

Canola Seeding Rate – SR_06

Research Question: Can Manitoba canola farms reduce their seeding rates without sacrificing yield to increase return on investment?

Site Information

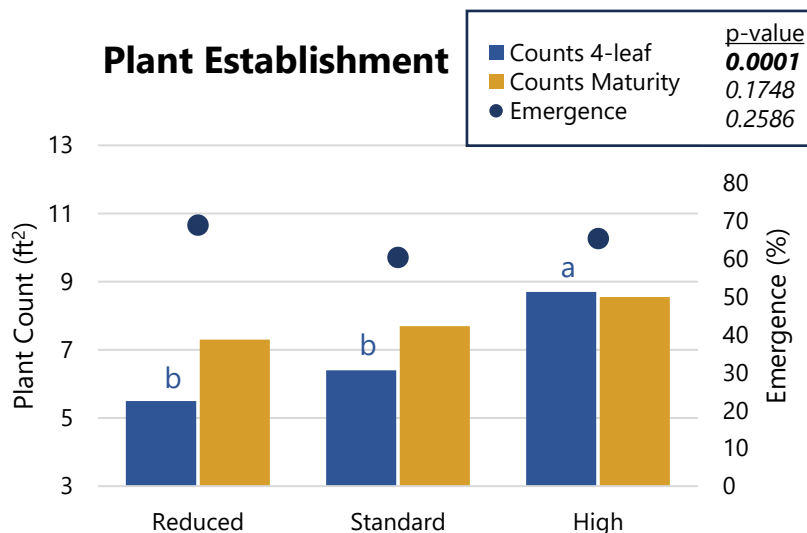
R.M.	Minitonas-Bowsman
Seeding Date:	May 21, 2023
Seeding Equipment:	Bourgault 5710 Air Drill
Variety:	L234PC
Seed Treatment:	Lumiderm
TKW:	4.7 g/1000 seeds
Row Spacing:	10"
Harvest Date:	September 13, 2023

Treatment	lbs./ac	Seeds/ac
1 Reduced Seeding Rate (75%)	3.6	347,438
2 Standard Seeding Rate (100%)	4.8	463,251
3 Hight Seeding Rate (125%)	6	579,063

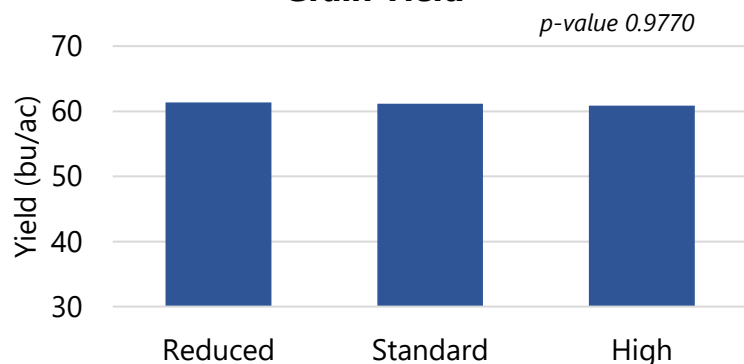
Summary

- **Plant Establishment:** High seeding rate significantly increase the amount of plants present at the 4-leaf stage compared to the other treatments (no difference in emergence % at 4 leaf). There were no differences between treatments for plant counts at maturity, indicating that there was likely a late flush of emergence after much of the crop was at 4 leaf stage due to dry May conditions.
- **Grain Yield:** There was no significant difference in grain yield between all seeding rates tested.
- **Economic Considerations:** The reduced seeding rate treatment resulted in the greatest return on investment in this trial. With no effect on yield the adoption of a lower seeding rate could reduce seed costs by 25%.
- 2024 SRP is approximately \$1000/bag of canola seed, indicating a potential cost reduction of \$250/bag.
- Additional considerations: risks associated with low plant populations outside of the scope of this trial include reduced competitiveness against field pests.

Plant Establishment



Grain Yield



The absence of lowercase letters for any data type indicates no significant differences between treatments.

	Apr	May	June	July	Aug	Total
Rainfall (mm)	36.5	18.6	40.6	39.7	54	189
% of Normal Rainfall	108%	33%	45%	42%	69%	47%
Avg Daily Temp (C)	-0.3	14	19	17	18	

Agronomic support for this trial provided by:

