

Sweet Potato Herbicide Efficacy Evaluation - Hancock - 2012
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Location: Hancock Ag Research Station: R-1 Pivot

Plot Information:

Soil Type: Plainfield Loamy Sand; pH 6.8; OM 1.0%.
 Potato Cultivar: Sweet Potato slips
 Date Planted: 5/30/12
 Row Spacing: 36 Inches, 2 rows/plot
 Plant Spacing: 12 inches
 Date Harvested: 9/20/12
 Plot Size-Design: 12' x 20', 3 Reps
 Rating Dates: 6/13, 6/20, 7/5, 8/6

Application Equipment: Tractor mounted air pressure sprayer. GPA 20, PSI 27, MPH 3.3,
 Nozzle - XR8003VS, Nozzle spacing 18", Height 18".

Herbicide Application Data:

Date	5/30/12	5/30/12	6/29/12
Time	8:00 am	12:00 pm	10:30 am
Treatment	PRETRA	POSTRA	PO1
Soil Moisture			
SF	dry	dry	dry
1"	moist	moist	moist
3"	moist	moist	moist
Soil Temp (F°)			
SF	66.4	70.9	95.0
3"	63.4	67.1	83.3
Air Temp (F°)	57.1	60.0	83.3
Wind	6.0 W	2.2 W	1.4 NW
%RH	53.8%	48.7%	43.1%
Sky Condition	100% clouds	65% clouds	50% clouds
Crop Stage	pre	3"	vining
Weed & Size	pre	-----	COLQ 4"
	-----	-----	CORW 5"
	-----	-----	WIBU 4"
	-----	-----	YEFT 3"
	-----	-----	

Weed Abbreviations:

COLQ = Common Lambsquarters
 CORW = Common Ragweed
 WIBU = Wild Buckwheat
 YEFT = Yellow Foxtail

Plot Weed Density:

moderate
 high
 high
 moderate

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2012 Field Season Precipitation/Irrigation (R-1 Pivot)

<u>Date</u>	<u>Type</u>	<u>Amount (inches)</u>	<u>Date</u>	<u>Type</u>	<u>Amount (inches)</u>
29-May	Precipitation	0.42	23-Jul	Irrigation	0.6
30-May	Irrigation	0.5	24-Jul	Precipitation	0.08
1-Jun	Irrigation	0.5	25-Jul	Irrigation	0.5
3-Jun	Irrigation	0.5	25-Jul	Precipitation	0.06
5-Jun	Irrigation	0.5	26-Jul	Precipitation	0.06
6-Jun	Irrigation	0.25	27-Jul	Irrigation	0.5
7-Jun	Irrigation	0.25	27-Jul	Precipitation	0.15
8-Jun	Irrigation	0.25	29-Jul	Irrigation	0.5
9-Jun	Irrigation	0.25	31-Jul	Irrigation	0.5
9-Jun	Precipitation	0.1	2-Aug	Irrigation	0.5
10-Jun	Irrigation	0.5	3-Aug	Precipitation	0.03
14-Jun	Irrigation	0.5	4-Aug	Irrigation	0.5
16-Jun	Irrigation	0.5	4-Aug	Precipitation	0.05
17-Jun	Precipitation	0.15	6-Aug	Irrigation	0.5
18-Jun	Precipitation	0.56	8-Aug	Irrigation	0.5
20-Jun	Irrigation	0.5	9-Aug	Precipitation	0.68
21-Jun	Precipitation	0.92	10-Aug	Precipitation	0.4
23-Jun	Irrigation	0.5	13-Aug	Irrigation	0.5
25-Jun	Irrigation	0.5	16-Aug	Precipitation	1.07
27-Jun	Irrigation	0.75	20-Aug	Irrigation	0.5
29-Jun	Irrigation	0.75	23-Aug	Irrigation	0.5
1-Jul	Irrigation	0.5	26-Aug	Precipitation	0.66
3-Jul	Irrigation	0.75	27-Aug	Precipitation	0.04
3-Jul	Precipitation	0.04	31-Aug	Irrigation	0.5
5-Jul	Irrigation	0.75	2-Sep	Irrigation	0.5
7-Jul	Irrigation	0.75	4-Sep	Irrigation	0.5
9-Jul	Irrigation	0.6	7-Sep	Irrigation	0.5
11-Jul	Irrigation	0.75	7-Sep	Precipitation	0.07
13-Jul	Irrigation	0.5	8-Sep	Precipitation	0.2
15-Jul	Irrigation	0.5	9-Sep	Precipitation	0.08
15-Jul	Precipitation	0.07	10-Sep	Irrigation	0.5
17-Jul	Irrigation	0.75	13-Sep	Precipitation	0.1
19-Jul	Irrigation	0.5	18-Sep	Precipitation	0.18
19-Jul	Precipitation	0.17	19-Sep	Precipitation	0.05
21-Jul	Irrigation	0.6	20-Sep	Precipitation	0.02

Maintenance Fertilizer & Pesticides (R-1 Pivot)

<u>Date</u>	<u>Product</u>	<u>Rate</u>	<u>Unit</u>
9-Apr	0-0-60	400	lb/A
9-Apr	0-0-0-17S-210	500	lb/A

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Trt No.	Treatment Name	Rate	Unit	Grow Stg	% Weed Control 6/13/12			
					COLQ	CORW	WIBU	YEFT
1	Handweeded Check				92.7 b	94.3 a	96 a	92 ab
2	Valor SX	2.5	OZ/A	PRETRA	100 a	100 a	100 a	100 a
	Command	2.5	PT/A	POSTRA				
3	Devrinol	2	LB/A	POSTRA	100 a	100 a	100 a	100 a
	Command	2.5	PT/A	POSTRA				
4	Dual Magnum	1	PT/A	POSTRA	100 a	100 a	100 a	100 a
	Sandea	0.047	LB A/A	POSTRA				
5	Dual Magnum	1	PT/A	POSTRA	93.3 b	92.7 a	95 a	86.7 b
	Sandea	0.047	LB A/A	POST				
6	Dual Magnum	1	PT/A	POSTRA	100 a	100 a	100 a	100 a
	Lorox	0.5	LB A/A	POSTRA				
7	Dual Magnum	1	PT/A	POSTRA	98.3 a	99.3 a	100 a	100 a
	Lorox	0.5	LB A/A	POST				
8	Dual Magnum	1	PT/A	POSTRA	100 a	99.3 a	100 a	100 a
	Impact	0.75	OZ/A	POST				
LSD (P=.05)					3.97	5.79	4.57	9.27

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

Trt No.	Treatment Name	Rate	Unit	Grow Stg	% Injury 6/20/12	% Weed Control 6/20/12			
						COLQ	CORW	WIBU	YEFT
1	Handweeded Check				0 a	100 a	100 a	100 a	100 a
2	Valor SX	2.5	OZ/A	PRETRA	0 a	100 a	100 a	100 a	100 a
	Command	2.5	PT/A	POSTRA					
3	Devrinol	2	LB/A	POSTRA	0 a	100 a	100 a	100 a	100 a
	Command	2.5	PT/A	POSTRA					
4	Dual Magnum	1	PT/A	POSTRA	0 a	100 a	100 a	100 a	100 a
	Sandea	0.047	LB A/A	POSTRA					
5	Dual Magnum	1	PT/A	POSTRA	0 a	13.3 b	43.3 c	68.3 a	43.3 b
	Sandea	0.047	LB A/A	POST					
6	Dual Magnum	1	PT/A	POSTRA	0 a	100 a	100 a	100 a	100 a
	Lorox	0.5	LB A/A	POSTRA					
7	Dual Magnum	1	PT/A	POSTRA	0 a	97.7 a	90 b	100 a	98.3 a
	Lorox	0.5	LB A/A	POST					
8	Dual Magnum	1	PT/A	POSTRA	0 a	95.3 a	88.3 b	100 a	93.3 a
	Impact	0.75	OZ/A	POST					
LSD (P=.05)					0.00	5.13	9.06	31.32	8.68

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

Note: Research results only. Some treatments in this trial are not currently registered on the crop

