

Soybean Seeding Rate Trial

Trial ID: 2022-SSR06 – R.M. of Glenella-Lansdowne

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

Summary: There was no significant yield difference between seeding rates of 145,000, 165,000 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	145k vs 165k vs 185k
Soil Texture	Loamy Very Fine Sand
Previous Crop	Soybeans
Tillage	Conventional
Seeding Equipment	43 ft Disc Drill
Seeding Date	June 20
Variety	Torro R2
Germination	81%
Row Spacing	10″
Harvest Date	October 12

Precipitation (mm)

	May	Jun	Jul	Aug	Total
Rainfall	150.7	89.3	44.2	41.7	325.9
Normal	56.5	78	80.2	68.7	283.4
% Normal	267%	114%	55%	61%	115%

Plant Stand (plants/ac)

	V1	R7
145k	91,000	93,000
165k	117,000	117,000
185k	118,000	114,000

NDVI Field Image August 11



45 40 35 30 25 20 15 10 5 0

Yield by Treatment



165K

145K

185K



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Overall Yield & Economics

	Mean (bu/ac)	Cost ⁺	Change in Profit/ac ⁺⁺
145k	40	\$70/ac	
165k	37.5	\$80/ac	-\$10/ac
185k	37.3	\$90/ac	-\$19/ac
P-Value	0.1795	Economic	145K to 165K → No
CV	5.7%		145K to 185K → No
Significance	Νο		165K to 185K → No

+ Based on Manitoba Agriculture's 2022 Cost of Production Guidelines (\$67.90/unit); does not include application cost.

++ Yields were not significantly different, therefore profit/ac decreased by the cost/ac of increasing seeding rate.

