

Soybean Seeding Rate Trial

Trial ID: 2024-SSR04 – R.M. of Louise

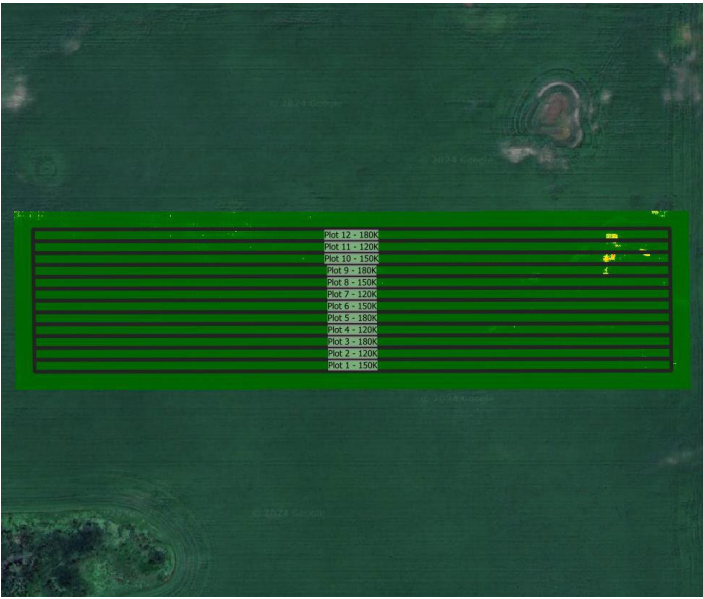
Objective: Quantify the agronomic and economic impacts of different soybean seeding rates.

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

Treatment	120k vs 150k vs 180k
Soil Texture	Clay Loam
Previous Crop	Wheat
Tillage	Conventional
Seeding Equipment	42.5ft Disc Drill
Seeding Date	May 12
Variety	P003Z08E
Germination	97%
Row Spacing	7.5"
Harvest Date	September 27

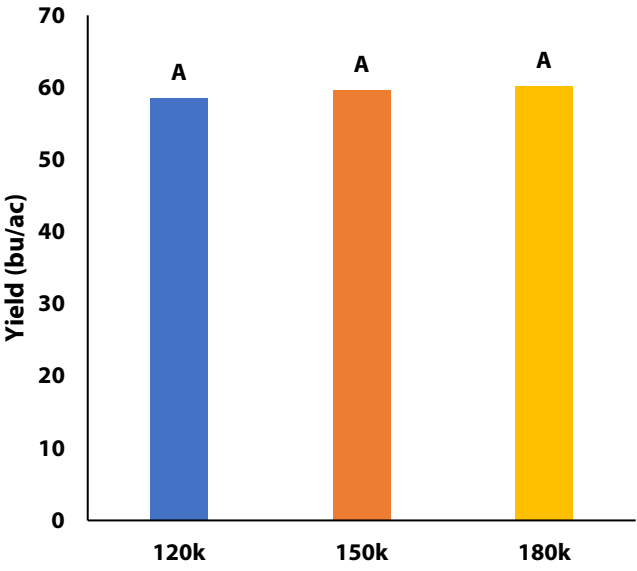
NDVI Field Image August 9



Precipitation (mm)

	May	June	July	Aug	Total
Rainfall	121.2	94.2	54.8	68.2	338.4
Normal	61.1	89.8	68.3	72.3	291.5
% Norm	198%	105%	80%	94%	116%

Yield by Treatment



Plant Stand (plants/ac) †

	V3	R8
120k	120,000 A	118,000 B
150k	137,000 A	132,000 B
180k	162,000 A	145,000 A

† Columns followed by different letters are significantly different

Plant Establishment and Survivability †

	Establishment at V3	Survivability to R8	Change V3 to R8
120k	101%	99%	-2%
150k	91%	88%	-3%
180k	90%	81%	-9%

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



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Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit ^{††}
120k	58.6	\$54/ac	
150k	59.7	\$67/ac	-\$13/ac
180k	60.2	\$81/ac	-\$27/ac

P-Value	0.126	Economic	120k → 150k No
CV	1.6%		120k → 180k No
Significance	No		150k → 180k No

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

^{††} 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