

RIMSULFURON TANK-MIXES, 2010

Trial ID: P0510 Protocol ID: P0510
 Location: Montcalm Co. Study Director: Andy Chomas
 Project ID: Investigator: Wesley Everman

General Trial Information

Study Director: Andy Chomas
Investigator: Wesley Everman

Personnel

Study Director: Andy Chomas
Investigator: Wesley Everman

Crop Description

Crop 1: SOLTU Solanum tuberosum Potato
Variety: SNOWDEN
BBCH Scale: BPOT **Planting Date:** May-17-10
Rate, Unit: 1 S/FT
Row Spacing, Unit: 34 IN

Pest Description

Pest 1 Type: W **Code:** ANGR
Common Name: annual grass
Pest 2 Type: W **Code:** CHEAL Chenopodium album L.
Common Name: Lambsquarters, common
Pest 3 Type: W **Code:** AMARE Amaranthus retroflexus L.
Common Name: Pigweed, redroot

Site and Design

Plot Width, Unit: 9 FT **Site Type:** FIELD field
Plot Length, Unit: 20 FT
Plot Area, Unit: 180 FT² **Tillage Type:** CONTIL conventional-till
Replications: 3 **Study Design:** RACOB� Randomized Complete Block (RCB)

Trial Initiation Comments:

Spring Disk X3, Chisel, Field Cultivated. Cultivated on , Hilled on .

Field Prep./Maintenance:

Broadcast 200 lbs/A K-mag, 10 lbs/A Boron, 2 ton/A Chicken Manure. 5 gal/A 10-34-0, 23 gal/A 28%N at Plant, 100 lbs/A 46-0-0 Broadcast.

Soil Description

% OM: 1.5 **Texture:** LS loamy sand
pH: 5.8

Application Description

	A	B
Application Date:	May-17-10	Jul-6-10
Time of Day:	11:00 am	9:45 am
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	POST
Application Placement:	BROADC	BROADC
Air Temperature, Unit:	62 F	79 F
% Relative Humidity:	45	72
Wind Velocity, Unit:	10 MPH	3 MPH
Wind Direction:	NE	SW
Soil Temperature, Unit:	55 F	72 F
Soil Moisture:	5	3
% Cloud Cover:	90	10

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	SOLTU BPOT	SOLTU BPOT
Stage Scale Used:		BBCH
Stage Majority, Percent:		FLOWER
Height, Unit:		15 IN
Height Minimum, Maximum:		14 19

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Pest Stage At Each Application

	A		B	
Pest 1 Code, Type, Scale:	ANGR	W	ANGR	W
Stage Majority, Percent:			L19	
Stage Minimum, Percent:			L17	
Stage Maximum, Percent:			L26	
Height, Unit:			19	IN
Height Minimum, Maximum:			17	20
Pest 2 Code, Type, Scale:	CHEAL	W	CHEAL	W
Stage Majority, Percent:			L20	
Stage Minimum, Percent:			L18	
Stage Maximum, Percent:			L24	
Height, Unit:			26	IN
Height Minimum, Maximum:			17	32
Pest 3 Code, Type, Scale:	AMARE	W	AMARE	W
Stage Majority, Percent:			L21	
Stage Minimum, Percent:			L21	
Stage Maximum, Percent:			L25	
Height, Unit:			22	IN
Height Minimum, Maximum:			22	28

Application Equipment

	A		B	
Equipment Type:	BKPK		BKPK	
Operating Pressure, Unit:	30	PSI	30	PSI
Nozzle Type:	FF		FF	
Nozzle Size:	8003		8003	
Nozzle Spacing, Unit:	20	IN	20	IN
Boom Length, Unit:	100	IN	100	IN
Boom Height, Unit:	18	IN	34	IN
Ground Speed, Unit:	3.5	MPH	3.5	MPH
Carrier:	WATER		WATER	
Spray Volume, Unit:	20	gal/ac	20	gal/ac
Mix Size, Unit:	2	liters	2	liters

