

Pickling Cucumber Herbicide Efficacy Trial - Arlington, WI - 2012
 Jed B. Colquhoun / Daniel J. Heider / Richard A. Rittmeyer

Location: Arlington Ag Research Station - Horticulture Farm, Field 616

Plot Information:

Soil Type: Plano Silt Loam; pH 6.8; OM 3.6%.
 Variety: 'Journey' - Seminis Seed Co.
 Date Planted: 6/6/12
 Plant Spacing: 12 inches
 Date Harvested: 7/18, 7/26, 8/2
 Plot Size-Design: 6' x 30', 3 Reps
 Rating Dates: 6/25, 7/11

Application Equipment: CO2 backpack sprayer. GPA 20, PSI 27, MPH 3.3
 Nozzle - XR8003VS, Nozzle spacing 18", Height 18".

Incorporation Equipment: N/A

Herbicide Application Data:

Date	6/6/12	7/3/12	
Time	10:45 am	12:30 pm	
Treatment	PRE	POST	
Soil Moisture			
SF	dry	dry	
1"	moist	dry	
3"	moist	moist	
Soil Temp (F°)			
SF	88.7	104.2	
2"	72.5	88.7	
4"	69.1	85.5	
Air Temp (F°)	76.0	90.2	
Wind		2-6 S	
%RH	42.3%	56.0%	
Sky Condition	0% clouds	0% clouds	
Crop Stage	PRE	Post	

Comments: Herbicides applied post-emergence were very injurious to cucumbers and led to severe yield reduction. Pre-emergent herbicides, combined with Curbit herbicide, resulted in fruit counts and total yields similar to the handweeded check. In 2011 and 2012, V10142 and Spartan (neither are registered in cucumbers) applied pre-emergence resulted in excellent weed control with minimal or no injury.

Fertilization and other pesticides:

Fall 2011 - dairy replacement pack manure, 160 lb N/A.

Irrigation: As needed

Weed Abbreviations:

COLQ = Common Lambsquarters
 RRPW = Redroot Pigweed
 COPU = Common Purslane
 VELE = Velvetleaf

Pickling Cucumber Herbicide Efficacy - Arlington, WI - 2012

Trt No.	Treatment Name	Rate	Unit	Appl. Timing	6/25/12		% Weed Control 6/25/12			
					% Injury	Stand Ct.	COLQ	RRPW	COPU	VELE
1	Curbit V10142	3.5	PT/A	PRE	6.7 b	25.3 a	100 a	100 a	100 a	96.7 a
2	Curbit Matrix	3.5	PT/A	PRE	16.7 a	25.3 a	98.3 a	95 a	91.7 b	96.7 a
3	Curbit Spartan	3.5	PT/A	PRE	0 b	27 a	100 a	91.7 a	93.3 b	95 a
4	Curbit Lorox	3.5	PT/A	PRE	3.3 b	27 a	80 b	43.3 b	91.7 b	95 a
5	Curbit Matrix	3.5	PT/A	PRE	3.3 b	25.3 a	80 b	50 b	85 c	93.3 a
6	Curbit Lorox	3.5	PT/A	PRE	0 b	29.7 a	86.7 ab	70 ab	93.3 b	95 a
7	Curbit Lorox	3.5	PT/A	POST	0 b	29.7 a	86.7 ab	75 ab	83.3 c	98.3 a
8	Handweeded Check	3.5	PT/A	PRE	0 b	27.7 a	100 a	100 a	100 a	100 a
LSD (P=.05)					9.26	4.21	13.58	35.60	6.08	5.93

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 this crop.

Pickling Cucumber Herbicide Efficacy - Arlington, WI - 2012

Trt No.	Treatment Name	Rate	Unit	Appl. Timing	7/11/12	% Weed Control 7/11/12			
					% Injury	COLQ	RRPW	COPU	VELE
1	Curbit V10142	3.5	PT/A	PRE	0 b	96.7 a	91.7 ab	95 a	91.7 a
2	Curbit Matrix	3.5	PT/A	PRE	0 b	91.7 a	88.3 b	88.3 a	93.3 a
3	Curbit Spartan	3.5	PT/A	PRE	0 b	93.3 a	56.7 c	51.7 b	83.3 a
4	Curbit Lorox	3.5	PT/A	PRE	0 b	26.7 b	0 d	20 bcd	58.3 a
5	Curbit Matrix	3.5	PT/A	PRE	23.3 a	0 b	10 d	3.3 d	33.3 a
6	Curbit Lorox	3.5	PT/A	PRE	30 a	0 b	6.7 d	40 bc	58.3 a
7	Curbit	3.5	PT/A	PRE	0 b	30 b	0 d	6.7 cd	61.7 a
8	Handweeded Check				0 b	100 a	100 a	100 a	100 a
LSD (P=.05)					6.76	32.60	10.81	34.86	62.77

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 this crop.

Pickling Cucumber Herbicide Efficacy - Arlington, WI - 2012

Trt No.	Treatment Name	Rate Unit	Appl. Timing	7/18/2012 Yield		7/26/2012 Yield		8/2/2012 Yield	
				# fruit/A	lb/A	# fruit/A	lb/A	# fruit/A	lb/A
1	Curbit V10142	3.5 PT/A	PRE	15568.7 ab	1360.8 abc	29120.7 a	4235 b	37752 a	9984.9 a
		0.4 LB A/A	PRE						
2	Curbit Matrix	3.5 PT/A	PRE	7582.7 c	677.6 d	20650.7 b	2768.5 c	25490.7 b	6765.5 b
		0.8 OZ/A	PRE						
3	Curbit Spartan	3.5 PT/A	PRE	15246.0 ab	1644.0 ab	18876.0 b	3227.5 bc	19763.3 bc	5468.4 bc
		2 OZ/A	PRE						
4	Curbit Lorox	3.5 PT/A	PRE	7905.3 c	785.7 cd	4678.7 c	716.3 d	9034.7 c	2184.5 d
		0.5 LB/A	PRE						
5	Curbit Matrix	3.5 PT/A	PRE	13229.3 bc	1696.4 ab	7421.3 c	1051.1 d	15488 bc	3664.7 cd
		0.8 OZ/A	POST						
6	Curbit Lorox	3.5 PT/A	PRE	968 d	50.82 e	7986.0 c	1110.8 d	13390.7 c	2925.0 cd
		0.5 LB/A	POST						
7	Curbit	3.5 PT/A	PRE	10567.3 bc	1170.5 bcd	10406.0 c	1421.3 d	13310 c	3816.3 bcd
8	Handweeded Check			20731.3 a	1794.8 a	34848.0 a	5407.9 a	44931.3 a	11047.3 a
LSD (P=.05)				5812.07	604.62	6459.97	1084.23	11151.52	3064.08

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 this crop.