

Soybean Biological Trial

Trial ID: 2022-SB04 – R.M. of Roland

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

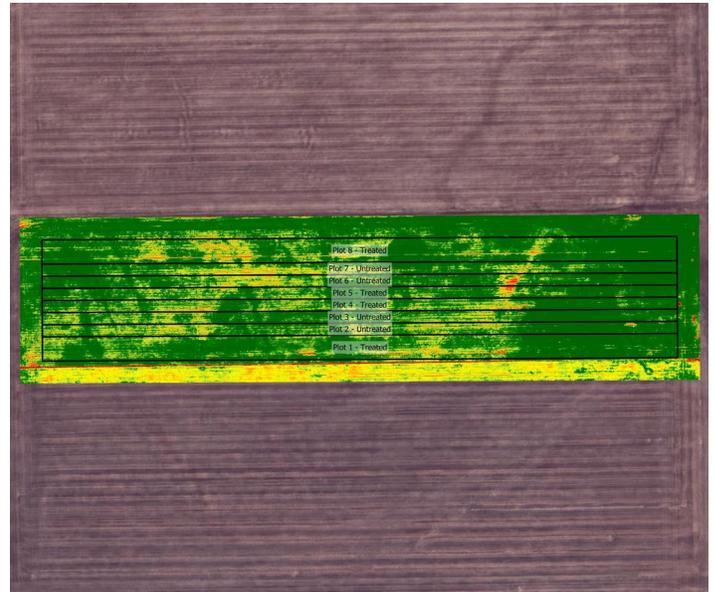
Summary: There was no significant yield difference between soybeans treated with Envita® and those without. Due to the lack of yield response, there was a decrease in profit/ac in the treated area of the trial, equivalent to the cost of product application.

Trial Information †

Treatment	Envita®
Application Timing	V3
Application Date	July 7
Application Rate	40 ac/jug
Application Method	Broadcast
Soil Texture	Clay
Previous Crop	Soybeans
Tillage	Zero Till
Seeding Date	June 4
Variety	DKB006-29
Seeding Rate	140,000 seeds/ac
Row Spacing	30"
Plant Stand @ R4	148,000 plants/ac
Harvest Date	October 3

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

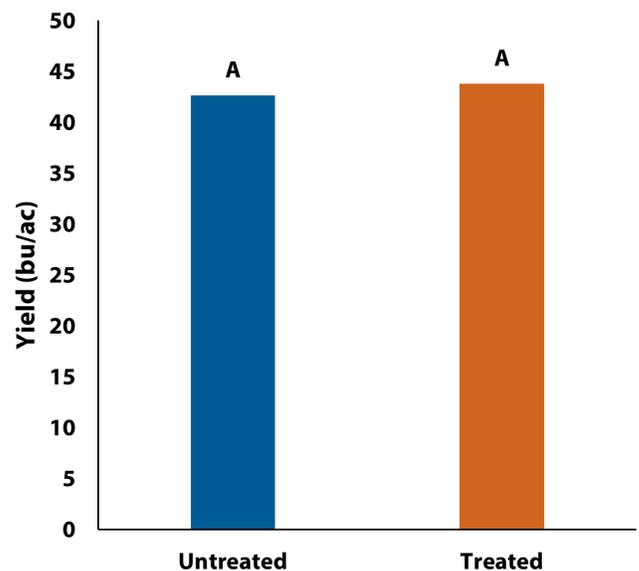
NDVI Field Image August 13



Precipitation (mm)

	May	Jun	Jul	Aug	Total
Rainfall	110.6	42.2	84	53.1	289.9
Normal	53.8	80.6	65.7	71	271.1
% Normal	206%	52%	128%	75%	107%

Yield by Treatment





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Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
Envita®	43.8	\$14.50/ac	-\$14.50/ac
Untreated	42.7		
Yield Difference	1.1		
P-Value	0.1134		
CV	5.9%		
Significance	No	Economic	No

† 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.