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Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Trt-Eval Interval	SOLTU			ANGR			CHEAL			AMARE		
						Jun-9-10 injury percent	Jul-6-10 injury percent	10 DA crack	Jul-6-10 control percent	AT POST	Jul-6-10 control percent	AT POST	Jul-6-10 control percent	AT POST	Jul-19-10 injury percent	14 DAPO	Jul-19-10 control percent
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Growth Stage	1	2	3	4	5	6	7	8	9			
1	Matrix	25 WG		0.023 lb ai/a	PRE	0	0	100	92	100	3	98	82	100			
1	Outlook	6 L		0.625 lb ai/a	PRE												
2	Matrix	25 WG		0.023 lb ai/a	PRE	0	0	98	70	100	10	90	97	98			
2	Authority	75 DG		0.19 lb ai/a	PRE												
3	Matrix	25 WG		0.023 lb ai/a	PRE	0	0	100	90	100	2	98	80	83			
3	Sencor	75 DF		0.38 lb ai/a	PRE												
4	Outlook	6 L		0.625 lb ai/a	PRE	0	0	100	73	87	7	100	73	90			
4	Matrix	25 WG		0.023 lb ai/a	POST												
4	Activator 90	100 L		0.25 % v/v	POST												
5	Authority	75 DG		0.19 lb ai/a	PRE	0	0	100	100	97	3	100	100	100			
5	Matrix	25 WG		0.023 lb ai/a	POST												
5	Activator 90	100 L		0.25 % v/v	POST												
6	Sencor	75 DF		0.38 lb ai/a	PRE	0	0	100	98	100	10	100	97	100			
6	Dual II Magnum	7.64 L		0.96 lb ai/a	PRE												
6	Matrix	25 WG		0.023 lb ai/a	POST												
6	Activator 90	100 L		0.25 % v/v	POST												
7	Matrix	25 WG		0.016 lb ai/a	POST	0	0	83	50	83	8	100	65	85			
7	Permit	75 DF		0.016 lb ai/a	POST												
7	Activator 90	100 L		0.25 % v/v	POST												
8	Matrix	25 WG		0.016 lb ai/a	POST	0	0	96	50	77	7	100	83	87			
8	Sencor	75 DF		0.25 lb ai/a	POST												
8	Activator 90	100 L		0.25 % v/v	POST												
9	Matrix	25 WG		0.023 lb ai/a	POST	0	0	100	57	100	0	100	68	88			
9	Activator 90	100 L		0.25 % v/v	POST												
10	Non-Treated					0	0	0	0	0	0	0	0	0			
LSD (P=.05)						0.0	0.0	15.9	36.3	22.8	6.8	6.1	16.5	15.1			
Standard Deviation						0.0	0.0	9.3	21.1	13.3	4.0	3.5	9.6	8.8			
CV						0.0	0.0	10.55	31.1	15.76	79.58	4.0	12.95	10.59			

