

Soybean Biological Trial

Trial ID: 2021-SB04 – R.M. of St. Clements

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

Summary: There was no significant yield difference between soybeans treated with Primacy Alpha 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†	Primacy Alpha®
Application Timing	R1
Application Date	June 29
Application Rate	500 ml/ac
Application Method	Foliar Spray
Soil Texture	Clay - Clay Loam
Previous Crop	Oats
Tillage	Conventional
Seeding Date	May 11
Variety	LS0036RR
Seeding Rate	180 000 seeds/ac
Row Spacing	10
Plant Stand @ R1	90 000 plants/ac
Harvest Date	October 4

† Primacy Alpha® is a biological product intended to improve efficiency of nutrient use, to increase yield

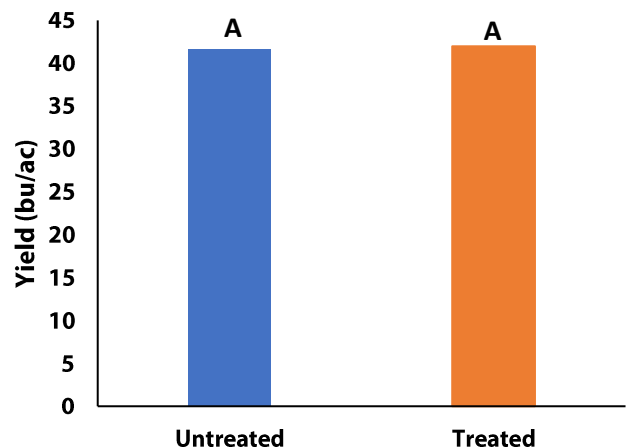
Precipitation (mm)

	May	Jun	Jul	Aug	Total
Rainfall	62.4	36.3	8	82.2	188.9
Normal	58.2	92.6	77	69.9	297.7
% Normal	107%	39%	10%	118%	63%

NDVI Field Image August 15



Yield by Treatment



Overall Yield & Economics

	Mean (bu/ac)	Cost†	Change in Profit/ac††
Treated	42.0	\$7/ac	-\$7/ac
Untreated	41.6		
Yield Difference	0.4		
P-Value	0.4889		
CV	2.2%		
Significance	No	Economic	No

† Based on an estimated cost for biological products

†† Yields were not significantly different, therefore there is no increased income to offset the cost of the biological product