

Rimsulfuron in Peaches.

Project Code: 07-Sirles Location: Alto Pass, IL
 Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Alto Pass IL 62905 USA
 Trial Status: Final Updated: 1-24-08

Objective:

Evaluate efficacy and crop tolerance of rimsulfuron alone and in combination with simazine, diuron, and terbacil in peaches.

Weed Code	Common Name	Scientific Name
1. CYPES	nutsedge, yellow	Cyperus esculentus L.
2. TRFRE	clover, white	Trifolium repens L.
3. AMARE	pigweed, redroot	Amaranthus retroflexus L.
4. ACCOS	copperleaf, hophornbeam	Acalypha ostryaefolia
5. ERICA	horseweed	Conyza canadensis (L.) Crong.
6. DIGSA	crabgrass, large	Digitaria sanguinalis (L.) Scop.

Crop 1: PRNPS Peach Variety: PF-25 Flamin Fury
 Planting Method: Established Planting Date: 3rd leaf

Plot Width, Unit: 7.3 FT Plot Length, Unit: 42 FT Reps: 3
 Tillage Type: No-Till Study Design: Randomized complete block
 Previous Crop, Year: NA , 2006

APPLICATION DESCRIPTION**A**

Application Date: 4-20-07
 Time of Day: 9:30
 Application Method: Spray
 Application Timing: E.SPRING
 Applic. Placement: BROFOL
 Air Temp., Unit: 64 F
 % Relative Humidity: 51
 Wind Velocity, Unit: 2-3 MPH
 Dew Presence (Y/N): Y
 Soil Temp., Unit: 51.3 F
 Soil Moisture: ABONOR
 % Cloud Cover: 0

CROP STAGE AT EACH APPLICATION**A**

Crop 1 Code, Stage: PRNPS
 IN

WEED STAGE AT EACH APPLICATION**A**

Weed 2 Code: TRFRE
 Stage(leaves): 20+
 Height(inches): 6-12
 Density: Low

Weed 5 Code: ERICA
 Stage(leaves): 5-10
 Height(inches): 0.5-1
 Density: Low

APPLICATION EQUIPMENT**A**

Appl. Equipment: CO2 sprayer
 Operating Pressure: 40 PSI
 Nozzle Type: Flat fan
 Nozzle Size: XR 8002
 Boom Length, Unit: 3.65 FT
 Spray Volume, Unit: 20 GPA

NOTES:

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Weed Code									CYPES	CYPES	CYPES
Crop Code											
Rating Data Type									PRNPS	PRNPS	PRNPS
Rating Unit									Injury	Injury	Injury
Rating Date									Percent	Percent	Percent
Trt-Eval Interval									5-20-07	6-19-07	7-19-07
									30 DA-A	60 DA-A	90 DA-A
									Control	Control	Control
									Percent	Percent	Percent
									5-20-07	6-19-07	7-19-07
									30 DA-A	60 DA-A	90 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code						
1	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	0 a	0 a	0 a	96 a	80 ab	85 a
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
1	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
2	MATRIX	25	WG	0.125	lb ai/a	8	oz/a	E.SPRING	A	0 a	0 a	0 a	97 a	93 a	88 a
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
2	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
3	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	0 a	0 a	0 a	96 a	77 ab	80 a
3	KARMEX	80	WG	2.4	lb ai/a	48	oz/a	E.SPRING	A						
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
3	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
4	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	0 a	0 a	0 a	89 ab	81 ab	80 a
4	PRINCEP	4	L	3.6	lb ai/a	3.6	qt/a	E.SPRING	A						
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
4	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
5	PRINCEP	4	L	3.6	lb ai/a	3.6	qt/a	E.SPRING	A	0 a	0 a	0 a	63 b	30 cd	17 cd
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
5	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
6	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	0 a	0 a	0 a	97 a	83 a	85 a
6	KARMEX	80	WG	1.6	lb ai/a	32	oz/a	E.SPRING	A						
6	PRINCEP	4	L	1.8	lb ai/a	1.8	qt/a	E.SPRING	A						
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
6	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
7	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	0 a	0 a	0 a	99 a	92 a	91 a
7	SINBAR	80	WP	0.8	lb ai/a	16	oz/a	E.SPRING	A						
7	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
7	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
8	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	0 a	0 a	0 a	96 a	92 a	90 a
8	PROWL H2O	3.8	CS	1.9	lb ai/a	4	pt/a	E.SPRING	A						
8	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
8	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
9	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	0 a	0 a	0 a	93 a	84 a	75 ab
9	SURFLAN	4	SL	4.0	lb ai/a	8	pt/a	E.SPRING	A						
9	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
9	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
10	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A	0 a	0 a	0 a	10 cd	63 abc	65 ab
10	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
11	CHATEAU	51	WG	0.25	lb ai/a	7.84	oz/a	E.SPRING	A	0 a	0 a	0 a	35 c	47 bc	47 bc
11	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
11	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
12	NONTREATED									0 a	0 a	0 a	0 d	0 d	0 d
LSD (P=.05)										0.0	0.0	0.0	27.2	35.5	31.5
Replicate F										0.000	0.000	0.000	1.990	2.478	1.310
Replicate Prob(F)										1.0000	1.0000	1.0000	0.1605	0.1070	0.2909
Treatment F										0.000	0.000	0.000	15.815	5.703	7.968
Treatment Prob(F)										1.0000	1.0000	1.0000	0.0001	0.0003	0.0001

