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Soybean Seeding Rate Trial

Trial ID: 2022-SSR01 – R.M. of St. Clements

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	Winter Wheat
Tillage	Conventional
Seeding Equipment	40 ft Planter
Seeding Date	May 16
Variety	S007-Y4
Germination	90%
Row Spacing	15"
Harvest Date	October 04

Precipitation (mm)

	May	Jun	Jul	Aug	Total
Rainfall	100.2	75.3	123.9	53.1	352.5
Normal	54	89.9	73.4	72.6	289.9
% Normal	186%	84%	169%	73%	122%

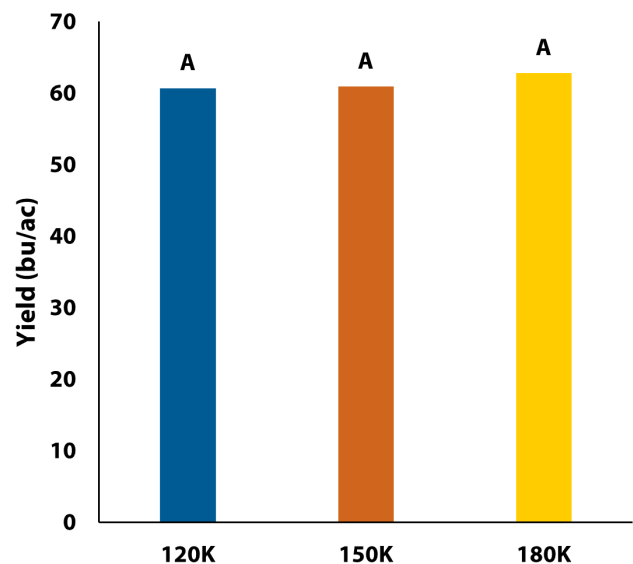
Plant Stand (plants/ac)

	VC	R6
120k	102,000	111,000
150k	132,000	129,000
180k	142,000	132,000

NDVI Field Image August 12



Yield by Treatment





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Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
120k	60.7	\$58/ac	
150k	60.9	\$73/ac	-\$15/ac
180k	62.8	\$87/ac	-\$29/ac
P-Value	0.4027	Economic	120K to 150K → No
CV	3.8%		120K to 180K → No
Significance	No		150K to 180K → No

[†] Based on Manitoba Agriculture's 2022 *Cost of Production Guidelines* (\$67.90/unit); does not include application cost.

^{††} Yields were not significantly different, therefore profit/ac decreased by the cost/ac of increasing seeding rate.