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Pest Code	Crop Code	Rating Date	Rating Type	Rating Unit	Trt-Eval Interval	ANGR		CHEAL		AMARE		DIGSA		ECHCG		CHEAL		AMARE		
						SOLTU	SOLTU	SOLTU	SOLTU	SOLTU	SOLTU	SOLTU	SOLTU	SOLTU	SOLTU	SOLTU	SOLTU	SOLTU	SOLTU	SOLTU
						Aug-2-10	Aug-2-10	Aug-2-10	Aug-2-10	Aug-16-10	Aug-16-10	Aug-16-10	Aug-16-10	Aug-16-10	Aug-16-10	Aug-16-10	Aug-16-10	Aug-16-10	Aug-16-10	
						injury	control	control	control	injury	control	control	control	control	control	control	control	control	control	control
						percent	percent	percent	percent	percent	percent	percent	percent	percent	percent	percent	percent	percent	percent	percent
						28 DAPO	28 DAPO	28 DAPO	28 DAPO	42 DAPO	42 DAPO	42 DAPO	42 DAPO	42 DAPO	42 DAPO	42 DAPO	42 DAPO	42 DAPO	42 DAPO	42 DAPO
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Growth Stage	10	11	12	13	14	15	16	17	18						
1	Matrix	25	WG	0.023 lb ai/a	PRE	0	92	75	100	0	82	100	63	95						
1	Outlook	6	L	0.625 lb ai/a	PRE															
2	Matrix	25	WG	0.023 lb ai/a	PRE	3	82	97	100	0	77	93	93	83						
2	Authority	75	DG	0.19 lb ai/a	PRE															
3	Matrix	25	WG	0.023 lb ai/a	PRE	0	90	72	72	0	83	100	63	67						
3	Sencor	75	DF	0.38 lb ai/a	PRE															
4	Outlook	6	L	0.625 lb ai/a	PRE	2	100	75	98	0	85	97	55	95						
4	Matrix	25	WG	0.023 lb ai/a	POST															
4	Activator 90	100	L	0.25 % v/v	POST															
5	Authority	75	DG	0.19 lb ai/a	PRE	2	98	100	100	0	93	100	92	93						
5	Matrix	25	WG	0.023 lb ai/a	POST															
5	Activator 90	100	L	0.25 % v/v	POST															
6	Sencor	75	DF	0.38 lb ai/a	PRE	0	100	97	97	0	100	100	87	100						
6	Dual II Magnum	7.64	L	0.96 lb ai/a	PRE															
6	Matrix	25	WG	0.023 lb ai/a	POST															
6	Activator 90	100	L	0.25 % v/v	POST															
7	Matrix	25	WG	0.016 lb ai/a	POST	2	93	63	97	0	85	97	53	93						
7	Permit	75	DF	0.016 lb ai/a	POST															
7	Activator 90	100	L	0.25 % v/v	POST															
8	Matrix	25	WG	0.016 lb ai/a	POST	0	100	72	92	0	97	100	68	83						
8	Sencor	75	DF	0.25 lb ai/a	POST															
8	Activator 90	100	L	0.25 % v/v	POST															
9	Matrix	25	WG	0.023 lb ai/a	POST	0	100	63	93	0	100	100	53	100						
9	Activator 90	100	L	0.25 % v/v	POST															
10	Non-Treated					0	0	0	0	0	0	0	0	0						
LSD (P=.05)						4.2	13.0	16.1	14.3	0.0	18.0	8.0	21.2	21.8						
Standard Deviation						2.5	7.6	9.4	8.3	0.0	10.5	4.7	12.3	12.7						
CV						296.65	8.88	13.19	9.84	0.0	13.06	5.27	19.62	15.71						

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Pest Code													
Crop Code					SOLTU	SOLTU	SOLTU	SOLTU	SOLTU	SOLTU	SOLTU	SOLTU	SOLTU
Rating Date					Sep-17-10	Sep-17-10	Sep-17-10	Sep-17-10	Sep-17-10	Sep-17-10	Sep-17-10	Sep-17-10	Sep-17-10
Rating Type					< 1 7/8"	< 1 7/8"	> 3 1/4"	> 3 1/4"	PickOut	PickOut	Grade A	Grade A	
Rating Unit					kilogram	count	kilogram	count	kilogram	count	kilogram	count	
Trt-Eval Interval					HARVEST	HARVEST	HARVEST	HARVEST	HARVEST	HARVEST	HARVEST	HARVEST	