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

Rimsulfuron in Peaches.

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Weed Code	TRFRE	TRFRE	TRFRE	AMARE	AMARE	AMARE
Crop Code	Control	Control	Control	Control	Control	Control
Rating Data Type	Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit	5-20-07	6-19-07	7-19-07	5-20-07	6-19-07	7-19-07
Rating Date	30 DA-A	60 DA-A	90 DA-A	30 DA-A	60 DA-A	90 DA-A
Trt-Eval Interval						

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code						
1	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	92 a	88 a	87 a	99 a	99 a	95 a
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
1	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
2	MATRIX	25	WG	0.125	lb ai/a	8	oz/a	E.SPRING	A	98 a	98 a	90 a	99 a	99 a	99 a
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
2	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
3	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	98 a	98 a	98 a	99 a	99 a	99 a
3	KARMEX	80	WG	2.4	lb ai/a	48	oz/a	E.SPRING	A						
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
3	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
4	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	94 a	95 a	97 a	99 a	94 a	96 a
4	PRINCEP	4	L	3.6	lb ai/a	3.6	qt/a	E.SPRING	A						
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
4	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
5	PRINCEP	4	L	3.6	lb ai/a	3.6	qt/a	E.SPRING	A	82 a	80 ab	80 a	98 b	33 b	42 b
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
5	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
6	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	99 a	99 a	99 a	99 a	99 a	98 a
6	KARMEX	80	WG	1.6	lb ai/a	32	oz/a	E.SPRING	A						
6	PRINCEP	4	L	1.8	lb ai/a	1.8	qt/a	E.SPRING	A						
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
6	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
7	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	99 a	99 a	98 a	99 a	99 a	99 a
7	SINBAR	80	WP	0.8	lb ai/a	16	oz/a	E.SPRING	A						
7	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
7	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
8	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	91 a	81 a	86 a	99 a	99 a	98 a
8	PROWL H2O	3.8	CS	1.9	lb ai/a	4	pt/a	E.SPRING	A						
8	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
8	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
9	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	91 a	95 a	80 a	99 a	99 a	98 a
9	SURFLAN	4	SL	4.0	lb ai/a	8	pt/a	E.SPRING	A						
9	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
9	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
10	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A	10 c	36 bc	33 bc	0 c	33 b	30 b
10	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
11	CHATEAU	51	WG	0.25	lb ai/a	7.84	oz/a	E.SPRING	A	41 b	36 bc	40 b	99 a	99 a	96 a
11	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A						
11	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A						
12	NONTREATED									0 c	0 c	0 c	0 c	0 b	0 c
LSD (P=.05)										24.0	43.8	39.0	0.6	37.6	23.7
Replicate F										2.209	0.441	0.266	1.000	2.374	3.250
Replicate Prob(F)										0.1335	0.6492	0.7690	0.3840	0.1165	0.0580
Treatment F										19.616	4.806	5.791	40042.004	7.686	18.198
Treatment Prob(F)										0.0001	0.0009	0.0003	0.0001	0.0001	0.0001

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

Rimsulfuron in Peaches.

