

Herbicide Effect on Growth Cracks in Production Potato, 2009

Trial ID: P0409 Study Dir.: Andy Chomas
 Conducted: MONTCALM RSCH FAM Investigator: Christy Sprague

Date Planted: 5/11/09 Row Spacing: 34 IN
 Variety: FL 2053 No. of Reps: 4
 Population: 1/FT % OM: 1.5
 Soil Type: Loamy Sand pH: 5.6
 Plot Size: 10 X 25 FT Design: FACTORIAL

Tillage: Spring Disc 3X. Spring Chisel. Field Cultivated.
 Fertilizer: 20 gal/A of 19-17-0, 12 gal/A of 10-34-0 in Row. 23 gal/A of 28% N at Cultivation. 23 gal/A of 28%N at Hilling. 100 lbs/A of 46-0-0 Broadcast.

Application Description

	A	B
Application Timing:	PRE	POST
Date Treated:	5/11/09	7/8/09
Time Treated:	2:30 PM	9:20 AM
% Cloud Cover:	60	40
Air Temp., Unit:	59 F	79 F
% Relative Humidity:	37	53
Wind Speed/Unit/Dir:	7 mph W	2 mph S
Soil Temp., Unit:	68 F	64 F
Soil/Leaf Surface M:	4	4
Soil Moist (1=w 5=d):	4	4

Crop Stage at Each Application

	A	B
Crop Name:	SOLTU	SOLTU
Height (In.):		22

Weed Stage at Each Application

	A	B
Weed 1 Name:	ANGR	ANGR
Height (In.):		.25-1(1)
Stage (L):		1-3(1)
Weed 2 Name:	CHEAL	CHEAL
Height (In.):		.25-2(1)
Stage (L):		Cot-2(2)
Weed 3 Name:	AMARE	AMARE
Height (In.):		.25-2(1)
Stage (L):		Cot-2(2)
Weed 4 Name:	AMBEL	AMBEL
Weed 5 Name:	ABUTH	ABUTH

Weed Density (plants/sq. ft.)

	1
Date:	7/8/09
Weed Name:	ANGR
Density:	16
Date:	7/8/09
Weed Name:	CHEAL
Density:	20
Date:	7/8/09
Weed Name:	AMARE
Density:	8
Date:	7/8/09
Weed Name:	AMBEL
Density:	0
Date:	7/8/09
Weed Name:	ABUTH
Density:	0

Application Equipment

Appl	Sprayer Type	Speed MPH	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Nozzle Width	Boom	GPA	Carrier	PSI
A	BKPK	3.5	FF	8003	18"	20"	120"	20	H20		30
B	BKPK	3.5	FF	8003	24"	20"	100"	20	H20		30

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Weed Code

Crop Code

Rating Data Type

Rating Unit

Rating Date

Trt-Eval Interval

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	1	2	3	4	5	6	7	8	9	10
1	Dual Magnum	7.62	EC	1.33	pt/a	PRE	2.4075	50	0.5800	5	2	0.0000	0	0	0	14.2175
1	Sencor	75	DF	0.33	lb/a	PRE										
1	Prowl H2O	3.8	L	0.5	pt/a	PRE										
1	Sencor	75	DF	0.33	lb/a	POST										
1	Activator 90		L	0.25	% v/v	POST										
2	Dual Magnum	7.62	EC	1.33	pt/a	PRE	2.3900	50	1.0988	9	2	0.1750	0	0	0	16.3825
2	Sencor	75	DF	0.33	lb/a	PRE										
2	Prowl H2O	3.8	L	0.5	pt/a	PRE										
2	Matrix	25	WG	1	oz/a	POST										
2	Activator 90		L	0.25	% v/v	POST										
3	Dual Magnum	7.62	EC	1.33	pt/a	PRE	2.5613	53	0.8113	6	2	0.0000	0	0	0	15.2188
3	Sencor	75	DF	0.33	lb/a	PRE										
3	Prowl H2O	3.8	L	0.5	pt/a	PRE										
3	Sencor	75	DF	0.33	lb/a	POST										
3	Matrix	25	WG	1	oz/a	POST										
3	Activator 90		L	0.25	% v/v	POST										
4	Dual Magnum	7.62	EC	1.33	pt/a	PRE	2.1275	43	0.7363	5	2	0.0388	0	0	0	18.3188
4	Sencor	75	DF	0.33	lb/a	PRE										
4	Prowl H2O	3.8	L	0.5	pt/a	PRE										
4	Non-Treated					POST										
5	Dual Magnum	7.62	EC	1.33	pt/a	PRE	1.8475	38	0.5813	4	2	0.0000	0	0	0	15.8075
5	Sencor	75	DF	0.33	lb/a	PRE										
5	Lorox	50	DF	1	lb/a	PRE										
5	Sencor	75	DF	0.33	lb/a	POST										
5	Activator 90		L	0.25	% v/v	POST										
6	Dual Magnum	7.62	EC	1.33	pt/a	PRE	2.3838	53	0.9338	6	2	0.0550	0	0	0	19.2375
6	Sencor	75	DF	0.33	lb/a	PRE										
6	Lorox	50	DF	1	lb/a	PRE										
6	Matrix	25	WG	1	oz/a	POST										
6	Activator 90		L	0.25	% v/v	POST										
7	Dual Magnum	7.62	EC	1.33	pt/a	PRE	1.9100	38	0.4838	4	2	0.0000	0	0	0	14.5938
7	Sencor	75	DF	0.33	lb/a	PRE										
7	Lorox	50	DF	1	lb/a	PRE										
7	Sencor	75	DF	0.33	lb/a	POST										
7	Matrix	25	WG	1	oz/a	POST										
7	Activator 90		L	0.25	% v/v	POST										
8	Dual Magnum	7.62	EC	1.33	pt/a	PRE	2.1638	42	0.7013	5	2	0.0000	0	0	0	19.2313
8	Sencor	75	DF	0.33	lb/a	PRE										
8	Lorox	50	DF	1	lb/a	PRE										
8	Non-Treated					POST										
9	Matrix	25	WG	1	oz/a	POST	2.3525	44	1.0350	6	2	0.0000	0	0	1	19.0338
9	Activator 90		L	0.25	% v/v	POST										
10	Handweeded						2.4688	53	1.1125	9	2	0.0675	0	0	0	17.8750
LSD (P=.05)							1.11595	21.8	0.78651	5.2	0.8	0.18335	0.4	0.3	0.7	4.22467
Standard Deviation							0.76910	15.0	0.54206	3.6	0.6	0.12636	0.3	0.2	0.5	2.91159
CV							34.01	32.47	67.14	61.24	28.82	375.8	298.14	632.46	632.46	17.14

