

# Soybean Seeding Rate Trial

**Trial ID:** 2021-SSR05 – R.M. of St. Andrews

**Objective:** Quantify the agronomic and economic impacts of different soybean seeding rates

**Summary:** There was no significant yield difference between seeding rates of 140,000, 170,000 and 200,000 seeds/ac. As a result, there was a decrease in profit equivalent to the increase in seed cost for the higher seeding rates.

## Trial Information

<b>Treatment</b>	140k vs. 170k vs. 200k
<b>Soil Texture</b>	Clay Loam
<b>Previous Crop</b>	Wheat
<b>Tillage</b>	Conventional
<b>Seeding Equipment</b>	60 ft Disc Drill
<b>Seeding Date</b>	May 12
<b>Variety</b>	P006A37X
<b>Germination</b>	84%
<b>Row Spacing</b>	10"
<b>Harvest Date</b>	September 24

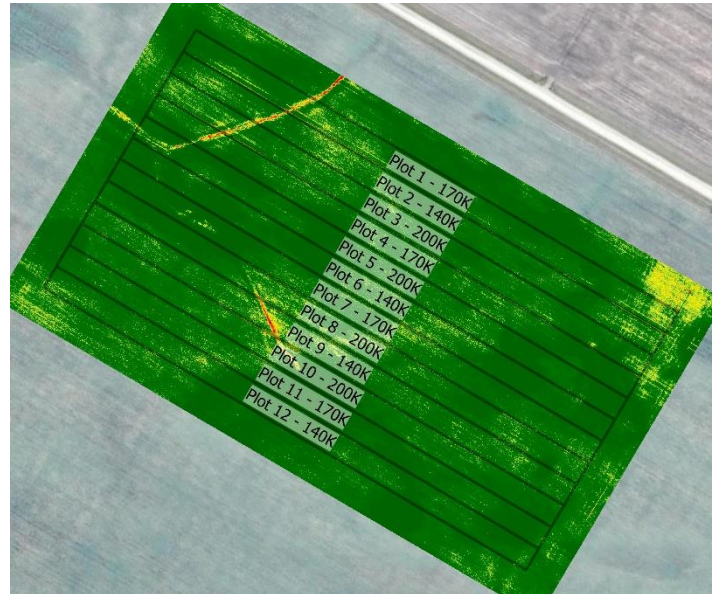
## Precipitation (mm)

	May	Jun	Jul	Aug	Total
<b>Rainfall</b>	22.2	45	24.2	88.2	179.6
<b>Normal</b>	54.4	90.7	81.1	73.7	299.9
<b>% Normal</b>	41%	50%	30%	120%	60%

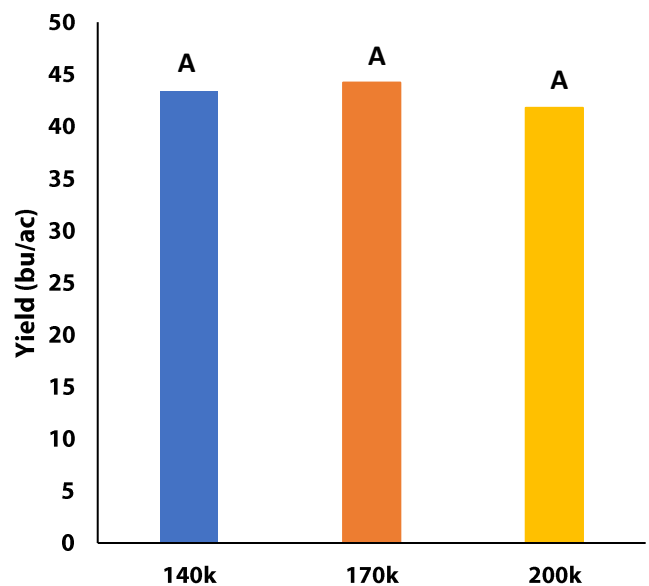
## Plant Stand (plants/ac)

	V2	R8
<b>140k</b>	143,000	155,000
<b>170k</b>	170,000	183,000
<b>200k</b>	199,000	212,000

## NDVI Field Image August 15



## Yield by Treatment





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### Overall Yield & Economics

	Mean (bu/ac)	Cost <sup>†</sup>	Change in Profit/ac <sup>††</sup>
<b>140k</b>	43.3	\$65/ac	
<b>170k</b>	44.2	\$79/ac	-\$14/ac
<b>200k</b>	41.8	\$93/ac	-\$28/ac
<b>P-Value</b>	0.4324	<b>Economic</b>	140k → 170k No
<b>CV</b>	7.4%		140k → 200k No
<b>Significance</b>	<b>No</b>		170k → 200k No

† Based on MB Agriculture 2021 Cost of Production Guidelines (\$65.30/unit)

†† Change in profit is calculated as the difference in cost between seeding rate treatments. Because yields were not significantly different, there is no increased income to offset the increase in seed cost