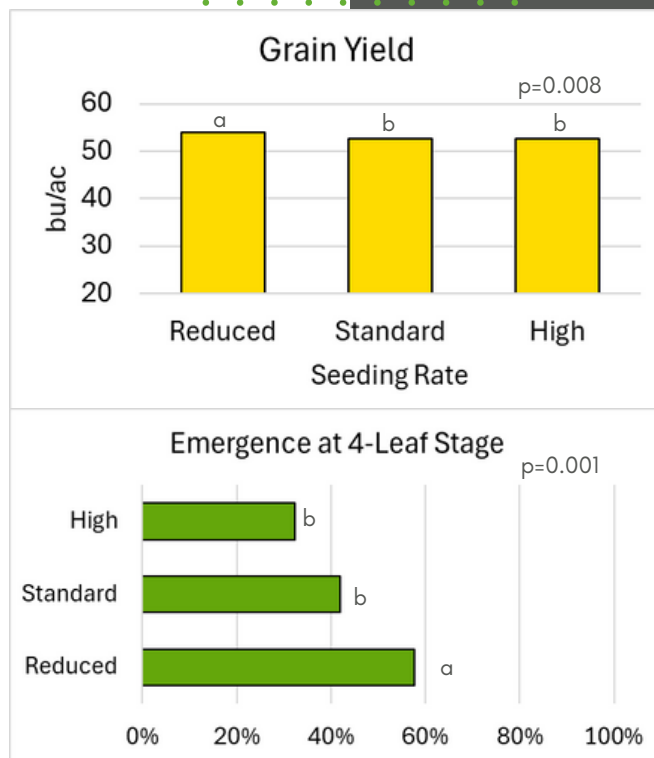


Seeding Rate Trial SR_21

Site Info

Trial ID: SR_21
Rural Municipality: Rhineland
Seeding Date: May 7, 2025
Seeding Equipment: John Deere Planter

Variety: InVigor L340PC
Seed Treatment: Helix Vibrance and Buteo Start
TKW: 4.8 g/1000 seeds
Row Spacing: 10 inch
Harvest Date: August 26, 2025



Within each data type, treatments with different lowercase letters are significantly different at 95% confidence level ($p < 0.05$). Data types with no lowercase letters listed indicate an insignificant treatment effect.

Results Summary

Plant Establishment: Plant counts at the 4-leaf stage and maturity were not significantly different across seeding rate treatments. Emergence% was significantly greater in the reduced seeding treatment relative to the standard and high seeding rate treatments.

Grain Yield: Seeding rate had significant influence on grain yield – the reduced seeding rate produced greater yield than the standard and high seeding rate treatments

Profitability: The reduced seeding rate treatment lowered seed costs while significantly increasing yield, returning \$32/ac more than when using the farm standard rate. The high seeding rate treatment raised costs without significantly increasing yield, returning \$17/ac less than the standard.

Treatment	Seeding Rate		Plant Counts (ft ²)	
	Lbs./ac	Seeds/ac	4-leaf	Maturity
Reduced Seeding Rate (75%)	3	377,993	3.7	3.4
Standard Seeding Rate (100%)	4	283,495	3.6	3.5
High Seeding Rate (125%)	5	472,492	3.5	3.5
	<i>p-value</i>		0.627	0.738

Seeding Rate Trial SR_21 Continued



SR_21 Weather

	Apr	May	June	July	Aug	Sept	Total
Rainfall (mm)	24.3	67.9	42.6	99.8	54.5	64.4	353.5
Avg Daily Temp (°C)	5.77	15.35	18.25	20.15	19.79	16.61	

SR_21 Economic Analysis

Seeding Rate	Mean yield (bu/ac)	Seed Cost ¹	Change in Profit from Farm Standard ²
3 lb/ac	53.88 ^a	\$50/ac	\$32/ac
4 lb/ac	52.72 ^b	\$66/ac	-
5 lb/ac	52.62 ^b	\$83/ac	-\$17/ac
P-value	0.009		
CV	3.49		

¹ Based on 2025 MB Cost of Production: estimated cost of seed ~ \$16.50 / lb

² Change in profit is calculated as the difference in grain sales income (based on estimated canola sale price of \$13.25/bu) and treatment costs, relative to the standard farm practice. Yields were not significantly different in the high seeding rate treatment, but were significantly increased by the low seeding rate treatment in this trial, therefore an increase in grain sales income



**Agronomic Support for this Trial
Provided by:**