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Growth Stage	19	20	21	22	23	24	25	26
1	Matrix	25	WG	0.023	lb ai/a	PRE	1.6133	36	0.705	2			14.438	123
1	Outlook	6	L	0.625	lb ai/a	PRE								
2	Matrix	25	WG	0.023	lb ai/a	PRE	1.9533	43	1.243	4			17.072	136
2	Authority	75	DG	0.19	lb ai/a	PRE								
3	Matrix	25	WG	0.023	lb ai/a	PRE	1.6250	36	0.773	3			17.577	144
3	Sencor	75	DF	0.38	lb ai/a	PRE								
4	Outlook	6	L	0.625	lb ai/a	PRE	1.7050	48	1.110	3			15.627	139
4	Matrix	25	WG	0.023	lb ai/a	POST								
4	Activator 90	100	L	0.25	% v/v	POST								
5	Authority	75	DG	0.19	lb ai/a	PRE	1.7400	40	0.345	1			19.448	144
5	Matrix	25	WG	0.023	lb ai/a	POST								
5	Activator 90	100	L	0.25	% v/v	POST								
6	Sencor	75	DF	0.38	lb ai/a	PRE	1.9117	42	0.910	3			19.610	164
6	Dual II Magnum	7.64	L	0.96	lb ai/a	PRE								
6	Matrix	25	WG	0.023	lb ai/a	POST								
6	Activator 90	100	L	0.25	% v/v	POST								
7	Matrix	25	WG	0.016	lb ai/a	POST	2.3037	48	0.775	2	0.600	1	15.498	126
7	Permit	75	DF	0.016	lb ai/a	POST								
7	Activator 90	100	L	0.25	% v/v	POST								
8	Matrix	25	WG	0.016	lb ai/a	POST	2.0717	49	0.710	2	0.193	1	16.703	134
8	Sencor	75	DF	0.25	lb ai/a	POST								
8	Activator 90	100	L	0.25	% v/v	POST								
9	Matrix	25	WG	0.023	lb ai/a	POST	1.7317	38	0.628	2			15.782	127
9	Activator 90	100	L	0.25	% v/v	POST								
10	Non-Treated						2.1983	51					11.915	115
	LSD (P=.05)						0.93681	19.8	1.2665	3.2	.	.	2.8010	23.4
	Standard Deviation						0.54610	11.5	0.5587	1.4	.	.	1.6328	13.6
	CV						28.97	26.69	69.87	59.97	.	.	9.98	10.08

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Pest Code								
Crop Code					SOLTU	SOLTU	SOLTU	SOLTU
Rating Date					Sep-17-10	Sep-17-10	Sep-17-10	Sep-17-10
Rating Type					SPEC. GRAV.	HH	VD	BC
Rating Unit						0-10	0-10	0-10
Trt-Eval Interval					HARVEST	HARVEST	HARVEST	HARVEST

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Growth Stage	29	30	31	32
1	Matrix	25	WG	0.023	lb ai/a	PRE	1.078		3	1
1	Outlook	6	L	0.625	lb ai/a	PRE				
2	Matrix	25	WG	0.023	lb ai/a	PRE	1.079		3	
2	Authority	75	DG	0.19	lb ai/a	PRE				
3	Matrix	25	WG	0.023	lb ai/a	PRE	1.078		5	
3	Sencor	75	DF	0.38	lb ai/a	PRE				
4	Outlook	6	L	0.625	lb ai/a	PRE	1.080	1	3	
4	Matrix	25	WG	0.023	lb ai/a	POST				
4	Activator 90	100	L	0.25	% v/v	POST				
5	Authority	75	DG	0.19	lb ai/a	PRE	1.079	1	3	1
5	Matrix	25	WG	0.023	lb ai/a	POST				
5	Activator 90	100	L	0.25	% v/v	POST				
6	Sencor	75	DF	0.38	lb ai/a	PRE	1.079	1	5	1
6	Dual II Magnum	7.64	L	0.96	lb ai/a	PRE				
6	Matrix	25	WG	0.023	lb ai/a	POST				
6	Activator 90	100	L	0.25	% v/v	POST				
7	Matrix	25	WG	0.016	lb ai/a	POST	1.080		4	
7	Permit	75	DF	0.016	lb ai/a	POST				
7	Activator 90	100	L	0.25	% v/v	POST				
8	Matrix	25	WG	0.016	lb ai/a	POST	0.719		3	
8	Sencor	75	DF	0.25	lb ai/a	POST				
8	Activator 90	100	L	0.25	% v/v	POST				
9	Matrix	25	WG	0.023	lb ai/a	POST	1.080		3	
9	Activator 90	100	L	0.25	% v/v	POST				
10	Non-Treated						1.078		1	2
	LSD (P=.05)						0.3383	.	3.6	.
	Standard Deviation						0.1972	.	2.1	.
	CV						18.91	.	64.12	.