

Pea Seeding Rate Trial

Trial ID: 2021-PSR03 – R.M. of Glenella-Lansdowne

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

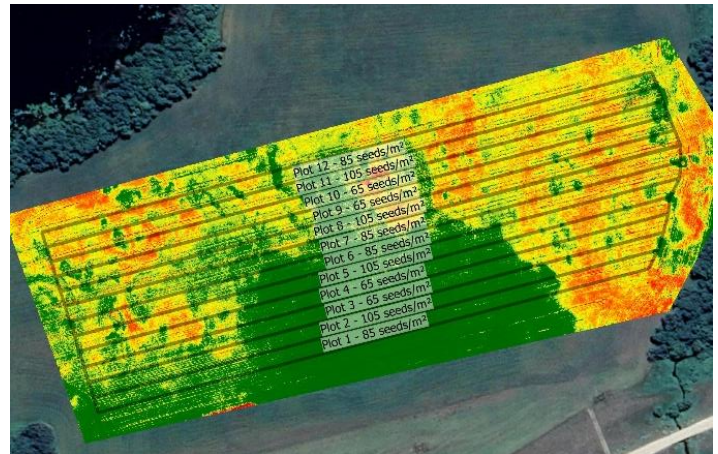
Summary: There was no significant yield difference between seeding rates of 65, 85 and 105 seeds/m². As a result, there was a decrease in profit/ac, equivalent to the increase in seed cost for the higher seeding rates.

Trial Information

Treatment †	65 vs. 85 vs. 105 seeds/m ²
Soil Texture	Loamy Fine Sand
Previous Crop	Ryegrass
Tillage	Conventional
Seeding Equipment	43 ft Disc Drill
Seeding Date	April 27
Variety	CDC Amarillo
Germination	93%
Row Spacing	10"
Harvest Date	August 12

† Equivalent to 2.2 vs. 2.9 vs. 3.6 bu/ac seeding rates

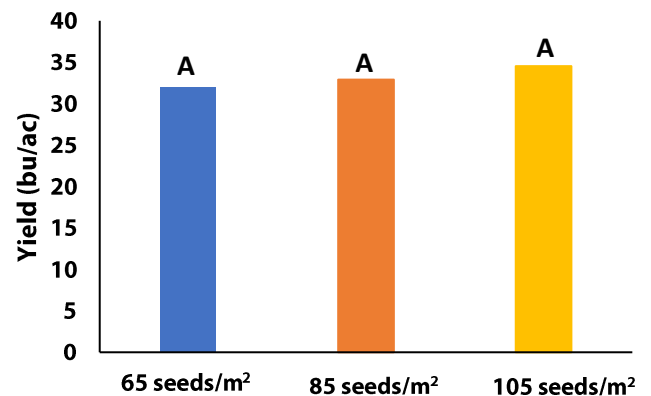
NDVI Field Image July 12



Precipitation (mm)

	May	Jun	Jul	Aug	Total
Rainfall	19.9	60.8	56.6	147	284.5
Normal	56.5	78	80.2	68.7	283.4
% Normal	35%	78%	71%	214%	100%

Yield by Treatment



Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
65 seeds/m²	32.0	\$37/ac	
85 seeds/m²	32.9	\$49/ac	-\$12/ac
105 seeds/m²	34.5	\$60/ac	-\$23/ac
P-Value	0.487	Economic	65 seeds/m ² → 85 seeds/m ² No
CV	21.2%		65 seeds/m ² → 105 seeds/m ² No
Significance	No		85 seeds/m ² → 105 seeds/m ² No

† Based on MB Agriculture 2021 Cost of Production Guidelines (\$16.83/bu)

†† Change in profit is calculated as the difference in cost between seeding rate treatments. Because yields were not significantly different, there is no increased income to offset the increase in seed cost.