

# GARDEN BEET HERBICIDE EVALUATION - PLAINFIELD, WI - 2012

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Location: Mortenson Bros. Farm - Plainfield, WI

## Plot Information:

Soil Type: Sand.

Row Spacing: 6' wide beds, 4 rows/bed

Plant Spacing: 18 inches

Date Harvested: 9/5/12

Plot Size-Design: 6' x 15', 3 Reps

Rating Dates: 6/25, 7/5, 7/25

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

Dual Magnum & Nortron were applied pre-emergent over the entire trial

## Herbicide Application Data:

Date	6/11/12	6/25/12
Time	10:00 am	9:00 am
Treatment	2 lf	4 lf
Soil Temp (F°)		
surface	77.2	72.5
2"	72.9	70.9
4"	73.6	71.3
Air Temp (F°)	75.0	71.4
Wind	0-3.0 SW	5-7 E
%RH	73.0%	40.7%
Sky Condition	cloudy	sunny
Crop Stage	2 leaf	4 leaf
Weed & Size	-----	-----

Summary: The recent adoption of glyphosate tolerant sugar beets has resulted in the discontinuation of numerous beet herbicides that were labeled on garden beet. Always check to the label to confirm use instructions. In this trial, Nortron alone did not provide sufficient common lambsquarters control. Control was improved substantially when applied in combination with Betanex or Upbeet. Satisfactory weed control in beets will require a pre-emergent herbicide program, followed by a post program (often with multiple applications) targeting small weeds.

## Weed Abbreviations:

COLQ = Common Lambsquarters

RRPW = Redroot Pigweed

## Weed Abbreviations:

LASW = Ladysthumb Smartweed

YEFT = Yellow Foxtail

Garden Beet Herbicide Efficacy - Plainfield, WI - 2012

Trt No	Treatment Name	Rate	Unit	Grow Stg	% Weed Control 6/25/12			% Weed Control 7/5/12	
					COLQ	LASW	YEFT	COLQ	LASW
1	Nortron SC	5.25	OZ/A	2 lf	80 a	91.7 a	100 a	75 c	95 a
	Nortron SC	5.25	OZ/A	4 lf					
2	UpBeet	1	OZ/A	2 lf	88.3 a	95 a	100 a	86.7 ab	96.7 a
	Nortron SC	5.25	OZ/A	2 lf					
	UpBeet	1	OZ/A	4 lf					
	Nortron SC	5.25	OZ/A	4 lf					
3	Betanex	1.5	PT/A	2 lf	98.3 a	98.3 a	100 a	96.7 a	100 a
	Nortron SC	5.25	OZ/A	2 lf					
	Betanex	1.5	PT/A	4 lf					
	Nortron SC	5.25	OZ/A	4 lf					
4	Betanex	1.5	PT/A	2 lf	96.7 a	100 a	100 a	93.3 a	100 a
	Nortron SC	5.25	OZ/A	2 lf					
	Nortron SC	5.25	OZ/A	4 lf					
	UpBeet	1	OZ/A	4 lf					
5	Untreated Check				90 a	93.3 a	93.3 a	78.3 bc	93.3 a

LSD (P=.05)

12.57 10.24 9.72 11.47 5.70

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

Trt No	Treatment Name	Rate	Unit	Grow Stg	% Control 7/5/12		% Weed Control 7/25/12			Yield 9/5
					RRPW	YEFT	COLQ	RRPW	YEFT	tons/A
1	Nortron SC	5.25	OZ/A	2 lf	98.3 a	91.7 a	48.3 b	98.3 a	90 a	13.034 b
	Nortron SC	5.25	OZ/A	4 lf						
2	UpBeet	1	OZ/A	2 lf	100 a	98.3 a	78.3 a	98.3 a	96.7 a	16.764 ab
	Nortron SC	5.25	OZ/A	2 lf						
	UpBeet	1	OZ/A	4 lf						
	Nortron SC	5.25	OZ/A	4 lf						
3	Betanex	1.5	PT/A	2 lf	100 a	98.3 a	93.3 a	100 a	93.3 a	20.121 a
	Nortron SC	5.25	OZ/A	2 lf						
	Betanex	1.5	PT/A	4 lf						
	Nortron SC	5.25	OZ/A	4 lf						
4	Betanex	1.5	PT/A	2 lf	100 a	96.7 a	86.7 a	100 a	93.3 a	15.809 b
	Nortron SC	5.25	OZ/A	2 lf						
	Nortron SC	5.25	OZ/A	4 lf						
	UpBeet	1	OZ/A	4 lf						
5	Untreated Check				90 a	96.7 a	46.7 b	73.3 a	96.7 a	13.131 b

LSD (P=.05)

14.17 6.98 27.12 37.77 5.83 3.8981

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