-1	B	506	4	50
								711	10	20
		2.5	lb/a			APR-1	B	Mean =	4	49
7	2,4-D Ester	1	lb ai/a			APR-10	C	107	2	95
								411	3	70
								507	6	25
								703	7	30
								Mean =	4	55
8	Roundup Weathermax AMS	0.77	lb ae/a			APR-10	C	108	6	80
								404	5	70
		2.5	lb/a			APR-10	C	610	16	10
								810	18	25
		Mean =	11	46						
9	Roundup Weathermax 2,4-D Ester AMS	0.77	lb ae/a			APR-10	C	109	6	65
								303	2	80
		1	lb ai/a			APR-10	C	505	2	85
								809	8	35
		2.5	lb/a			APR-10	C	Mean =	4	66

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Weed Code								TAROF	TAROF	
Crop Code								COUNT	Control	
Rating Data Type								2-5 YD2	%	
Rating Unit								29/Sep/2005	29/Sep/2005	
Rating Date										
Crop Stage										
Crop Stage Scale										
Weed Stage										
Assessed By								EO, JM	EC	
Tri-Eval Interval										
Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	Plot	7	8
10	2,4-D Ester	1	lb ai/a			APR-20	D	110	4	55
								307	8	0
								508	9	0
								811	8	0
								Mean =	7	14
11	Roundup Weathermax	0.77	lb ae/a			APR-20	D	111	7	80
	AMS	2.5	lb/a			APR-20	D	309	3	85
								606	1	80
								807	2	85
								Mean =	3	83
12	Roundup Weathermax	0.77	lb ae/a			APR-20	D	211	6	85
	2,4-D Ester	1	lb ai/a			APR-20	D	401	2	80
	AMS	2.5	lb/a			APR-20	D	608	4	60
								709	1	20
								Mean =	3	61
13	2,4-D Ester	1	lb ai/a			APR-30	E	202	5	60
								301	4	70
								605	4	85
								710	2	20
								Mean =	3	59
14	Roundup Weathermax	0.77	lb ae/a			APR-30	E	203	8	50
	AMS	2.5	lb/a			APR-30	E	308	3	40
								502	4	50
								806	5	55
								Mean =	5	49
15	Roundup Weathermax	0.77	lb ae/a			APR-30	E	204	1	95
	2,4-D Ester	1	lb ai/a			APR-30	E	305	1	98
	AMS	2.5	lb/a			APR-30	E	510	2	85
								804	1	90
								Mean =	1	92
16	2,4-D Ester	1	lb ai/a			MAY-10	F	205	6	70
								311	4	80
								501	4	50
								805	7	65
								Mean =	5	66
17	Roundup Weathermax	0.77	lb ae/a			MAY-10	F	206	5	40
	AMS	2.5	lb/a			MAY-10	F	406	7	10
								604	13	40
								803	22	10
								Mean =	11	25
18	Roundup Weathermax	0.77	lb ae/a			MAY-10	F	207	8	50
	2,4-D Ester	1	lb ai/a			MAY-10	F	405	9	50
	AMS	2.5	lb/a			MAY-10	F	607	6	50
								802	16	5
								Mean =	10	39

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Weed Code								TAROF	TAROF	
Crop Code								COUNT	Control	
Rating Data Type								2-5 YD2	%	
Rating Unit								29/Sep/2005	29/Sep/2005	
Rating Date										
Crop Stage										
Crop Stage Scale										
Weed Stage										
Assessed By								EO, JM	EC	
Tri-Eval Interval										
Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	Plot	7	8
19	2,4-D Ester	1	lb ai/a			MAY-20	G	208	7	35
								403	12	25
								511	6	40
								707	5	40
								Mean =	7	35
20	Roundup Weathermax	0.77	lb ae/a			MAY-20	G	209	7	25
	AMS	2.5	lb/a			MAY-20	G	306	7	20
								609	13	0
								701	6	60
								Mean =	8	26
21	Roundup Weathermax	0.77	lb ae/a			MAY-20	G	210	13	40
	2,4-D Ester	1	lb ai/a			MAY-20	G	408	15	35
	AMS	2.5	lb/a			MAY-20	G	509	7	25
								702	6	35
								Mean =	10	34
22	UTC							201	6	45
								409	8	0
								603	18	10
								706	6	40
								Mean =	9	24

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## Dandelion Control Timing Study with Glyphosate and 2,4-D