Project Code: 07-Sirles Location: Alto Pass, IL
 Investigator: Bryan Young

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	ACCOS 5-20-07	ACCOS 6-19-07	ACCOS 7-19-07	ERICA 5-20-07	ERICA 6-19-07	ERICA 7-19-07	DIGSA 6-19-07	DIGSA 7-19-07
1	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	99 a	66 a	63 ab	99 a	99 a	98 ab	99 a	95 a
1	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A								
1	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A								
2	MATRIX	25	WG	0.125	lb ai/a	8	oz/a	E.SPRING	A	99 a	95 a	80 a	99 a	99 a	99 a	99 a	95 a
2	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A								
2	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A								
3	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	99 a	86 a	73 ab	99 a	99 a	99 a	99 a	99 a
3	KARMEX	80	WG	2.4	lb ai/a	48	oz/a	E.SPRING	A								
3	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A								
3	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A								
4	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	99 a	97 a	87 a	98 ab	99 a	99 a	99 a	95 a
4	PRINCEP	4	L	3.6	lb ai/a	3.6	qt/a	E.SPRING	A								
4	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A								
4	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A								
5	PRINCEP	4	L	3.6	lb ai/a	3.6	qt/a	E.SPRING	A	89 ab	79 a	37 bc	99 a	99 a	99 a	0 c	0 b
5	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A								
5	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A								
6	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	99 a	60 a	56 ab	98 ab	99 a	99 a	98 a	98 a
6	KARMEX	80	WG	1.6	lb ai/a	32	oz/a	E.SPRING	A								
6	PRINCEP	4	L	1.8	lb ai/a	1.8	qt/a	E.SPRING	A								
6	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A								
6	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A								
7	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	99 a	99 a	80 a	99 a	96 a	96 ab	99 a	99 a
7	SINBAR	80	WP	0.8	lb ai/a	16	oz/a	E.SPRING	A								
7	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A								
7	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A								
8	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	99 a	93 a	93 a	95 b	99 a	98 ab	95 b	93 a
8	PROWL H2O	3.8	CS	1.9	lb ai/a	4	pt/a	E.SPRING	A								
8	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A								
8	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A								
9	MATRIX	25	WG	0.0625	lb ai/a	4	oz/a	E.SPRING	A	99 a	91 a	71 ab	99 a	99 a	99 a	99 a	96 a
9	SURFLAN	4	SL	4.0	lb ai/a	8	pt/a	E.SPRING	A								
9	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A								
9	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A								
10	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A	66 b	66 a	56 ab	99 a	99 a	93 b	0 c	0 b
10	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A								
11	CHATEAU	51	WG	0.25	lb ai/a	7.84	oz/a	E.SPRING	A	99 a	98 a	86 a	98 ab	96 a	93 ab	99 a	95 a
11	GRAMOXONE INTEON	2	SL	0.75	lb ai/a	3	pt/a	E.SPRING	A								
11	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	E.SPRING	A								
12	NONTREATED									0 c	0 b	0 c	0 c	0 b	0 c	0 c	0 b
LSD (P=.05)										28.4	39.4	43.0	2.5	3.4	6.2	2.4	7.3
Replicate F										1.619	4.613	4.476	2.184	2.200	2.711	1.850	1.450
Replicate Prob(F)										0.2208	0.0212	0.0234	0.1363	0.1346	0.0886	0.1809	0.2562
Treatment F										9.033	4.352	3.137	1125.894	593.350	176.845	2975.070	300.753
Treatment Prob(F)										0.0001	0.0016	0.0108	0.0001	0.0001	0.0001	0.0001	0.0001

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

Trial Comments

1. Protocol: DuPont.
2. Ratings: CI/WC 30, 60, + 90 DAT.
3. Trees were entering 3rd leaf (3rd growing season).
4. Fruit not approved for consumption.
5. DA-A = Days after E.SPRING application.