

Soybean Seeding Rate Trial

Trial ID: 2024-SSR07 – R.M. of Emerson-Franklin

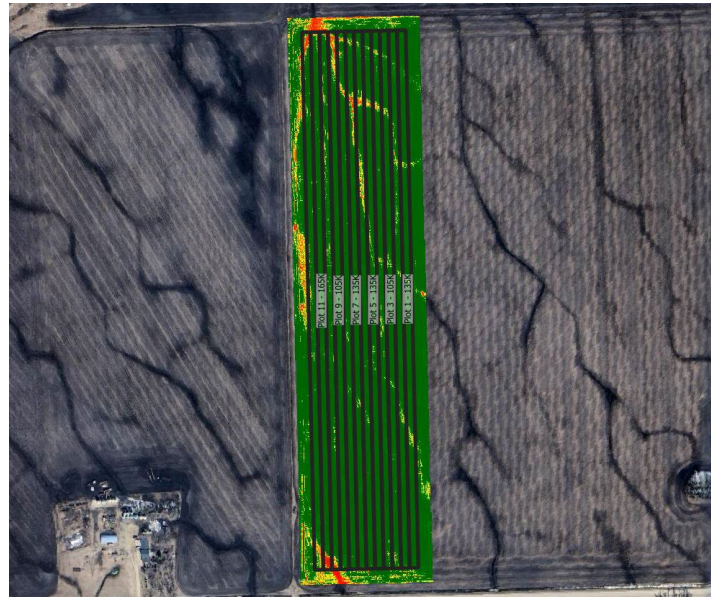
Objective: Quantify the agronomic and economic impacts of different soybean seeding rates.

Summary: There were no significant yield differences among seeding rates of 105,000, 135,000 and 165,000 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	105k vs 135k vs 165k
Soil Texture	Clay
Previous Crop	Wheat
Tillage	Conventional Till
Seeding Equipment	40ft Planter
Seeding Date	May 17
Variety	DKB008-48
Germination	81%
Row Spacing	20"
Harvest Date	October 1

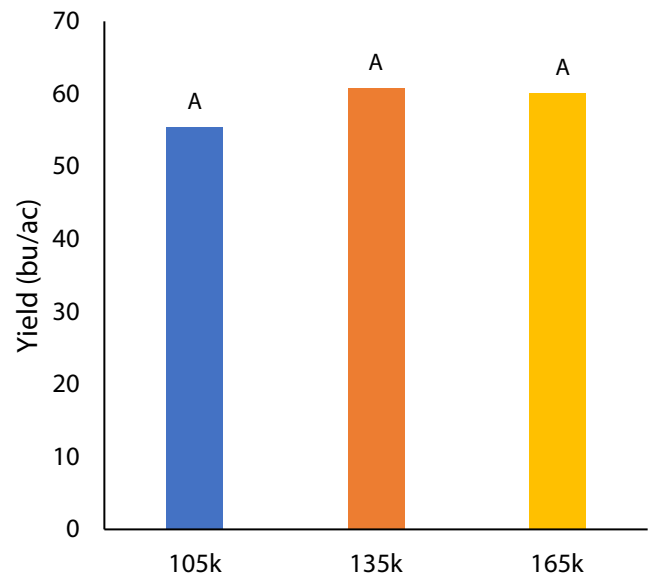
NDVI Field Image August 10



Precipitation (mm)

	May	June	July	Aug	Total
Rainfall	116.2	63.8	87.9	64	331.9
Normal	57.8	89.5	80.6	71.8	299.7
% Norm	201%	71%	109%	89%	111%

Yield by Treatment



Plant Stand (plants/ac)

	V3	R7
105k	113,000 A	110,000 A
135k	115,000 A	112,000 A
165k	123,000 A	117,000 A

Plant Establishment and Survivability †

	Establishment at R1	Survivability to R5	Change R1 to R5
105k	107%	105%	-2%
135k	85%	83%	-3%
165k	75%	71%	-4%

† % 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 ^{††}
105k	55.4	\$47/ac	
135k	60.8	\$60/ac	-\$13/ac
165k	60.1	\$74/ac	-\$27/ac

P-Value	0.312	Economic	105k → 135k No
CV	8.4%		105k → 165k No
Significance	No		135k → 165k 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