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# Soybean Seeding Rate Trial

**Trial ID:** 2024-SSR10 – R.M. of Rockwood

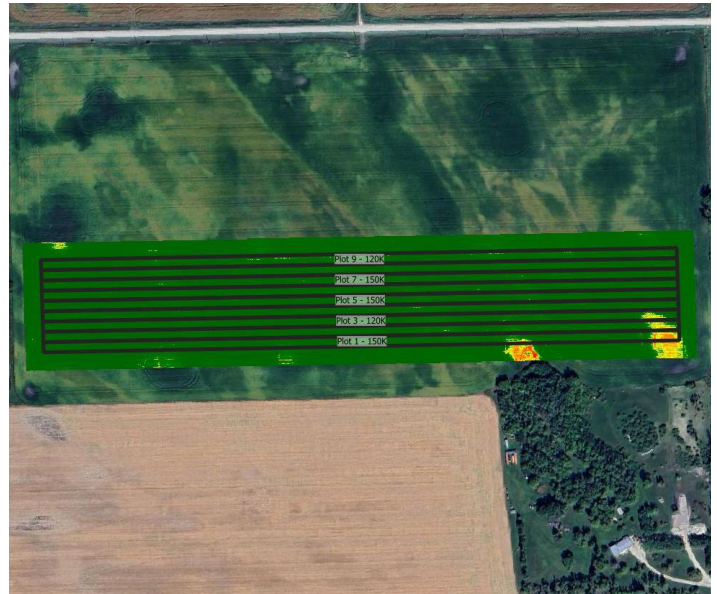
**Objective:** Quantify the agronomic and economic impacts of different soybean seeding rates.

**Summary:** There were no significant yield differences among seeding rates of 120,000, 150,000 and 180,000 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>	120k vs 150k vs 180k
<b>Soil Texture</b>	Very Fine Sandy Loam
<b>Previous Crop</b>	Wheat
<b>Tillage</b>	Conventional Tillage
<b>Seeding Equipment</b>	40ft Planter
<b>Seeding Date</b>	May 29
<b>Variety</b>	DKB006-29
<b>Germination</b>	91%
<b>Row Spacing</b>	15"
<b>Harvest Date</b>	October 1

## NDVI Field Image August 12



## Precipitation (mm)

	May	June	July	Aug	Total
<b>Rainfall</b>	99	109.7	71.9	44.3	324.9
<b>Normal</b>	53.8	92	66.4	63.3	275.5
<b>% Norm</b>	184%	119%	108%	70%	118%

## Plant Stand (plants/ac)

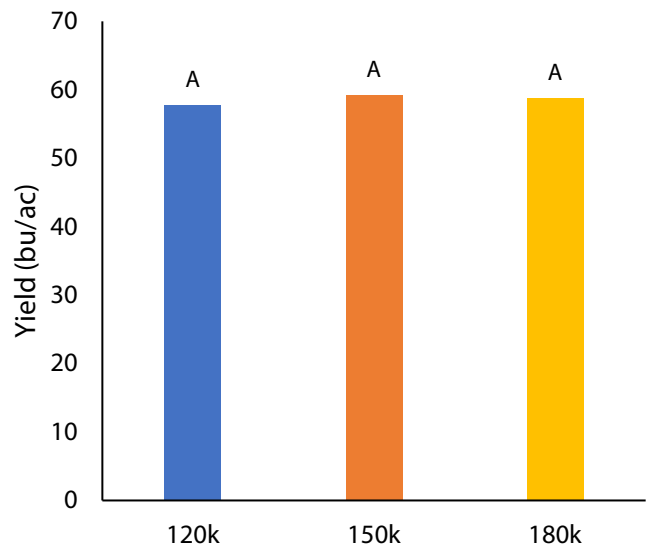
	V5	R5
<b>120k</b>	107,000 C	108,000 B
<b>150k</b>	133,000 B	127,000 B
<b>180k</b>	157,000 A	152,000 A

## Plant Establishment and Survivability †

	Establishment at V5	Survivability to R5	Change V5 to R5
<b>120k</b>	90%	90%	0%
<b>150k</b>	89%	85%	-4%
<b>180k</b>	87%	85%	-2%

† % establishment = plant count at V stages/seeding rate; % survivability = plant count at R stages/seeding rate

## Yield by Treatment





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### Overall Yield & Economics

	Mean (bu/ac)	Cost <sup>†</sup>	Change in Profit <sup>††</sup>
<b>120k</b>	57.8	\$54/ac	
<b>150k</b>	59.3	\$67/ac	-\$13/ac
<b>180k</b>	58.8	\$81/ac	-\$27/ac

<b>P-Value</b>	0.983	<b>Economic</b>	120k → 150k <b>No</b>
<b>CV</b>	5.5%		150k → 180k <b>No</b>
<b>Significance</b>	<b>No</b>		120k → 180k <b>No</b>

<sup>†</sup> Based on a \$62.94/unit soybean seed costs (Source: Manitoba Agriculture 2024 Cost of Production Guidelines)

<sup>††</sup> 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