

# Soybean Biological Trial

**Trial ID: 2020-SB03 – R.M. of North Cypress-Langford**

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

**Summary:** There was no significant yield difference between soybeans with and without Lignijoule. As a result, profit in the treated area decreased by the cost of product/ac, compared to profit from the untreated area.

## Trial Information†

<b>Treatment</b>	Lignijoule In-furrow
<b>Soil Texture</b>	Clay Loam
<b>Previous Crop</b>	Wheat
<b>Tillage</b>	Conventional
<b>Seeding Date</b>	May 27
<b>Variety</b>	S007-Y4
<b>Seeding Rate</b>	204 000 seeds/ac
<b>Row Spacing</b>	10"
<b>Plant Stand @ V3</b>	197 000 plants/ac
<b>Harvest Date</b>	October 1

† Lignijoule is intended to increase photosynthesis

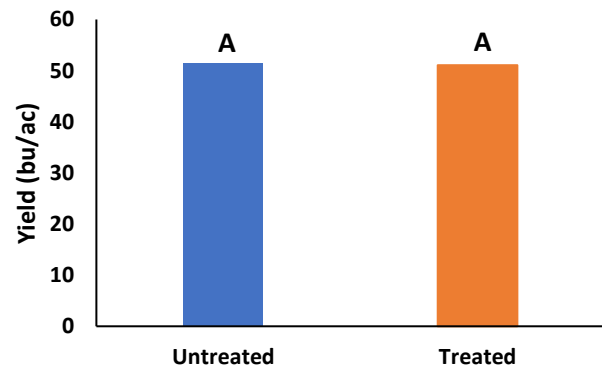
## NDVI Field Image August 15



## Precipitation (mm)

	May	June	July	August
<b>Normal</b>	51.2	72.8	74.4	66.2
<b>Rainfall</b>	8.7	94.5	62.5	69.9

## Yield by Treatment



## Overall Yield & Economics

	Mean (bu/ac)	Cost †	Change in Profit/ac ††
<b>Treated</b>	51.1	\$5/ac	-\$5/ac
<b>Untreated</b>	51.5		
<b>Yield Difference</b>	-0.4		
<b>P-Value</b>	0.4421		
<b>CV</b>	1.6%		
<b>Significance</b>	No	Economic	No

† Based on an estimated cost for biological products

†† Because yields were not significantly different, there is no increased income to offset the cost of the product. Profit/ac declines by the cost of the product application.