

Soybean Seeding Rate Trial

Trial ID: 2021-SSR12 – R.M. of Grassland

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

Summary: There was no significant yield difference between seeding rates of 125,000, 155,000 and 185,000 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	125k vs. 155k vs. 185k
Soil Texture	Loam / Clay Loam
Previous Crop	Corn
Tillage	Conventional
Seeding Equipment	60 ft Planter
Seeding Date	May 18
Variety	S0009-F2X
Germination	96%
Row Spacing	15"
Harvest Date	September 25

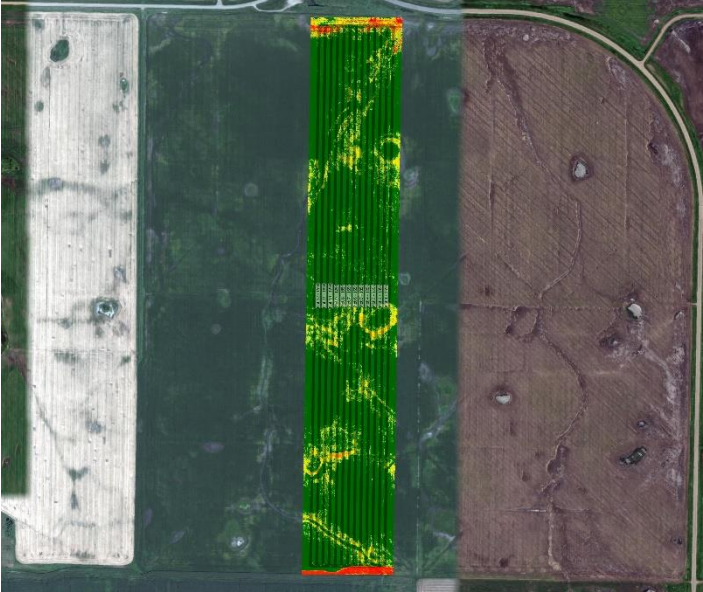
Precipitation (mm)

	May	Jun	Jul	Aug	Total
Rainfall	29.2	95	21.5	155	300.6
Normal	46.9	83.7	65.2	57.6	253.4
% Normal	62%	114%	33%	269%	119%

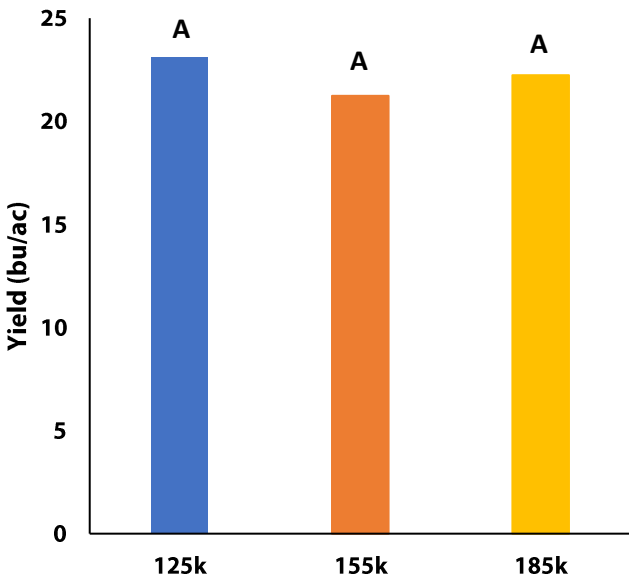
Plant Stand (plants/ac)

	V2	R6
125k	110,000	103,000
155k	128,000	125,000
185k	157,000	166,000

NDVI Field Image August 13



Yield by Treatment





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Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
125k	23.1	\$58/ac	
155k	21.2	\$72/ac	-\$14/ac
185k	22.2	\$86/ac	-\$28/ac
P-Value	0.4621	Economic	125k → 155k No
CV	7.5%		125k → 185k No
Significance	No		155k → 185k 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