

Soybean Seeding Rate Trial

Trial ID: 2020-SP03 – R.M. of Brokenhead

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

Summary: There was no significant yield difference between seeding rates of 180,000, 150,000 and 120,000 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 Loam
Previous Crop	Wheat
Tillage	Conventional
Seeding Equipment	40 ft Planter
Seeding Date	May 18
Variety	P005A83X
Row Spacing	15"
Harvest Date	September 24

Precipitation (mm)

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

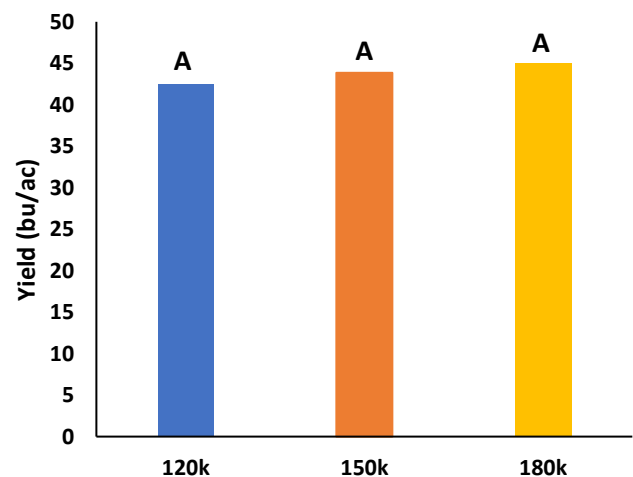
Plant Stand (plants/ac)

	V2	R6
120k	101 000	96 000
150k	130 000	116 000
180k	110 000	104 000

NDVI Field Image August 19



Yield by Treatment





on-farm network
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Overall Yield & Economics

	Mean (bu/ac)	Cost †	Change in Profits/ac ††
120k	42.3	\$59/ac	
150k	43.9	\$71/ac	-\$12/ac
180k	45.0	\$86/ac	-\$27/ac
P-Value	0.1210		
CV	5.9%		
Significance	No	Economic	120k → 150k No 120k → 180k No 150k → 180k 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