Pea Seeding Rate Trial

Trial ID: 2022-PSR02 – R.M. of Grey

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

Summary: There was no significant yield difference between seeding rates of 65, 89, and 105 seeds/m^2. As a result, there was a decrease in profit equivalent to the increase in seed cost for the higher seeding rates.

Trial Information

Treatment ǂ	65 vs 89 vs 105 seeds/m^2
Soil Texture	Clay
Previous Crop	Canola
Tillage	Zero Till
Seeding Equipment	42 ft Disc Drill
Seeding Date	May 27
Variety	AAC Chrome
Germination	75%
Row Spacing	7.5"
Harvest Date	September 9

ǂ Equivalent to 2.3 vs 3.2 vs 3.8 bu/ac seeding rates

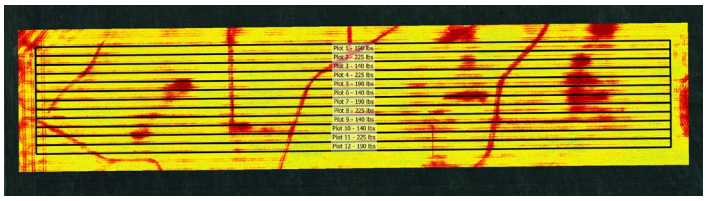
Precipitation (mm)

	May	Jun	Jul	Aug	Total
Rainfall	144.2	62.8	147.5	86.4	440.9
Normal	58.5	92	77.8	67.6	295.9
% Normal	246%	68%	190%	128%	149%

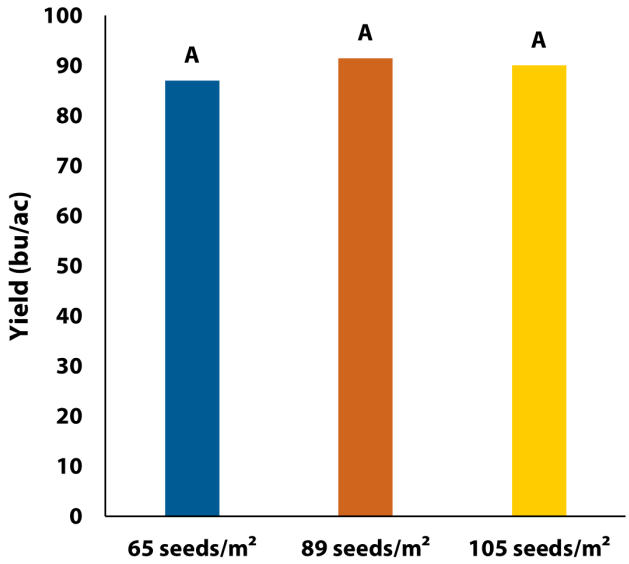
Plant Stand (plants/ac)

Seed/m^2	V2	R4
65	192,000	177,000
89	246,000	219,000
105	266,000	242,000

NDVI Field Image July 25



Yield by Treatment



Overall Yield & Economics

	Mean (bu/ac)	Cost ǂ	Change in Profit/ac ǂǂ
65 seeds/m^2	87	$67/ac	
89 seeds/m^2	91.5	$93/ac	-$26/ac
105 seeds/m^2	90	$110/ac	-$44/ac
P-Value	0.2542	**Economic**	65 seeds/m^2 to 89 seeds/m^2 → **No**
CV	4.6%		65 seeds/m^2 to 105 seeds/m^2 → **No**
Significance	**No**		89 seeds/m^2 to 105 seeds/m^2 → **No**

ǂ Based on Manitoba Agriculture's 2022 *Cost of Production Guidelines* ($29/bu); does not include application cost.

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

[Additional On-Farm Network Research Reports]

Manitoba Pulse Soybean Growers
T 204 745.6488
www.manitobapulse.ca