

Soybean Seeding Rate Trial

Trial ID: 2024-SSR11 – R.M. of Tache

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

Summary: There were no significant yield differences among seeding rates of 100,000 and 140,000 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	100k vs 140k
Soil Texture	Clay
Previous Crop	Oats
Tillage	Conventional Till
Seeding Equipment	44ft Planter
Seeding Date	May 29
Variety	NSC Winkler RR2X
Germination	89%
Row Spacing	22"
Harvest Date	October 2

Precipitation (mm)

	May	June	July	Aug	Total
Rainfall	94.6	100.4	126.6	46.2	367.8
Normal	58.1	91.3	80.1	66.1	295.6
% Norm	163%	110%	158%	70%	124%

Plant Stand (plants/ac)

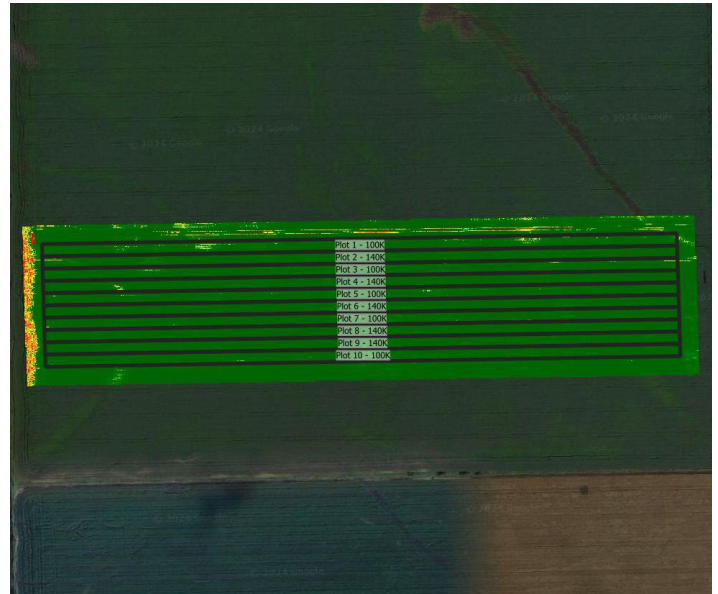
	V5	R5
100k	87,000 B	86,000 B
140k	123,000 A	122,000 A

Plant Establishment and Survivability †

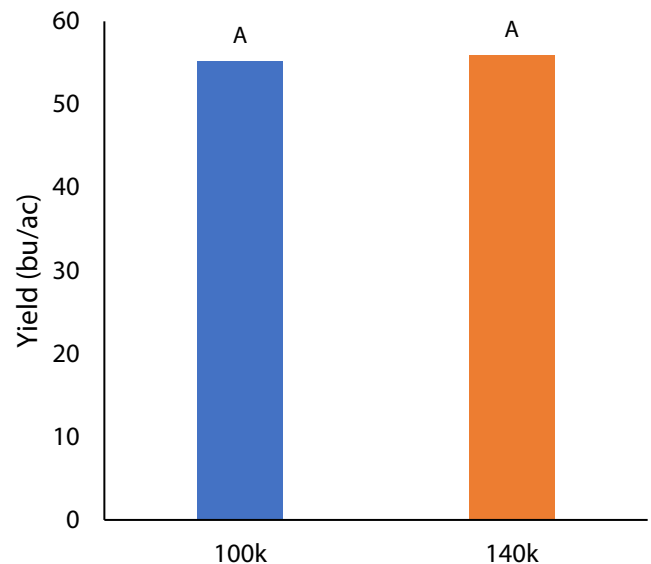
	Establishment at V5	Survivability to R5	Change V5 to R5
100k	87%	86%	-1%
140k	88%	87%	-1%

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

NDVI Field Image August 11



Yield by Treatment





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Overall Yield & Economics

	Mean (bu/ac)	Cost†	Change in Profit††
100k	55.2	\$45/ac	
140k	55.9	\$63/ac	-\$18/ac
P-Value	0.513	Economic	100k → 140k No
CV	2%		
Significance	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