

Soybean Double Inoculant Trial

Trial ID: 2020-S2IN02 – R.M. of Dauphin

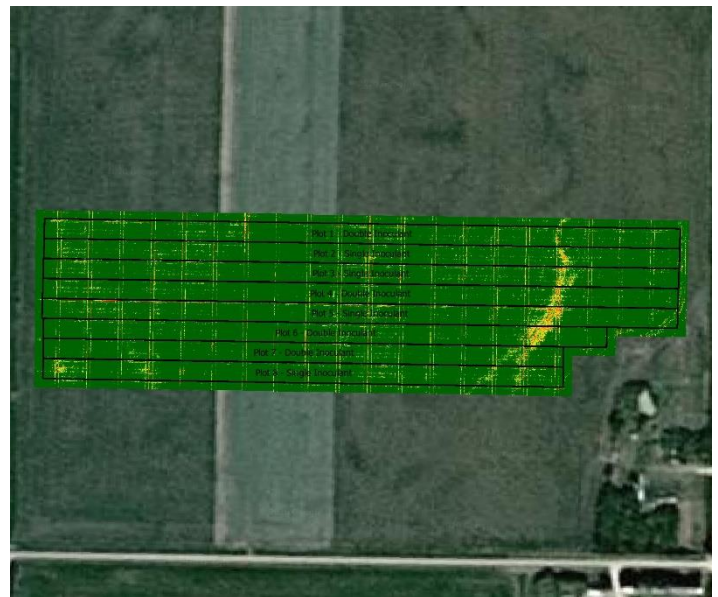
Objective: Quantify the agronomic and economic impacts of seed applied inoculant (single inoculation) vs. seed applied plus in-furrow inoculant (double inoculation) in soybean fields. This trial requires a minimum field history of 2 previous soybean crops.

Summary: Nodulation ratings were the same between treatments. 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 equivalent to the cost of the in-furrow inoculant application.

Trial Information

Treatment	1x Cell-Tech (liquid) 5 lbs/ac Nodulator (granular)
Last Soybean Crop	2017
Soybean History	2-year history
Soil Texture	Silty Loam
Previous Crop	Ryegrass
Tillage	Zero Till
Seeding Date	May 26
Variety	Amirani R2
Seeding Rate	223 000 seeds/ac
Row Spacing	10"
Plant Stand @ VC	180 000 plants/ac
Harvest Date	October 16

NDVI Field Image August 14



Precipitation (mm)

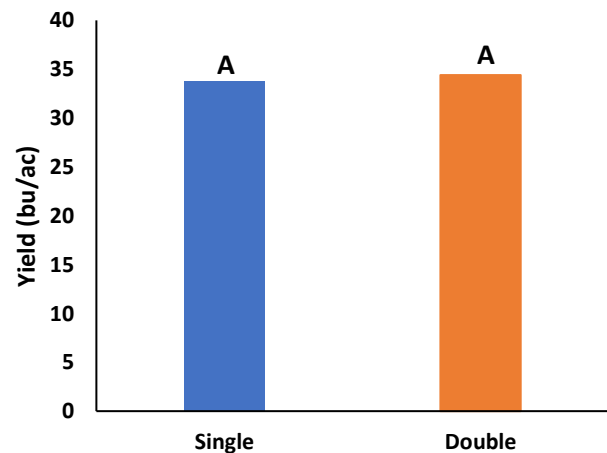
	May	June	July	August
Normal	54.3	86.7	73.2	63.3
Rainfall	27.8	102.6	67.9	98.4

Nodulation†

	Average Nodulation Rating @ R2
Double	2.8
Single	2.8

† 0 = no nodules, 1 = Poor (<5/plant), 2 = Fair (<10/plant), 3 = Good (<20/plant), 4 = Excellent (>20/plant)

Yield by Treatment





on-farm network
PARTICIPATORY • PRECISE • PROACTIVE

Soybean Double Inoculant Trial

Overall Yield & Economics

	Mean (bu/ac)	Cost †	Change in Profit/ac ††
Double Inoculant	34.4	\$15/ac	-\$10/ac
Single Inoculant	33.7	\$5/ac	
Yield Difference	0.7		
P-Value	0.3638		
CV	3.0%		
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 cost/ac