

Soybean Seeding Rate Trial

Trial ID: 2020-SP08 – 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 210,000, 180,000 and 150,000 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	150k vs 180k vs 210k
Soil Texture	Clay
Previous Crop	Wheat
Tillage	Zero Till
Seeding Equipment	65 ft Air Drill
Seeding Date	May 21
Variety	S007-Y4
Row Spacing	10"
Harvest Date	September 25

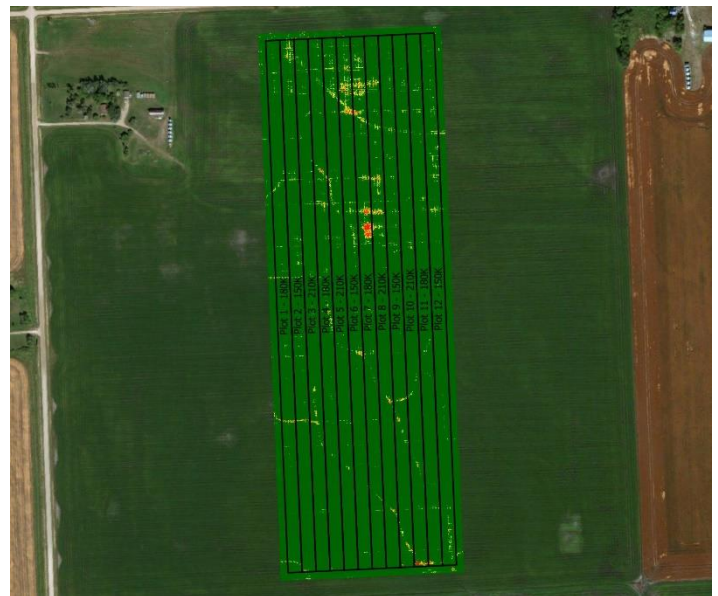
Precipitation (mm)

	May	June	July	August
Normal	54	89.9	73.4	72.6
Rainfall	11.3	74.9	49.8	110.7

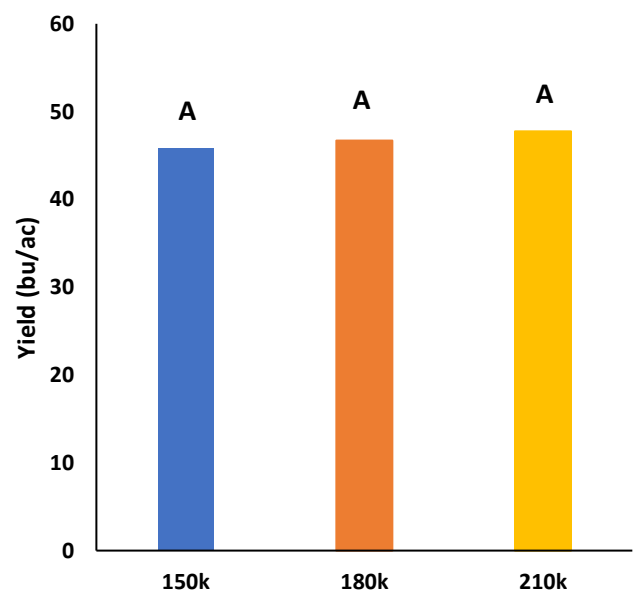
Plant Stand (plants/ac)

	V3	R6
150k	151 000	149 000
180k	173 000	164 000
210k	194 000	178 000

NDVI Field Image August 20



Yield by Treatment





on-farm network
PARTICIPATORY • PRECISE • PROACTIVE

Soybean Seeding Rate Trial

Overall Yield & Economics

	Mean (bu/ac)	Cost †	Change in Profit/ac ††
150k	45.8	\$71/ac	
180k	46.7	\$86/ac	-\$15/ac
210k	47.8	\$100/ac	-\$29/ac
P-Value	0.1709		
CV	3.0%		
Significance	No	Economic	150k → 180k No 150k → 210k No 180k → 210k No

† Based on MB Agriculture 2020 Cost of Production Guidelines (\$66.50/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