

Pea Seeding Rate Trial

Trial ID: 2022-PSR01 – R.M. of North Cypress-Langford

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

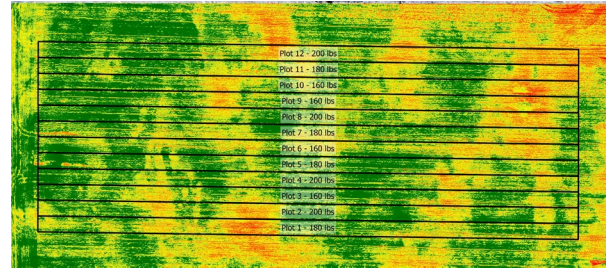
Summary: There was no significant yield difference between seeding rates of 78, 88, and 98 seeds/m². As a result, there was a decrease in profit equivalent to the increase in seed cost for the higher seeding rates.

Trial Information

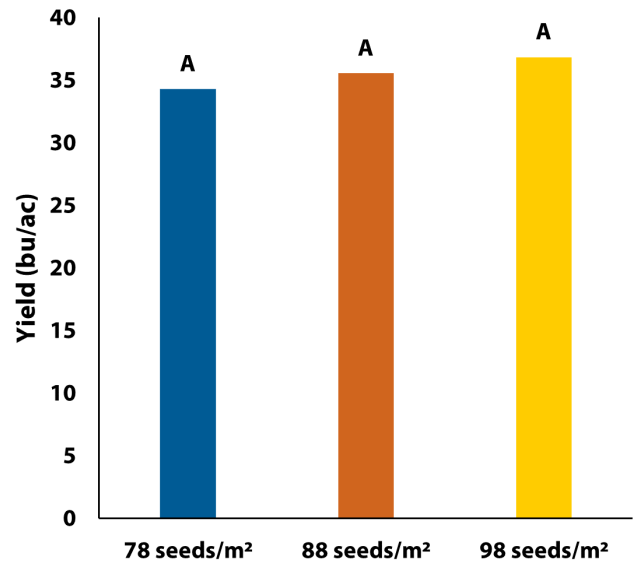
Treatment †	78 vs 88 vs 98 seeds/m ²
Soil Texture	Loam
Previous Crop	Wheat
Tillage	Zero Till
Seeding Equipment	43 ft Disc Drill
Seeding Date	May 24
Variety	CDC Amarillo
Germination	86%
Row Spacing	10"
Harvest Date	August 20

† Equivalent to 2.7 vs 3 vs 3.3 bu/ac seeding rates

NDVI Field Image July 23



Yield by Treatment



Precipitation (mm)

	May	Jun	Jul	Aug	Total
Rainfall	150.7	89.3	44.2	41.7	325.9
Normal	56.5	78	80.2	68.7	283.4
% Normal	267%	114%	55%	61%	115%

Plant Stand (plants/ac)

Seeds/m ²	V5	V13
78	322,000	322,000
88	328,000	323,000
98	398,000	387,000

Overall Yield & Economics

	Mean (bu/ac)	Cost †	Change in Profit/ac ††
78 seeds/m²	34.3	\$78/ac	
88 seeds/m²	35.5	\$87/ac	-\$9/ac
98 seeds/m²	36.8	\$96/ac	-\$17/ac
P-Value	0.3449	Economic	78 seeds/m ² to 88 seeds/m ² → No
CV	8.5%		78 seeds/m ² to 98 seeds/m ² → No
Significance	No		88 seeds/m ² to 98 seeds/m ² → No

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

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