

**Effect of tank-contamination levels of chloransulam in sugarbeet**

Trial ID: SB04-23 Study Dir.: Christy Sprague  
 Conducted: SVREC Investigator: Sprague, Stiles

**Planting Date:** Apr-26-2023 **Row Spacing:** 30 "  
**Variety:** Crystal G049 **No. of Reps:** 4  
**Population:** 4.375 " spacing **% OM:** 2.1  
**Soil Type:** SCL sandy clay loam **pH:** 8.0  
**Plot Size:** 10 X 30 FT **Study Design:** Randomized Complete Block (RCB)

**Tillage/Previous Crops:** Fall high speed disk (Joker); spring soil finish.125 lb/A of acual N was applied as urea prior to planting.  
**Fertilizer:**

**Crop and Weed Description**

| Weed | Code  | Common Name | Scientific Name |
|------|-------|-------------|-----------------|
| 1    |       |             |                 |
| Crop | Code  | Common Name |                 |
| 1    | BEAVP | sugarbeet   |                 |

**Application Description**

**A**  
**Application Timing:** 4 leaf  
**Date Treated:** May-31-2023  
**Time Treated:** 10:40 AM  
**% Cloud Cover:** 15  
**Air Temp., Unit:** 81 F  
**% Relative Humidity:** 54  
**Wind Speed/Unit/Dir:** 7 MPH S  
**Soil Temp, Unit:** 76 F  
**Leaf Moist/Dew Presence (Y/N):** N  
**Soil Moist:** 5

**Crop Stage at Each Application**

**A**  
**Crop 1 Name:** BEAVP  
**Height:** 2-4 " (4)  
**Stage:** 4L

**Weed Stage at Each Application**

**A**  
**Weed 1 Name:**  
**Height:**  
**Stage:**

**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 "           | 100 "      | 19 GPA       | WATER   | 30 PSI             |

**Comments:** Roundup PowerMax 3 at 30 fl oz/A + AMS was applied on May 22, June 7, and June 29 to keep the trial weed-free. Sugarbeet injury symptoms consisted of slight leaf chlorosis and stunted growth.



Michigan State University

Effect of tank-contamination levels of chloransulam in sugarbeet

Trial ID: SB04-23

Protocol ID: SB04-23 Location: SVREC Trial Year: 2023

Study Director: Christy Sprague Sponsor Contact:

Investigator: Sprague, Stiles

| Rating Date         | Sep-19-2023          | Sep-19-2023 | Sep-19-2023  | Sep-19-2023 | Sep-19-2023 |      |      |      |       |        |
|---------------------|----------------------|-------------|--------------|-------------|-------------|------|------|------|-------|--------|
| Rating Type         | stand count          | sugar       | RWST         | yield       | RWSA        |      |      |      |       |        |
| Rating Unit/Min/Max | 100' ROW, -, -       | %, 0, 100   | lb/ton, -, - | ton/A, -, - | lb/A, -, -  |      |      |      |       |        |
| Crop Type, Code     | C, BETVU             | C, BETVU    | C, BETVU     | C, BETVU    | C, BETVU    |      |      |      |       |        |
| Trt-Eval Interval   | 111 DA-A             | 111 DA-A    | 111 DA-A     | 111 DA-A    | 111 DA-A    |      |      |      |       |        |
| Number of Decimals  | 0                    | 1           | 0            | 1           | 0           |      |      |      |       |        |
| Trt No.             | Treatment Name       | Rate        | Unit         | Appl Code   | Appl Timing |      |      |      |       |        |
| 1                   | Untreated            |             |              |             |             | 220  | 16.0 | 235  | 28.0  | 6622   |
| 2                   | FirstRate            | 0.00051     | oz/a         | A           | 2-4 leaf    | 222  | 16.1 | 235  | 27.0  | 6371   |
| 3                   | FirstRate            | 0.00102     | oz/a         | A           | 2-4 leaf    | 225  | 15.4 | 223  | 22.3  | 4964   |
| 4                   | FirstRate            | 0.00204     | oz/a         | A           | 2-4 leaf    | 209  | 15.8 | 230  | 21.5  | 4935   |
| 5                   | FirstRate            | 0.00408     | oz/a         | A           | 2-4 leaf    | 217  | 15.9 | 233  | 27.1  | 6382   |
| 6                   | FirstRate            | 0.00816     | oz/a         | A           | 2-4 leaf    | 200  | 15.7 | 228  | 23.4  | 5361   |
| 7                   | FirstRate            | 0.0163      | oz/a         | A           | 2-4 leaf    | 205  | 15.5 | 226  | 21.8  | 4929   |
| 8                   | FirstRate            | 0.0163      | oz/a         | A           | 2-4 leaf    | 190  | 15.5 | 224  | 16.0  | 3609   |
|                     | Acetochlor (GF-5223) | 3           | pt/a         | A           | 2-4 leaf    |      |      |      |       |        |
|                     | Roundup PowerMax     | 30          | fl oz/a      | A           | 2-4 leaf    |      |      |      |       |        |
|                     | AMSOL                | 2.5         | % v/v        | A           | 2-4 leaf    |      |      |      |       |        |
|                     | LSD P=.05            |             |              |             |             | 28.4 | 0.65 | 12.0 | 5.95  | 1495.5 |
|                     | Standard Deviation   |             |              |             |             | 19.3 | 0.44 | 8.1  | 4.03  | 1013.9 |
|                     | CV                   |             |              |             |             | 9.13 | 2.8  | 3.54 | 17.24 | 18.79  |

Missing data estimates are included in columns: Average=7,8,9,10,11