

Soybean Seeding Rate Trial

Trial ID: 2021-SSR04 – R.M. of Grey

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

Summary: There was no significant yield difference between 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
Previous Crop	Canola
Tillage	Conventional
Seeding Equipment	40 ft Planter
Seeding Date	May 11
Variety	DKB005-52
Germination	86%
Row Spacing	15"
Harvest Date	September 21

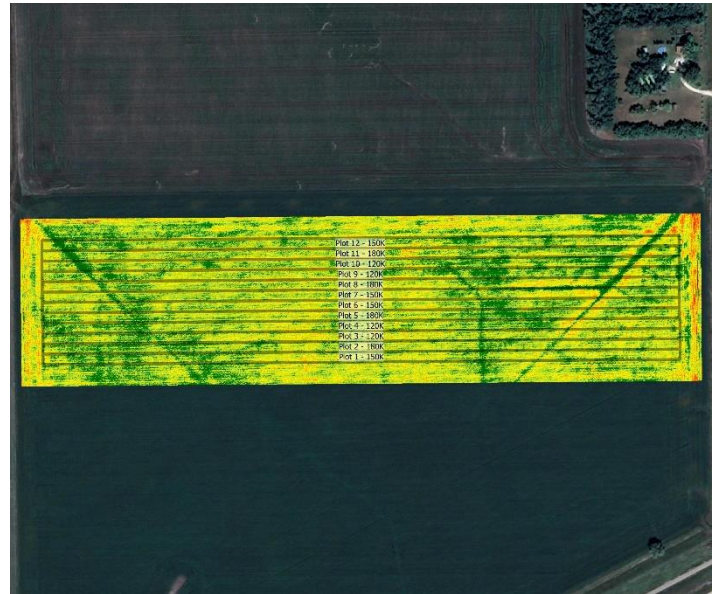
Precipitation (mm)

	May	Jun	Jul	Aug	Total
Rainfall	49.5	70.7	25.3	64.3	209.8
Normal	53.8	80.6	65.7	71	271.1
% Normal	92%	88%	39%	91%	77%

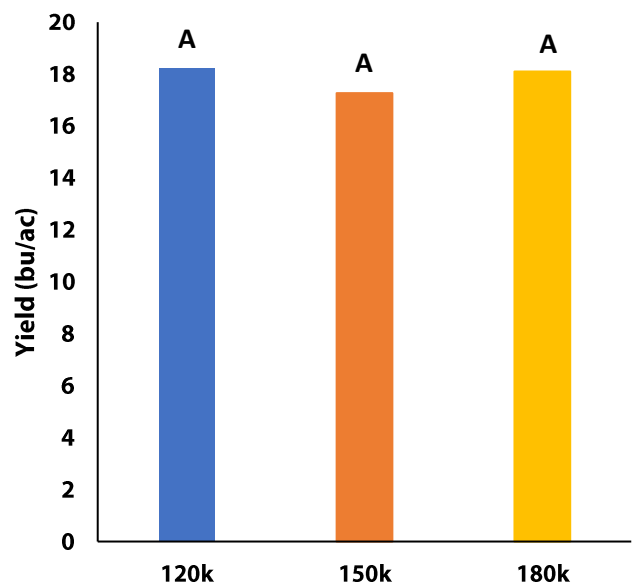
Plant Stand (plants/ac)

	V2	R6
120k	92,000	84,000
150k	119,000	110,000
180k	141,000	127,000

NDVI Field Image August 16



Yield by Treatment





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Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
120k	18.2	\$56/ac	
150k	17.3	\$70/ac	-\$14/ac
180k	18.1	\$84/ac	-\$28/ac
P-Value	0.6077	Economic	120k → 150k No
CV	6.4%		120k → 180k No
Significance	No		150k → 180k No

† Based on MB Agriculture 2021 Cost of Production Guidelines (\$65.30/unit)

†† 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