

Soybean Seeding Rate Trial

Trial ID: 2021-SSR11 – R.M. of St. Andrews

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	Clay
Previous Crop	Wheat
Tillage	Conventional
Seeding Equipment	60 ft Disc Drill
Seeding Date	May 15
Variety	P006A37X
Row Spacing	10"
Harvest Date	October 4

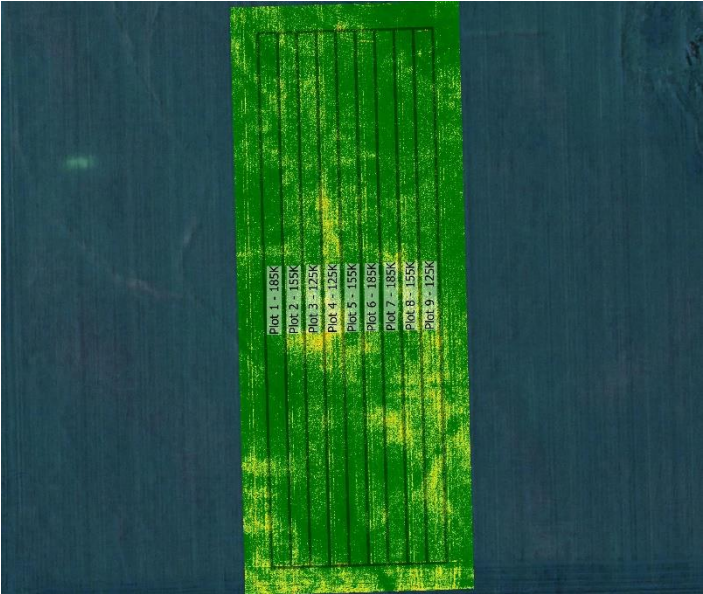
Precipitation (mm)

	May	Jun	Jul	Aug	Total
Rainfall	39.2	32.7	25.7	86.8	184.4
Normal	53.8	92	66.4	63.3	275.5
% Normal	73%	36%	39%	137%	67%

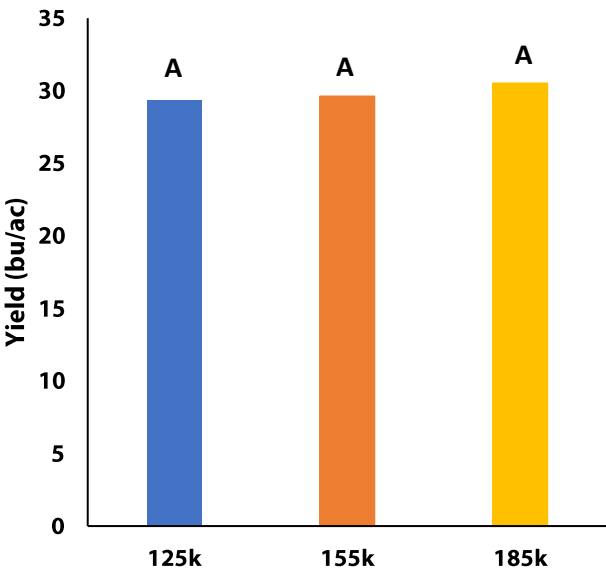
Plant Stand (plants/ac)

	V2	R7
125k	90,000	79,000
155k	142,000	103,000
185k	121,000	103,000

NDVI Field Image August 15



Yield by Treatment





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Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
125k	29.4	\$58/ac	
155k	29.6	\$72/ac	-\$14/ac
185k	30.5	\$86/ac	-\$28/ac
P-Value	0.3792	Economic	125k → 155k No
CV	3.2%		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