

# Soybean Biological Trial

**Trial ID:** 2022-SB01 – R.M. of Rockwood

**Objective:** Quantify the agronomic and economic impacts of biological products for soybean production.

**Summary:** There was no significant yield difference between soybeans treated with Envita® and those without. Due to the lack of yield response, there was a decrease in profit/ac in the treated area of the trial equivalent to the cost of product application.

## Trial Information †

<b>Treatment</b>	Envita®
<b>Application Timing</b>	V2
<b>Application Date</b>	July 4
<b>Application Rate</b>	40 ac/jug
<b>Application Method</b>	Broadcast
<b>Soil Texture</b>	Silty Clay Loam
<b>Previous Crop</b>	Corn
<b>Tillage</b>	Conventional
<b>Seeding Date</b>	June 7
<b>Variety</b>	NSC Holland RR2X
<b>Seeding Rate</b>	196,000 seeds/ac
<b>Row Spacing</b>	10"
<b>Plant Stand @ R3</b>	155,000 plants/ac
<b>Harvest Date</b>	October 20

† Envita® is a biological product intended to enable plant foliage and roots to fix their own nitrogen.

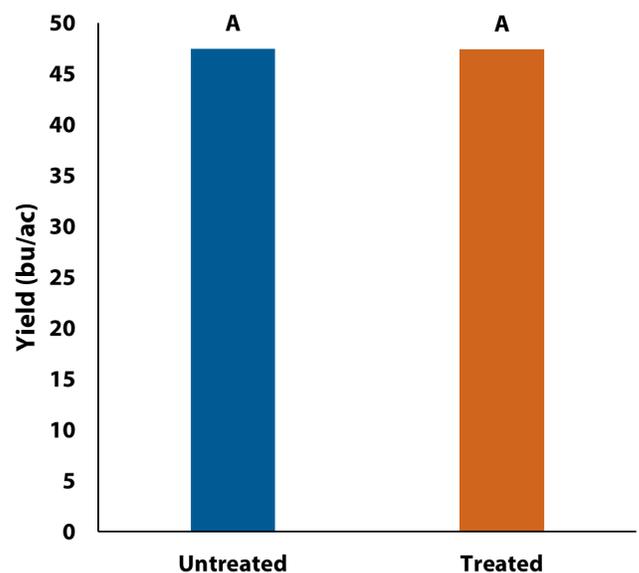
## NDVI Field Image August 12



## Precipitation (mm)

	May	Jun	Jul	Aug	Total
<b>Rainfall</b>	126	90.1	152	47.6	415.7
<b>Normal</b>	53.8	92	66.4	63.3	275.5
<b>% Normal</b>	234%	98%	229%	75%	151%

## Yield by Treatment





**on-farm network**  
PARTICIPATORY • PRECISE • PROACTIVE

## Soybean Biological Trial

### Overall Yield & Economics

	Mean (bu/ac)	Cost †	Change in Profit/ac ††
<b>Envita®</b>	47.4	\$14.50/ac	-\$14.50/ac
<b>Untreated</b>	47.5		
<b>Yield Difference</b>	-0.1		
<b>P-Value</b>	0.9296		
<b>CV</b>	2.2%		
<b>Significance</b>	<b>No</b>	<b>Economic</b>	<b>No</b>

† Based on an estimated cost of \$14.50/ac for biological products; does not include application costs.

†† Yields were not significantly different, therefore profit/ac decreased by the cost/ac of the biological treatment.