Soybean Double Inoculant Trial

Trial ID: 2025-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 inoculated soybeans. 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

Treatments	1 x Liquid On-Seed Granular In-Furrow
Last Soybean Crop	2022
Soybean History	Three Year History
Soil Texture	Loam
Previous Crop	Fescue Grass
Tillage	Zero Tillage
Seeding Date	5/12/2025
Variety	DKB002-32
Seeding Rate	175,000 seeds/ac
Row Spacing	10 in.
Plant Stand @ V2	132,000 plants/ac
Harvest Date	10/10/2025

Precipitation (mm)

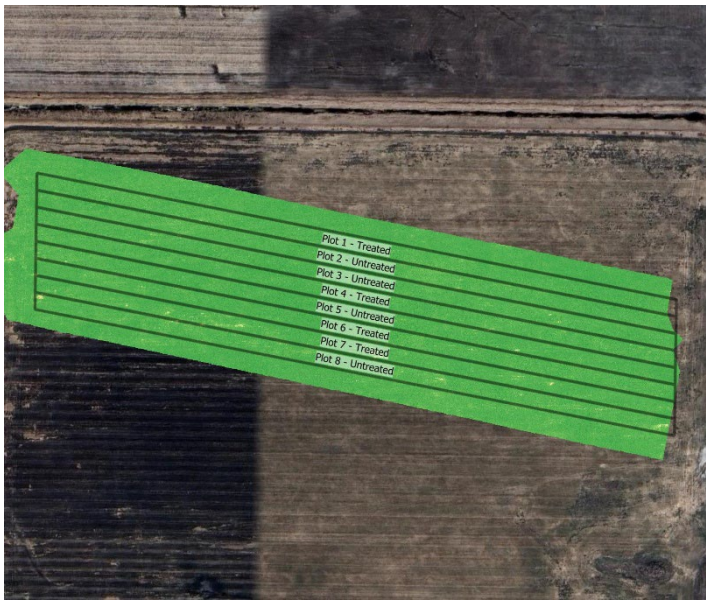
	May	June	July	Aug	Total
Rainfall	25.1	47.6	30	83.4	186.1
Normal	56.19	92.66	79.88	66.25	294.98
% Norm	45%	51%	38%	126%	63%

Nodulation[ŧ]

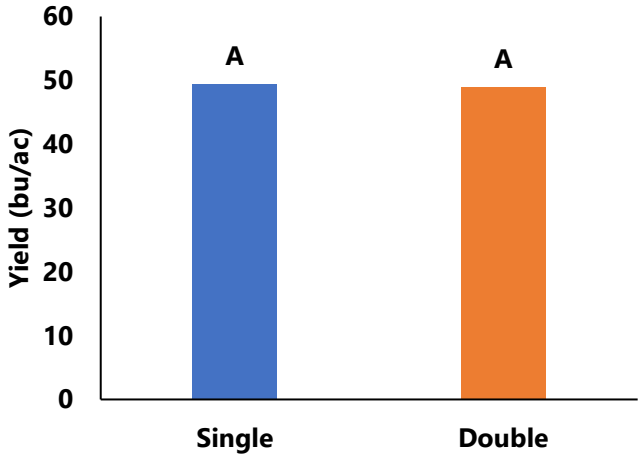
	Average Nodulation Rating @ R3
Double	3.98
Single	3.40

ŧ 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 α =0.05

NDVI Field Image August 14



Yield by Treatment



[Additional On-Farm Network Research Reports]

MANITOBA Pulse Soybean GROWERS
T 204 745.6488
www.manitobapulse.ca

Soybean Double Inoculant Trial

on-farm network
PARTICIPATORY • PRECISE • PROACTIVE

Overall Yield & Economics

	Mean (bu/ac)	Cost ǂ	Change in Profit ǂ ǂ
Double Inoculant	49.0	$12.00/ac	-$12.00/ac
Single Inoculant	49.4	$5.00/ac	
Yield Difference	-0.4		
P-Value	0.7267		
CV	3.1%		
Significance	**No**	**Economic**	**No**

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

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