Trial ID: 04F-WBURN-DANDTIM  
 Location: Woodburn

Study Dir.: Dr. Bill Johnson  
 Investigator: Dr. Bill Johnson

Weed Code Crop Code Rating Data Type Rating Unit Rating Date Crop Stage Crop Stage Scale Weed Stage Assessed By Tri-Eval Interval							TAROF	TAROF	GLXMA	TAROF	TAROF	TAROF	
							Control % 1/Apr/2005	Control % 29/Apr/2005	Control % 1/Jun/2005 VC,unifo 1-2"	Control % 1/Jun/2005	Control % 30/Jun/2005	Densities count	
							12-16 WGJ+EO 135 DA-A	8-12" EC+RD 163 DA-A	196 DA-A	12-20" 196 DA-A			
Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	1	2	3	4	5	6
1	2,4-D Ester	1	lb ai/a			FALPRE	A	80 a	78 a	0 a	63 c-f	28 f-i	3 a
2	Roundup Weathermax AMS	0.77 2.5	lb ae/a lb/a			FALPRE FALPRE	A A	82 a	29 cde	0 a	25 g	6 i	2 a
3	2,4-D Ester Roundup Weathermax AMS	1 0.77 2.5	lb ai/a lb ae/a lb/a			FALPRE FALPRE FALPRE	A A A	81 a	76 a	0 a	83 abc	54 b-f	2 a
4	2,4-D Ester	1	lb ai/a			APR-1	B		41 bc	0 a	61 def	28 f-i	5 a
5	Roundup Weathermax AMS	0.77 2.5	lb ae/a lb/a			APR-1 APR-1	B B		80 a	0 a	46 f	25 ghi	3 a
6	Roundup Weathermax 2,4-D Ester AMS	0.77 1 2.5	lb ae/a lb ai/a lb/a			APR-1 APR-1 APR-1	B B B		61 ab	0 a	70 b-e	34 e-h	3 a
7	2,4-D Ester	1	lb ai/a			APR-10	C		36 cd	0 a	72 bcd	43 c-h	2 a
8	Roundup Weathermax AMS	0.77 2.5	lb ae/a lb/a			APR-10 APR-10	C C		41 bc	0 a	84 ab	41 c-h	4 a
9	Roundup Weathermax 2,4-D Ester AMS	0.77 1 2.5	lb ae/a lb ai/a lb/a			APR-10 APR-10 APR-10	C C C		64 a	0 a	88 ab	65 bcd	2 a
10	2,4-D Ester	1	lb ai/a			APR-20	D		19 de	0 a	50 ef	19 hi	4 a
11	Roundup Weathermax AMS	0.77 2.5	lb ae/a lb/a			APR-20 APR-20	D D		14 e	0 a	95 a	77 ab	1 a
12	Roundup Weathermax 2,4-D Ester AMS	0.77 1 2.5	lb ae/a lb ai/a lb/a			APR-20 APR-20 APR-20	D D D		21 cde	0 a	90 ab	75 ab	4 a
13	2,4-D Ester	1	lb ai/a			APR-30	E			1 a	75 a-d	68 abc	1 a
14	Roundup Weathermax AMS	0.77 2.5	lb ae/a lb/a			APR-30 APR-30	E E			0 a	86 ab	43 c-h	3 a
15	Roundup Weathermax 2,4-D Ester AMS	0.77 1 2.5	lb ae/a lb ai/a lb/a			APR-30 APR-30 APR-30	E E E			0 a	90 ab	95 a	0 a
16	2,4-D Ester	1	lb ai/a			MAY-10	F					58 b-e	3 a
17	Roundup Weathermax AMS	0.77 2.5	lb ae/a lb/a			MAY-10 MAY-10	F F					51 b-g	5 a

# Purdue University

Weed Code							TAROF	TAROF	GLXMA	TAROF	TAROF	TAROF	
Crop Code							Control	Control	Control	Control	Control	Densities	
Rating Data Type							%	%	%	%	%	count	
Rating Unit							1/Apr/2005	29/Apr/2005	1/Jun/2005	1/Jun/2005	30/Jun/2005		
Rating Date									VC,unifo				
Crop Stage									1-2"				
Crop Stage Scale										12-20"			
Weed Stage							12-16	8-12"					
Assessed By							WGJ+EO	EC+RD					
Tri-Eval Interval							135 DA-A	163 DA-A	196 DA-A	196 DA-A			
Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	1	2	3	4	5	6
18	Roundup Weathermax	0.77	lb ae/a			MAY-10	F					51	b-g
	2,4-D Ester	1	lb ai/a			MAY-10	F						5
	AMS	2.5	lb/a			MAY-10	F						a
19	2,4-D Ester	1	lb ai/a			MAY-20	G					48	c-g
													5
20	Roundup Weathermax	0.77	lb ae/a			MAY-20	G					39	d-h
	AMS	2.5	lb/a			MAY-20	G						5
21	Roundup Weathermax	0.77	lb ae/a			MAY-20	G					53	b-f
	2,4-D Ester	1	lb ai/a			MAY-20	G						4
	AMS	2.5	lb/a			MAY-20	G						a
22	UTC							0	0	0	0		5
LSD (P=.05)							29.6	20.8	0.9	20.9	27.3	3.3	
Standard Deviation							17.1	14.4	0.6	14.6	19.3	2.3	
CV							21.14	30.93	774.6	20.42	40.69	73.9	
Grand Mean							81.0	46.67	0.08	71.6	47.49	3.17	
Bartlett's X2							1.049	8.311	0.0	33.568	38.114	38.231	
P(Bartlett's X2)							0.592	0.685	.	0.002*	0.009*	0.008*	
Replicate F							0.340	1.100	1.000	1.431	9.191	4.668	
Replicate Prob(F)							0.7975	0.3630	0.4023	0.2472	0.0001	0.0054	
Treatment F							0.016	11.238	1.000	7.408	4.797	1.506	
Treatment Prob(F)							0.9840	0.0001	0.4708	0.0001	0.0001	0.1131	

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.  
 Untreated treatment(s) 22 excluded from analysis.

