



Soybean Seeding Rate Trial

Trial ID: 2024-SSR02 – R.M. of Woodlands

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

Summary: There were no significant yield differences among 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	Corn
Tillage	Conventional Till
Seeding Equipment	40ft Planter
Seeding Date	May 12
Variety	DKB002-32
Germination	73%
Row Spacing	15"
Harvest Date	September 27

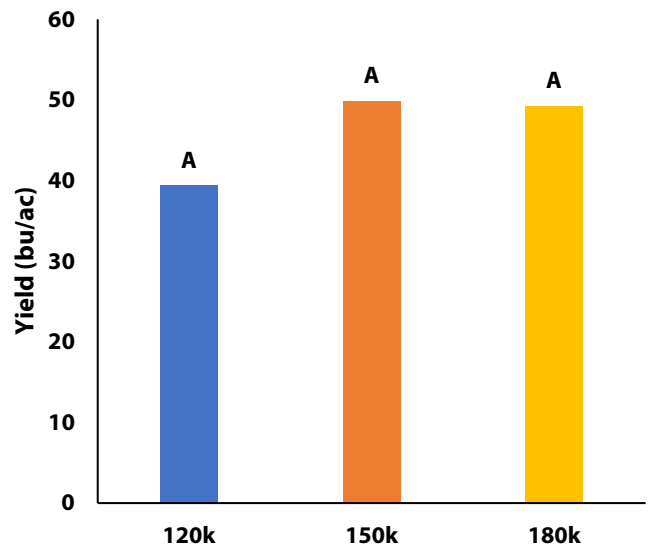
NDVI Field Image August 12



Precipitation (mm)

	May	June	July	Aug	Total
Rainfall	118.3	111.6	94	53.6	377.5
Normal	49.8	79.4	71.1	69.3	269.6
% Norm	238%	141%	132%	77%	140%

Yield by Treatment



Plant Stand (plants/ac) †

	V1	R4
120k	76,000 C	66,000 B
150k	105,000 B	101,000 A
180k	117,000 A	113,000 A

† Averages followed by different letters in the column are significantly different at $p=0.05$.

Plant Establishment and Survivability †

	Establishment at V1	Survivability to R4	Change V1 to R4
120k	63%	55%	-8%
150k	70%	68%	-3%
180k	65%	63%	-2%

† % establishment = plant count at V stages/seeding rate; % survivability = plant count at R stages/seeding rate



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Overall Yield & Economics

	Mean (bu/ac)	Cost†	Change in Profit**
120k	39.4	\$54/ac	
150k	49.9	\$67/ac	-\$13/ac
180k	49.2	\$81/ac	-\$27/ac

P-Value	0.079	Economic	120k → 150k No
CV	12.8%		120k → 180k No
Significance	No		150k → 180k No

† Based on a \$62.94/unit soybean seed costs (Source: Manitoba Agriculture 2024 Cost of Production Guidelines)

** 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