# Soybean Boron Foliar Trial

**Trial ID: 2025-SBF06 – R.M. of Hanover**

**Objective:** Quantify the agronomic and economic impacts of a single foliar boron fertilizer application for soybean production.

**Summary:** There was no significant yield difference between soybeans with and without a V3 foliar boron (B) application. A spring composite soil sample of the trial area resulted in a ''low'' soil B (0.7 ppm) level. All plots were plant tissue sampled after boron application and both treatments were similar and considered ''sufficient'' in plant B. Nodulation ratings were similar between treatments. As a result, there was a decrease in profit/ac equal to the cost of product application.

## Trial Information

| | |
|---|---|
| **Treatment** | Untreated vs. Solubor® |
| **Application Timing** | V3 |
| **Application Date** | 6/27/2025 |
| **Application Rate** | 0.5 lbs/ac |
| **Application Method** | Broadcast |
| **Soil Texture** | Very Fine Sandy Loam |
| **Spring Soil Test Boron (0-6'')** | 0.7 ppm (''Low'' per AGVISE interpretation) |
| **Previous Crop** | Corn |
| **Tillage** | Conventional Tillage |
| **Seeding Date** | 5/10/2025 |
| **Variety** | P008Z25E |
| **Seeding Rate** | 140,000 seeds/ac |
| **Row Spacing** | 30 in. |
| **Plant Stand @ R2** | 111,688 plants/ac |
| **Harvest Date** | 9/25/2025 |

## Precipitation (mm)

| | May | June | July | Aug | Total |
|---|---|---|---|---|---|
| **Rainfall** | 30.3 | 54.1 | 64.2 | 61.5 | 210.1 |
| **Normal** | 74.01 | 94.5 | 84.42 | 67.18 | 320.11 |
| **% Norm** | 41% | 57% | 76% | 92% | 66% |

## Foliar Boron Content (R2) ǂ

| | Foliar Boron Content (ppm) |
|---|---|
| **Solubor** | 33.5 A |
| **Untreated** | 32.3 A |

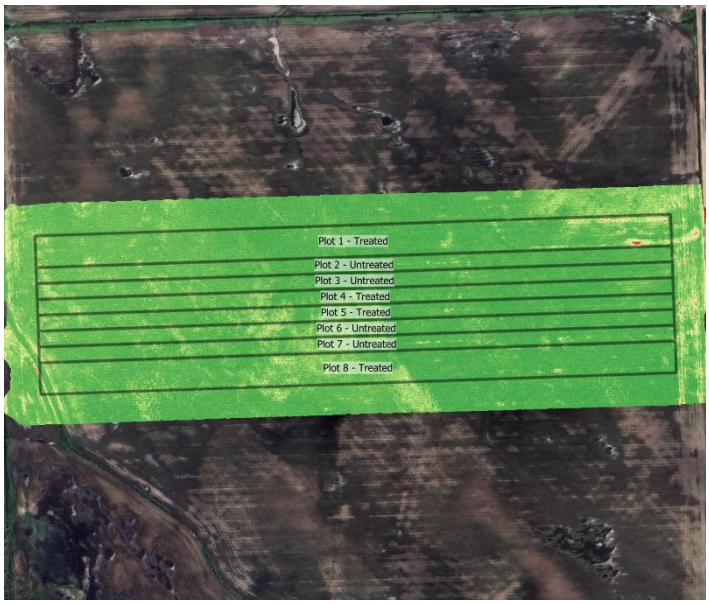
**ǂ Foliar samples (uppermost trifoliates) were collected after at least 10 days after application. Samples were then sent for total foliar Boron content testing. Plant B values >20 ppm are considered ''sufficient'' per AGVISE Laboratories interpretation.**

## Nodulation Rating ǂ

| | Nodulation Rating |
|---|---|
| **Solubor** | 3.01 A |
| **Untreated** | 2.95 A |

**ǂ Nodulation ratings were done at flowering (R1-R2) and the number of pink, healthy and active nodules were rated on a scale of 0-4, where 0 = no nodules, and 4 = 20+ healthy nodules/plant.**

## NDVI Field Image August 13

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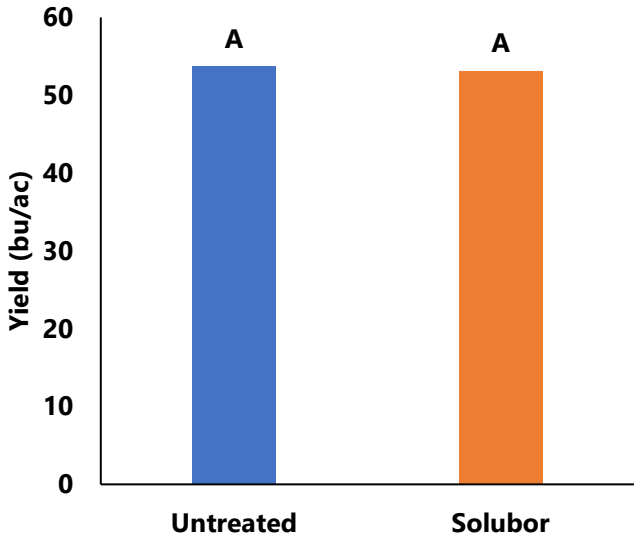
## Yield by Treatment




## Overall Yield & Economics

| | Mean (bu/ac) | Cost ǂ | Change in Profit ǂ ǂ |
|---|---|---|---|
| **Solubor** | 53.1 | $2.00/ac | -$2.00/ac |
| **Untreated** | 53.7 | | |
| **Yield Difference** | -0.6 | | |
| **P-Value** | 0.9695 | | |
| **CV** | 9.4% | | |
| **Significance** | **No** | **Economic** | **No** |

**ǂ Based on an estimated cost for foliar boron fertility products, does not include application cost**

**ǂ ǂ Yields were not significantly different, therefore there is no increased income to offset the cost of the foliar boron fertility product.**

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