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Rating Date

Trt-Eval Interval

SOLTU yield CWT	SOLTU Grade A count	SOLTU dry	SOLTU wet	SOLTU SPEC. GRAV	SOLTU HH	SOLTU VD	SOLTU IBS
8/27/09	8/27/09	8/27/09	8/27/09	8/27/09	8/27/09	8/27/09	8/27/09
HARVEST	HARVEST	HARVEST	HARVEST	HARVEST	HARVEST	HARVEST	HARVEST

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	11	12	13	14	15	16	17	18
1	Dual Magnum	7.62	EC	1.33	pt/a	PRE	192.8	121.3	9.6288	0.83963	1.0956200	0	0	0
1	Sencor	75	DF	0.33	lb/a	PRE								
1	Prowl H2O	3.8	L	0.5	pt/a	PRE								
1	Sencor	75	DF	0.33	lb/a	POST								
1	Activator 90		L	0.25	% v/v	POST								
2	Dual Magnum	7.62	EC	1.33	pt/a	PRE	222.1	141.3	8.6663	0.76688	1.0971104	2	0	0
2	Sencor	75	DF	0.33	lb/a	PRE								
2	Prowl H2O	3.8	L	0.5	pt/a	PRE								
2	Matrix	25	WG	1	oz/a	POST								
2	Activator 90		L	0.25	% v/v	POST								
3	Dual Magnum	7.62	EC	1.33	pt/a	PRE	206.4	138.5	9.2813	0.80600	1.0951620	0	0	0
3	Sencor	75	DF	0.33	lb/a	PRE								
3	Prowl H2O	3.8	L	0.5	pt/a	PRE								
3	Sencor	75	DF	0.33	lb/a	POST								
3	Matrix	25	WG	1	oz/a	POST								
3	Activator 90		L	0.25	% v/v	POST								
4	Dual Magnum	7.62	EC	1.33	pt/a	PRE	248.4	155.0	8.6025	0.76388	1.0973925	1	0	0
4	Sencor	75	DF	0.33	lb/a	PRE								
4	Prowl H2O	3.8	L	0.5	pt/a	PRE								
4	Non-Treated					POST								
5	Dual Magnum	7.62	EC	1.33	pt/a	PRE	214.3	136.5	9.0750	0.80050	1.0968406	0	0	0
5	Sencor	75	DF	0.33	lb/a	PRE								
5	Lorox	50	DF	1	lb/a	PRE								
5	Sencor	75	DF	0.33	lb/a	POST								
5	Activator 90		L	0.25	% v/v	POST								
6	Dual Magnum	7.62	EC	1.33	pt/a	PRE	260.8	164.8	10.4075	0.89650	1.0938526	1	1	0
6	Sencor	75	DF	0.33	lb/a	PRE								
6	Lorox	50	DF	1	lb/a	PRE								
6	Matrix	25	WG	1	oz/a	POST								
6	Activator 90		L	0.25	% v/v	POST								
7	Dual Magnum	7.62	EC	1.33	pt/a	PRE	197.9	125.3	8.1488	0.70713	1.0950276	1	0	0
7	Sencor	75	DF	0.33	lb/a	PRE								
7	Lorox	50	DF	1	lb/a	PRE								
7	Sencor	75	DF	0.33	lb/a	POST								
7	Matrix	25	WG	1	oz/a	POST								
7	Activator 90		L	0.25	% v/v	POST								
8	Dual Magnum	7.62	EC	1.33	pt/a	PRE	260.8	162.0	9.5938	0.84525	1.0965859	0	0	0
8	Sencor	75	DF	0.33	lb/a	PRE								
8	Lorox	50	DF	1	lb/a	PRE								
8	Non-Treated					POST								
9	Matrix	25	WG	1	oz/a	POST	258.1	160.5	9.7225	0.85213	1.0958688	1	0	0
9	Activator 90		L	0.25	% v/v	POST								
10	Handweeded						242.4	147.0	9.6038	0.84550	1.0965496	1	0	0
LSD (P=.05)							57.28	35.33	1.32164	0.128576	0.00361148	2.3	0.6	0.2
Standard Deviation							39.48	24.35	0.91086	0.088613	0.00248899	1.6	0.4	0.2
CV							17.14	16.77	9.82	10.91	0.23	228.7	380.06	632.46

ARM Action Codes

TY2 = 13.55932*[10]

T1 = ([C13])/([C13]-[C14])