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# Soybean Seeding Rate Trial

**Trial ID:** 2024-SSR03 – R.M. of Springfield

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

**Summary:** There were no significant yield differences among seeding rates of 125,000, 155,000 and 185,000 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>	125k vs 155k vs 185k
<b>Soil Texture</b>	Clay
<b>Previous Crop</b>	Soybeans
<b>Tillage</b>	Conventional Till
<b>Seeding Equipment</b>	44ft Planter
<b>Seeding Date</b>	May 13
<b>Variety</b>	TH81007 R2XN
<b>Germination</b>	91%
<b>Row Spacing</b>	22"
<b>Harvest Date</b>	September 30

## Precipitation (mm)

	May	June	July	Aug	Total
<b>Rainfall</b>	104.6	86.2	85.4	29.1	305.3
<b>Normal</b>	54	89.9	73.4	72.6	289.9
<b>% Norm</b>	194%	96%	116%	40%	105%

## Plant Stand (plants/ac) †

	V1	R5
<b>125k</b>	95,000 B	86,000 B
<b>155k</b>	110,000 B	102,000 B
<b>185k</b>	135,000 A	128,000 A

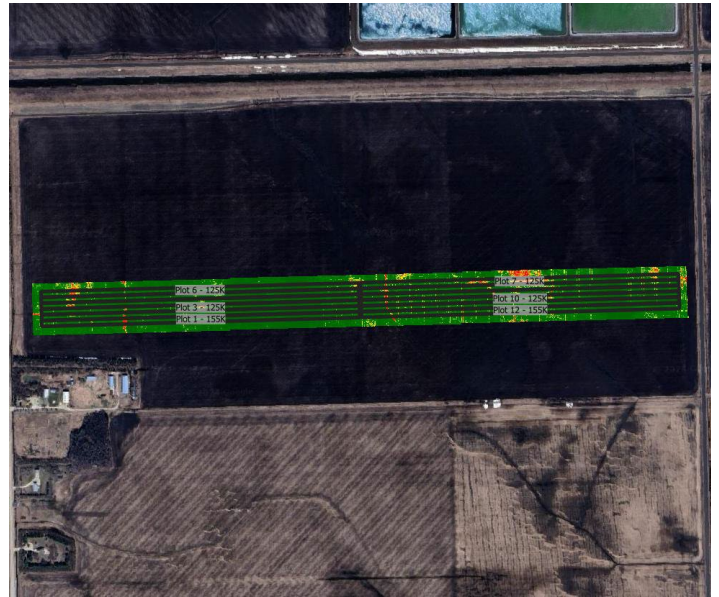
† Columns followed by different letters are significantly different from one another

## Plant Establishment and Survivability †

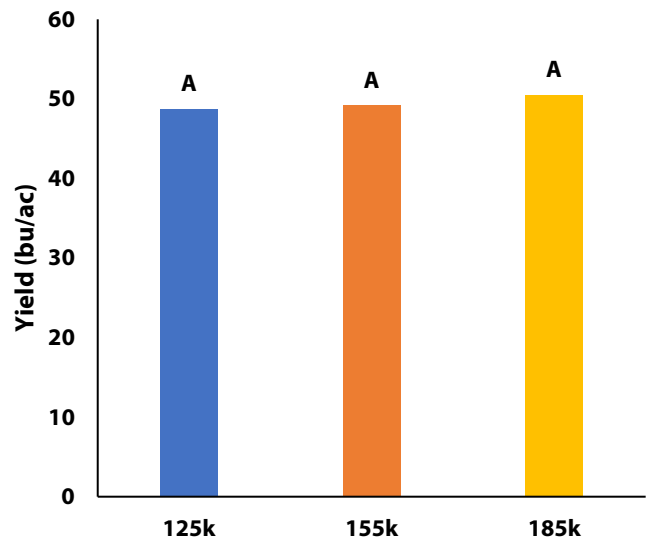
	Establishment at V1	Survivability to R5	Change V1 to R5
<b>125k</b>	76%	69%	-8%
<b>155k</b>	71%	66%	-5%
<b>185k</b>	73%	69%	-4%

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

## NDVI Field Image August 12



## Yield by Treatment





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### Overall Yield & Economics

	Mean (bu/ac)	Cost <sup>†</sup>	Change in Profit <sup>††</sup>
<b>125k</b>	48.7	\$56/ac	
<b>155k</b>	49.2	\$69/ac	-\$13/ac
<b>185k</b>	50.5	\$83/ac	-\$27/ac

<b>P-Value</b>	0.088	<b>Economic</b>	125k → 155k <b>No</b>
<b>CV</b>	1.9%		125k → 185k <b>No</b>
<b>Significance</b>	<b>No</b>		155k → 185k <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