Sweet Potato Herbicide Efficacy - Hancock, WI - 2012

Trt No.	Treatment Name	Rate	Unit	Grow Stg	% Injury 7/5/12	% Weed Control 7/5/12			
						COLQ	CORW	WIBU	YEFT
1	Handweeded Check				0 c	100 a	100 a	100 a	100 a
2	Valor SX	2.5 OZ/A		PRETRA	0 c	100 a	100 a	100 a	100 a
	Command	2.5 PT/A		POSTRA					
3	Devrinol	2 LB/A		POSTRA	0 c	99.3 a	100 a	100 a	100 a
	Command	2.5 PT/A		POSTRA					
4	Dual Magnum	1 PT/A		POSTRA	0 c	98.7 a	100 a	100 a	98.7 a
	Sandea	0.047 LB A/A		POSTRA					
5	Dual Magnum	1 PT/A		POSTRA	11.7 a	30 c	88.3 c	96.7 a	98.3 a
	Sandea	0.047 LB A/A		POST					
6	Dual Magnum	1 PT/A		POSTRA	0 c	98.7 a	98.7 ab	99.3 a	98.7 a
	Lorox	0.5 LB A/A		POSTRA					
7	Dual Magnum	1 PT/A		POSTRA	0 c	100 a	99.3 ab	100 a	97.7 a
	Lorox	0.5 LB A/A		POST					
8	Dual Magnum	1 PT/A		POSTRA	3.3 b	88.3 b	94.3 b	96.7 a	97.7 a
	Impact	0.75 OZ/A		POST					
LSD (P=.05)					1.91	4.89	5.22	4.24	3.05

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

Trt No.	Treatment Name	Rate	Unit	Grow Stg	% Injury 8/6/12	% Weed Control 8/6/12			
						COLQ	CORW	WIBU	YEFT
1	Handweeded Check				0 a	80 b	81.7 a	100 a	70 ab
2	Valor SX	2.5 OZ/A		PRETRA	0 a	99.3 a	100 a	100 a	100 a
	Command	2.5 PT/A		POSTRA					
3	Devrinol	2 LB/A		POSTRA	0 a	97.7 a	96.7 a	100 a	100 a
	Command	2.5 PT/A		POSTRA					
4	Dual Magnum	1 PT/A		POSTRA	0 a	53.3 c	76.7 a	100 a	75 ab
	Sandea	0.047 LB A/A		POSTRA					
5	Dual Magnum	1 PT/A		POSTRA	0 a	0 d	86.7 a	56.7 a	90 ab
	Sandea	0.047 LB A/A		POST					
6	Dual Magnum	1 PT/A		POSTRA	0 a	95 ab	85 a	100 a	91.7 ab
	Lorox	0.5 LB A/A		POSTRA					
7	Dual Magnum	1 PT/A		POSTRA	0 a	96.7 a	78.3 a	100 a	61.7 b
	Lorox	0.5 LB A/A		POST					
8	Dual Magnum	1 PT/A		POSTRA	0 a	1.7 d	85 a	80 a	30 c
	Impact	0.75 OZ/A		POST					
LSD (P=.05)					0.00	16.66	20.41	36.58	31.14

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Trt No.	Treatment Name	Rate	Unit	Grow Stg	% Control 8/6/12	Yield 9/20/12
					LACG	cwt/A
1	Handweeded Check				96.7 a	402.93 ab
2	Valor SX	2.5	OZ/A	PRETRA	100 a	375.95 b
	Command	2.5	PT/A	POSTRA		
3	Devrinol	2	LB/A	POSTRA	100 a	458.23 a
	Command	2.5	PT/A	POSTRA		
4	Dual Magnum	1	PT/A	POSTRA	96.7 a	89.30 e
	Sandea	0.047	LB A/A	POSTRA		
5	Dual Magnum	1	PT/A	POSTRA	93.3 a	27.71 e
	Sandea	0.047	LB A/A	POST		
6	Dual Magnum	1	PT/A	POSTRA	100 a	252.65 c
	Lorox	0.5	LB A/A	POSTRA		
7	Dual Magnum	1	PT/A	POSTRA	93.3 a	299.60 c
	Lorox	0.5	LB A/A	POST		
8	Dual Magnum	1	PT/A	POSTRA	70 a	173.39 d
	Impact	0.75	OZ/A	POST		
LSD (P=.05)					31.95	65.479

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

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