

# Soybean Double Inoculant Trial

**Trial ID:** 2024-S2IN01 – R.M. of Dauphin

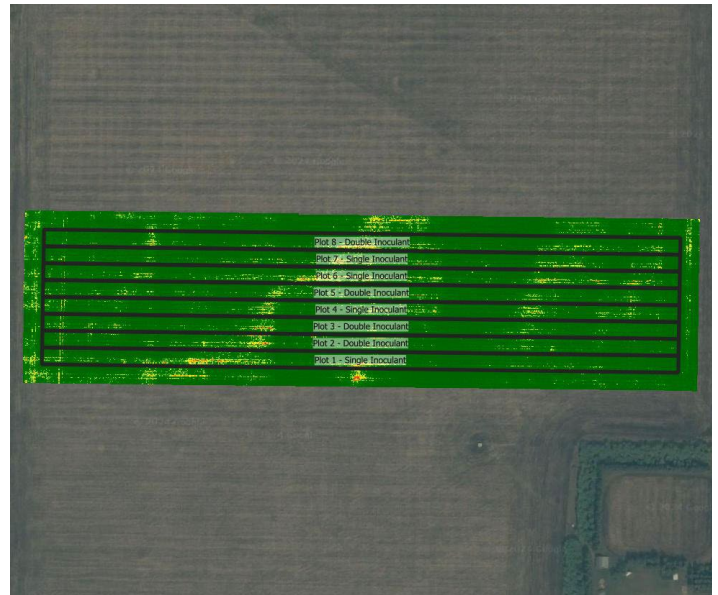
**Objective:** Quantify the agronomic and economic impacts of seed-applied inoculant (single inoculation) vs. seed-applied plus in-furrow inoculant (double inoculation) in soybeans. This trial requires a minimum field history of 2 previous soybean crops.

**Summary:** Nodulation ratings were similar between treatments and agronomically sufficient. There was no significant yield difference between single and double inoculation. Due to the lack of yield response, there was a decrease in profit/ac with double inoculation, equivalent to the cost of the additional inoculant.

## Trial Information

<b>Treatments</b>	Signum Soybean (on-Seed) vs Signum Soybean (on-seed) + Launcher (in Furrow)
<b>Last Soybean Crop</b>	2021
<b>Soybean History</b>	3 Year History
<b>Soil Texture</b>	Clay
<b>Previous Crop</b>	Canola
<b>Tillage</b>	Conventional Till
<b>Seeding Date</b>	May 10
<b>Variety</b>	DKB002-32
<b>Seeding Rate</b>	200,000 seeds/ac
<b>Row Spacing</b>	10"
<b>Plant Stand @ V2</b>	122,000 plants/ac
<b>Harvest Date</b>	October 10

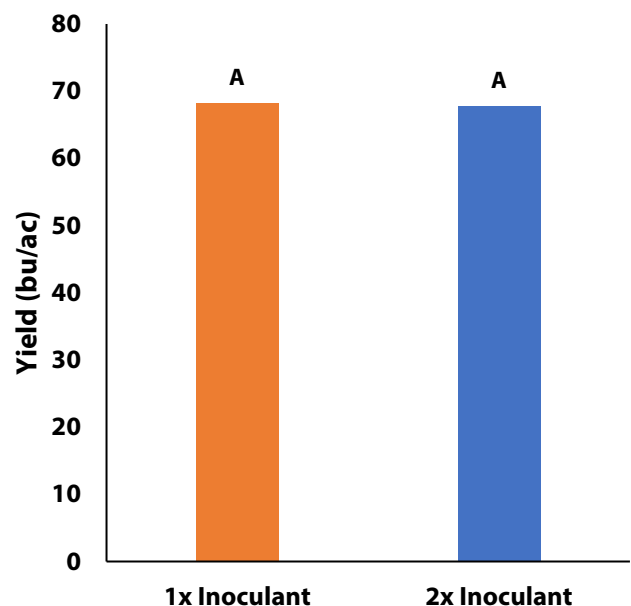
## NDVI Field Image August 10



## Precipitation (mm)

	May	June	July	Aug	Total
<b>Rainfall</b>	106	114.3	57.5	76.3	354.1
<b>Normal</b>	54.3	86.7	73.2	63.3	277.5
<b>% Norm</b>	195%	132%	79%	121%	128%

## Yield by Treatment



## Nodulation †

	Average Nodulation Rating @ R2
<b>Double</b>	3.95 A
<b>Single</b>	4.0 A

† 0 = no nodules, 1 = Poor (<5/plant), 2 = Fair (<10/plant), 3 = Good (<20/plant), 4 = Excellent (>20/plant). Averages followed by different letters are significantly different at  $\alpha = 0.05$



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### Overall Yield & Economics

	Mean (bu/ac)	Cost †	Change in Profit ††
Double Inoculant	67.9	\$13/ac	-\$10/ac
Single Inoculant	68.3	\$3/ac	
Yield Difference	-0.4		
P-Value	0.874		
CV	4.8%		
Significance	No	Economic	No

† Based on an estimated cost for on-seed + granular in-furrow vs. on-seed only

†† Because yields were not significantly different, there is no increased income with the double inoculant to offset the increase in price