RADISH HERBICIDE EVALUATION - ARLINGTON - 2012

Daniel J. Heider

Location: Arlington Ag Research Station - Horticulture Farm Field 616

Plot Information:

Soil Type: Plano Silt Loam; pH 6.8; OM 3.6%.

Varieties: 'Fireball' - Stokes Seed Co., 'Champion' - Jung Seed Co.

Date Planted: 5/18/12

Row Spacing: 12 Inches (Paired row of each variety - 2 rows of each variety/plot)

Plant Spacing: 0.75 inches

Date Harvested: Fireball 6/19/12, Champion 6/22/12

Plot Size-Design: 12' x 20', 4 Reps Rating Dates: June 19, June 28, July 10

Application Equipment: Tractor mounted air pressure sprayer. GPA 20, PSI 27, MPH 3.3,

Nozzle - XR8003VS, Nozzle spacing 18", Height 18".

Incorporation Equipment: N/A weed control ratings: 0 = none, 100 = complete control

phyto ratings: 0 = no injury, 100 = death of plant

Herbicide Application Data:

PRE = Preemergence

Date	5/22/12	6/12/12	
Time	8:45 am	6:30 am	
Treatment	PRE	4-6 If	
Soil Moisture			
SF	dry	dry	
1"	moist	moist	
3"	moist	moist	
Soil Temp (F°)			
SF	62.4	66.9	
3"	58.0	66.8	
Air Temp (F°)	59.9	61.2	
Wind	1.6 E	3.1 NW	
%RH	46.5 %	49.9 %	
% Clouds	0%	0%	
Crop Stage		4-6 If	
Weed & Size		COLQ 1"	
		RRPW 1"	
		VELE 1-2"	
		COPU 1"	
		YEFT 1-2"	

Comments: There was no visible injury from the 1X or 2X rates of clopyralid or the chemical standard on either 'Fireball' or 'Champion' varieties of radish. Weed control for clopyralid was relatively poor on the weed spectrum present, with the exception of common purslane. Yields were unaffected by herbicide treatment.

Fertilization and other pesticides:

Fall 2010 - dairy replacement pack manure, 160 lb N/A.

Irrigation: None

Weed Abbreviations:Plot Weed Density:Weed Abbreviations:Plot Weed Density:COLQ = Common LambsquarterhighCOPU = Common PurslanehighRRPW = Redroot PigweedhighYEFT = Yellow FoxtailmoderateVELE = Velvetleafmoderate

Radish Herbicide Efficacy - Arlington, WI - 2012

Trt Treatment	Rate	Grow	% Injury (6/19/12		% We	ed Control 6/	/19/12	
No. Name	Rate Unit	Stage	Champion'	Fireball'	COPU	COLQ	RRPW	VELE	YEFT
1 HANDWEEDED	CHECK		0 a	0 a	100 a	100 a	100 a	100 a	100 a
2 Stinger	0.3 LB A/A	A PO1	0 a	0 a	3.8 c	25 c	17.5 c	6.3 b	0 b
3 Stinger	0.5 LB A/A	A PO1	0 a	0 a	13.8 b	52.5 b	40 b	11.3 b	0 b
4 Dual Magnum	1 PT/A	PRE	0 a	0 a	100 a	93.3 a	99.5 a	95.8 a	100 a
LSD (P=.05)			0	0	7.18	27.00	18.93	7.25	0.00

Trt Treatment	Rate	Grow	% Injury (6/28/12		% Wee	ed Control 6/	28/12	
No. Name	Rate Unit	Stage	Champion'	Fireball'	COPU	COLQ	RRPW	VELE	YEFT
1 HANDWEEDED	CHECK		0 a	0 a	100 a	100 a	100 a	100 a	100 a
2 Stinger	0.3 LB A/A	4 PO1	0 a	0 a	18.8 c	20 c	18.8 c	5 b	0 b
3 Stinger	0.5 LB A/A	4 PO1	0 a	0 a	42.5 b	58.8 b	40 b	30 b	0 b
4 Dual Magnum	1 PT/A	PRE	0 a	0 a	100 a	78.8 ab	99.5 a	87.5 a	100 a
LSD (P=.05)			0	0	12.38	22.50	18.41	35.99	0.00

Trt Treatment	Rate	Grow	% Injury	7/10/12		% We	ed Control 7/	10/12	
No. Name	Rate Unit	Stage	Champion'	Fireball'	COPU	COLQ	RRPW	VELE	YEFT
1 HANDWEEDED	CHECK		0 a	0 a	100 a	100 a	100 a	100 a	100 a
2 Stinger	0.3 LB A/A	A PO1	0 a	0 a	35 c	27.5 c	22.5 c	42.5 c	0 b
3 Stinger	0.5 LB A/A	A PO1	0 a	0 a	82.5 b	72.5 b	40 b	65 bc	0 b
4 Dual Magnum	1 PT/A	PRE	0 a	0 a	100 a	62.5 b	95.8 a	81.3 ab	97.5 a
LSD (P=.05)			0	0	15.71	22.02	15.79	25.65	4.00

Trt Treatment	Rate Grow		Yield (lb	o/plot)			
No. Name	Rate Unit	Stage	Champion'	Fireball'			
1 HANDWEEDED (CHECK		2.65 a	3.65 a			
2 Stinger	0.3 LB A/A	4 PO1	3.825 a	4.225 a			
3 Stinger	0.5 LB A/A	4 PO1	2.8 a	3.925 a			
4 Dual Magnum	1 PT/A	PRE	3.05 a	3.05 a			
LSD (P=.05)			0.9297	1.4234			
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