## Purdue University

Weed Code							TAROF	TAROF	
Crop Code									
Rating Data Type							COUNT	Control	
Rating Unit							2-5 YD2	%	
Rating Date							29/Sep/2005	29/Sep/2005	
Crop Stage									
Crop Stage Scale									
Weed Stage									
Assessed By							EO, JM	EC	
Tri-Eval Interval									
Tri No.	Treatment Name	Rate	Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	7	8
1	2,4-D Ester	1	lb ai/a			FALPRE	A	5 bcd	51 cde
2	Roundup Weathermax AMS	0.77 2.5	lb ae/a lb/a			FALPRE FALPRE	A A	7 abc	16 f
3	2,4-D Ester Roundup Weathermax AMS	1 0.77 2.5	lb ai/a lb ae/a lb/a			FALPRE FALPRE FALPRE	A A A	5 bcd	59 bcd
4	2,4-D Ester	1	lb ai/a			APR-1	B	7 abc	40 c-f
5	Roundup Weathermax AMS	0.77 2.5	lb ae/a lb/a			APR-1 APR-1	B B	7 abc	25 ef
6	Roundup Weathermax 2,4-D Ester AMS	0.77 1 2.5	lb ae/a lb ai/a lb/a			APR-1 APR-1 APR-1	B B B	4 cd	49 cde
7	2,4-D Ester	1	lb ai/a			APR-10	C	4 cd	55 bcd
8	Roundup Weathermax AMS	0.77 2.5	lb ae/a lb/a			APR-10 APR-10	C C	11 a	46 cde
9	Roundup Weathermax 2,4-D Ester AMS	0.77 1 2.5	lb ae/a lb ai/a lb/a			APR-10 APR-10 APR-10	C C C	4 cd	66 abc
10	2,4-D Ester	1	lb ai/a			APR-20	D	7 abc	14 f
11	Roundup Weathermax AMS	0.77 2.5	lb ae/a lb/a			APR-20 APR-20	D D	3 cd	83 ab
12	Roundup Weathermax 2,4-D Ester AMS	0.77 1 2.5	lb ae/a lb ai/a lb/a			APR-20 APR-20 APR-20	D D D	3 cd	61 bcd
13	2,4-D Ester	1	lb ai/a			APR-30	E	3 cd	59 bcd
14	Roundup Weathermax AMS	0.77 2.5	lb ae/a lb/a			APR-30 APR-30	E E	5 bcd	49 cde
15	Roundup Weathermax 2,4-D Ester AMS	0.77 1 2.5	lb ae/a lb ai/a lb/a			APR-30 APR-30 APR-30	E E E	1 d	92 a
16	2,4-D Ester	1	lb ai/a			MAY-10	F	5 bcd	66 abc
17	Roundup Weathermax AMS	0.77 2.5	lb ae/a lb/a			MAY-10 MAY-10	F F	11 a	25 ef
18	Roundup Weathermax 2,4-D Ester AMS	0.77 1 2.5	lb ae/a lb ai/a lb/a			MAY-10 MAY-10 MAY-10	F F F	10 ab	39 c-f
19	2,4-D Ester	1	lb ai/a			MAY-20	G	7 abc	35 def

# Purdue University

Weed Code								TAROF	TAROF
Crop Code								COUNT	Control
Rating Data Type								2-5 YD2	%
Rating Unit								29/Sep/2005	29/Sep/2005
Rating Date									
Crop Stage									
Crop Stage Scale									
Weed Stage									
Assessed By								EO, JM	EC
Tri-Eval Interval									
Trt No.	Treatment Name	Rate	Unit	Product Rate	Product Rate Unit	Grow Stg	Appl Code	7	8
20	Roundup Weathermax AMS	0.77 2.5	lb ae/a lb/a			MAY-20 MAY-20	G G	8 abc	26 ef
21	Roundup Weathermax 2,4-D Ester AMS	0.77 1 2.5	lb ae/a lb ai/a lb/a			MAY-20 MAY-20 MAY-20	G G G	10 a	34 def
22	UTC							9	24
LSD (P=.05)								5.1	27.8
Standard Deviation								3.6	19.6
CV								59.44	41.68
Grand Mean								6.08	47.12
Bartlett's X2								34.224	36.757
P(Bartlett's X2)								0.025*	0.013*
Replicate F								2.267	6.175
Replicate Prob(F)								0.0899	0.0010
Treatment F								2.448	4.398
Treatment Prob(F)								0.0040	0.0001

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.

Untreated treatment(s) 22 excluded from analysis.