

**Sugarbeet safety to high load Warrant applications - EL**

Trial ID: SB04-21 Study Dir.: Sprague, Stiles, Powell  
 Conducted: Campus, H6-8 Investigator: Christy Sprague

**Planting Date:** 4-20-21 **Row Spacing:** 30 "  
**Variety:** Crystal G675 **No. of Reps:** 4  
**Population:** 47800 seeds/A **% OM:** 2.4  
**Soil Type:** CL clay loam **pH:** 7.3  
**Plot Size:** 10 X 30 FT **Study Design:** Randomized Complete Block (RCB)

**Tillage/Previous Crops:** Fall chisel plow; Spring soil finish twice  
**Fertilizer:**

**Crop and Weed Description**

Weed	Code	Common Name	Scientific Name
1	ANGR	annual grass	mainly foxtail, crabgrass, barnyardgrass
2	CHEAL	common lambsquarters	Chenopodium album
3	AMAPO	Powell amaranth	Amaranthus powellii
4	AMBEL	common ragweed	Ambrosia artemisiifolia
5	ABUTH	velvetleaf	Abutilon theophrasti
Crop	Code	Common Name	
1	BETVU	sugarbeet	

**Application Description**

**Application Timing:** A  
**Date Treated:** 4 leaf  
**Time Treated:** 5-27-21  
**% Cloud Cover:** 2:45 PM  
**Air Temp., Unit:** 80  
**% Relative Humidity:** 61 F  
**Wind Speed/Unit/Dir:** 47  
**Soil Temp, Unit:** 9 MPH NE  
**Leaf Moist/Dew Presence (Y/N):** 75 F  
**Soil Moist:** N  
 4

**Crop Stage at Each Application**

**Crop 1 Name:** A  
 BETVU  
**Height:** 2-3 " (2.5)  
**Stage:** 4 L

**Weed Stage at Each Application**

**Weed 1 Name:** A  
 ANGR  
**Height:** 0.5-1 " (0.75)  
**Stage:** 2 L  
**Weed 2 Name:** CHEAL  
**Height:** 0.5-1 " (0.75)  
**Stage:** 2 L  
**Weed 3 Name:** AMAPO  
**Height:** 0.5-1 " (0.75)  
**Stage:** 2 L  
**Weed 4 Name:** AMBEL  
**Height:** 1 "  
**Stage:** 2 L-4 L (3 L)  
**Weed 5 Name:** ABUTH  
**Height:** 1-2 " (1)  
**Stage:** 2 L

**Weed Density**

Date:	1	2	3	4	5
<b>Weed Name:</b>	ANGR	CHEAL	AMAPO	AMBEL	ABUTH
<b>Density:</b>	11 FT2	1 FT2	1 FT2	1 FT2	1 FT2

**Application Equipment**

Appl	Sprayer Type	Ground Speed	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	Spray Volume	Carrier	Operation Pressure
A	CUB	3.8 MPH	AIXR	11003	24.0 "	20.0 "	100.0 "	19 GAL/AC	WATER	30 PSI

**Comments:** Roundup PowerMax at 32 fl oz/A + AMS at 17 lbs/100 gal was applied to the entire study on May 20, 2021 when sugarbeet was at the 2-leaf stage.

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Location: Campus, H6-8

Investigator (Creator): Christy Sprague

Study Director: Sprague, Stiles, Powell

Pest Code	Crop Type, Code	C, BETVU C, BETVU C, BETVU C, BETVU	ANGR	CHEAL	AMAPO	AMBEL	ABUTH		
Rating Date		5-30-21	6-3-21	6-10-21	6-24-21	6-24-21	6-24-21	6-24-21	6-24-21
Rating Type		injury	injury	injury	injury	control	control	control	control
Rating Unit		%	%	%	%	%	%	%	%
Trt-Eval Interval		3 DA-A	7 DA-A	14 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A

Trt No.	Treatment Name	Rate	Appl Unit	Code	0	6	9	14	28	28	28	28	28
1	Untreated				0	0	0	0	0	0	0	0	0
2	Warrant	48 fl oz/a	A		6	11	9	0	53	81	87	49	83
3	Warrant	64 fl oz/a	A		6	16	9	0	45	94	87	53	85
4	MON 301668	30 fl oz/a	A		9	21	11	0	70	78	65	53	80
5	MON 301668	42 fl oz/a	A		6	16	15	0	64	91	93	69	85
6	MON 301668	42 fl oz/a	A		4	16	16	0	85	96	96	80	95
6	Roundup PowerMax 3	30 fl oz/a	A										
6	AMSOL	5 % v/v	A										
7	Stinger	8 fl oz/a	A		19	34	30	14	89	100	100	100	98
7	MON 301668	42 fl oz/a	A										
7	Roundup PowerMax 3	30 fl oz/a	A										
7	AMSOL	5 % v/v	A										
8	Ethofumesate	12 fl oz/a	A		8	24	18	0	86	88	85	70	89
8	MON 301668	42 fl oz/a	A										
8	Roundup PowerMax 3	30 fl oz/a	A										
8	AMSOL	5 % v/v	A										
9	SelectMax	9 fl oz/a	A		6	17	15	0	90	89	85	75	84
9	MON 301668	42 fl oz/a	A										
9	Roundup PowerMax 3	30 fl oz/a	A										
9	AMSOL	5 % v/v	A										
10	Roundup PowerMax 3	30 fl oz/a	A		4	6	6	0	58	91	69	60	96
10	AMSOL	5 % v/v	A										
11	Dual II Magnum	1.33 pt/a	A		5	13	6	0	90	92	87	73	90
11	Roundup PowerMax 3	30 fl oz/a	A										
11	AMSOL	5 % v/v	A										
12	Outlook	16 fl oz/a	A		5	13	2	0	97	97	89	78	88
12	Roundup PowerMax 3	30 fl oz/a	A										
12	AMSOL	5 % v/v	A										
LSD	P=.05				4.8	7.3	5.8	1.0	17.4	12.2	15.5	16.5	18.1
Standard Deviation					3.3	5.1	4.0	0.7	12.1	8.5	10.8	11.5	12.6
CV					51.98	32.86	35.42	62.98	17.56	10.18	13.72	18.19	15.57