

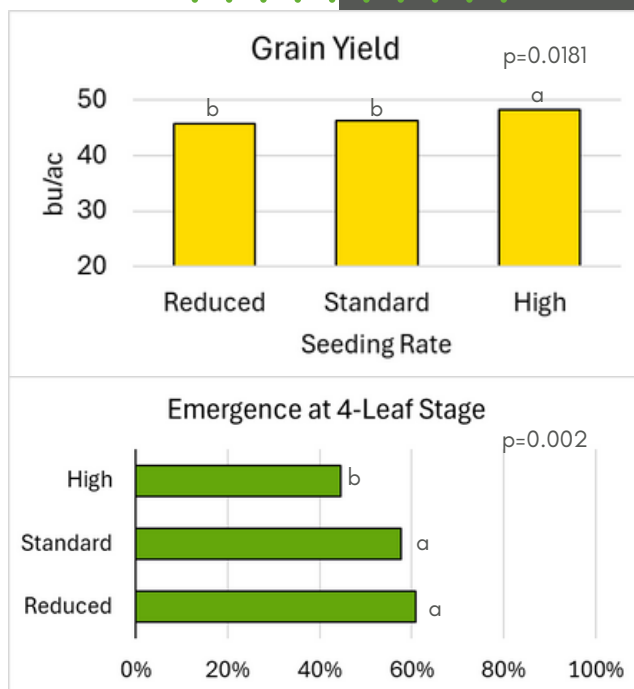
Seeding Rate Trial SR_22

Site Info

Trial ID: SR_22
Rural Municipality: Minitonas
Seeding Date: May 23, 2025
Seeding Equipment: Bourgault 5710

Variety: ICS4000
Seed Treatment: Buteo

TKW: 5.2 g/1000 seeds
Row Spacing: 10 inch
Harvest Date: September 8, 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 were significantly greater in the standard and high seeding rate treatments than the reduced seeding rate treatment. At maturity, the high seeding rate treatment maintained significantly greater plant counts than the reduced seeding rate treatment, however the standard rate’s plant counts fell slightly to be statistically similar to the reduced seeding rate. Emergence% was significantly greater when using reduced and standard seeding rates compared to the high seeding rate treatment.

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

Profitability: The reduced seeding rate treatment lowered seed costs while maintaining statistically similar yield to the farm standard rate, returning \$22/ac more than the standard. The high seeding rate treatment significantly increased yield at the price of seed costs, returning only \$6/ac more than the standard.

Treatment	Seeding Rate		Plant Counts (ft ²)	
	Lbs./ac	Seeds/ac	4-leaf	Maturity
Reduced Seeding Rate (75%)	3.9	340,500	4.8 ^b	4.5 ^b
Standard Seeding Rate (100%)	5.2	454,000	6.0 ^a	5.9 ^{ab}
High Seeding Rate (125%)	6.5	567,500	5.8 ^a	6.3 ^a
	<i>p-value</i>		0.012	0.025

Seeding Rate Trial SR_22 Continued



SR_22 Weather

	Apr	May	June	July	Aug	Sept	Total
Rainfall (mm)	1.8	23.8	48.5	20.8	135	32.5	262.4
Avg Daily Temp (°C)	2.66	12.65	16.06	17.62	19.12	15	

SR_22 Economic Analysis

Seeding Rate	Mean yield (bu/ac)	Seed Cost ¹	Change in Profit from Farm Standard ²
3.9 lb/ac	45.84 ^b	\$64/ac	\$22/ac
5.2 lb/ac	46.23 ^b	\$86/ac	-
6.5 lb/ac	48.33 ^a	\$107/ac	\$6/ac
P-value	0.018		
CV	3.45		

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 low seeding rate treatment, but were significantly increased by the high seeding rate treatment in this trial, therefore an increase in grain sales income



Agronomic Support for this Trial
Provided by: