Soybean Seeding Rate Trial

Trial ID: 2024-SSR09 – R.M. of Dauphin

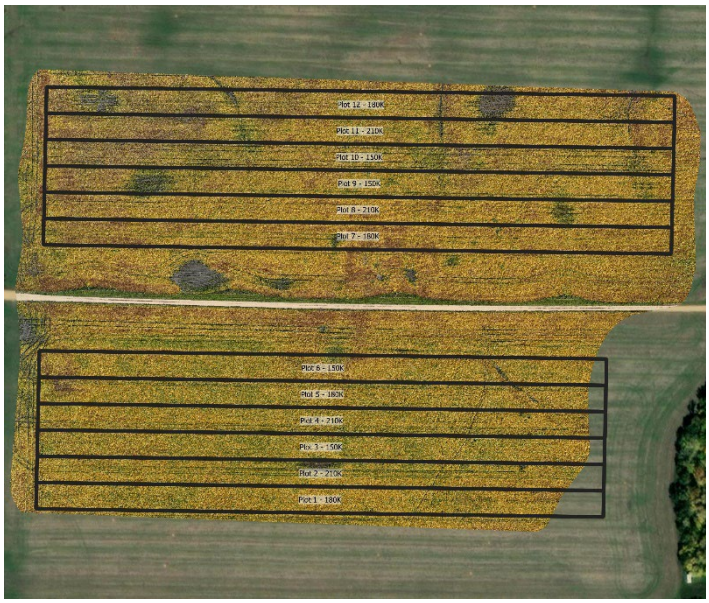
Objective: Quantify the agronomic and economic impacts of different soybean seeding rates.

Summary: There were no significant yield differences among seeding rates of 150,000, 180,000 and 210,000 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	150k vs 180k vs 210k
Soil Texture	Clay
Previous Crop	Wheat
Tillage	Harrow
Seeding Equipment	60ft Hoe Drill
Seeding Date	May 31
Variety	Renolds
Germination	96%
Row Spacing	10"
Harvest Date	October 6

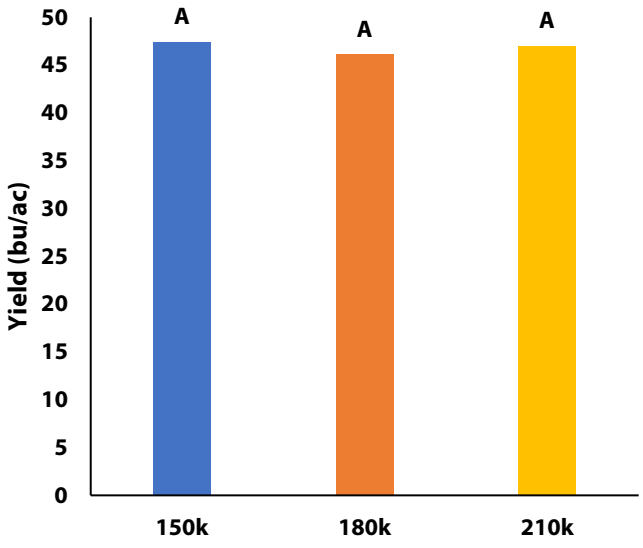
Trial Image September 26



Precipitation (mm)

	May	June	July	Aug	Total
Rainfall	106	114.3	57.5	76.3	354.1
Normal	54.3	86.7	73.2	63.3	277.5
% Norm	195%	132%	79%	121%	128%

Yield by Treatment



Plant Stand (plants/ac) ǂ

	V4	R7
150k	161,000 B	162,000 B
180k	177,000 B	175,000 B
210k	219,000 A	216,000 A

ǂ Averages followed by different letters in the column are significantly different at *p =0.05*.

Plant Establishment and Survivability ǂ

	Establishment at V4	Survivability to R7	Change V4 to R7
150k	107%	108%	1%
180k	99%	97%	-1%
210k	104%	103%	-1%

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

[Additional On-Farm Network Research Reports]

MANITOBA Pulse Soybean GROWERS
T 204 745.6488
www.manitobapulse.ca

Soybean Seeding Rate Trial

on-farm network
PARTICIPATORY • PRECISE • PROACTIVE

Overall Yield & Economics

	Mean (bu/ac)	Cost ǂ	Change in Profit ǂǂ
150k	47.4	$67/ac	
180k	46.1	$80/ac	-$13/ac
210k	47.0	$94/ac	-$27/ac

P-Value	0.787	**Economic**	150k → 180k **No**
CV	5.6%		150k → 210k **No**
Significance	**No**		180k → 210k **No**

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

ǂ ǂ 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