

Pea Seeding Rate Trial

Trial ID: 2021-PSR01 – R.M. of Wallace-Woodworth

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

Summary: There was no significant yield difference between seeding rates of 95, 115 and 135 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 †	95 vs. 115 vs. 135 seed/m ²
Soil Texture	Loam
Previous Crop	Canola
Tillage	Zero Till
Seeding Equipment	60 ft Air Seeder
Seeding Date	April 24
Variety	AAC Chrome
Germination	84%
Row Spacing	12"
Harvest Date	August 4

† Equivalent to 3.4 vs. 4.1 vs. 4.8 bu/ac seeding rates

Precipitation (mm)

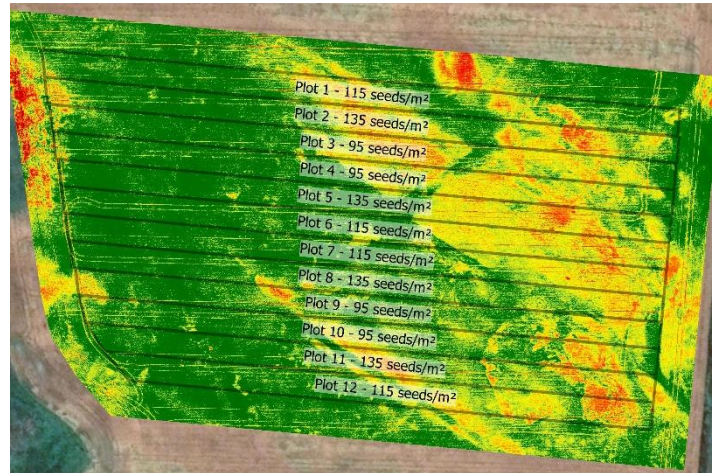
	May	Jun	Jul	Aug	Total
Rainfall	24.5	89.4	20.1	110	243.6
Normal	40.7	78.7	58.5	52.9	230.8
% Normal	60%	114%	34%	207%	106%

Plant Stand (plants/ac) †

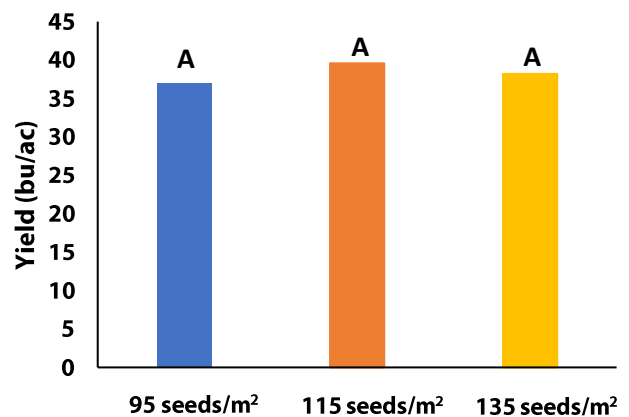
Rate	V4		R6	
	plants/ac	plants/m ²	plants/ac	plants/m ²
95	306,000	76	243,000	60
115	318,000	79	291,000	72
135	366,000	90	314,000	78

† 80-90 plants/m² is the current stand recommendation for peas in MB

NDVI Field Image July 12



Yield by Treatment



Overall Yield & Economics

	Mean (bu/ac)	Cost †	Change in Profit/ac ††
95 seeds/m²	37.0	\$57/ac	
115 seeds/m²	40.0	\$69/ac	-\$12
135 seeds/m²	38.2	\$81/ac	-\$24
P-Value	0.3471	Economic	95 seeds/m ² → 115 seeds/m ² No
CV	6.2%		95 seeds/m ² → 135 seeds/m ² No
Significance	No		115 seeds/m ² → 135 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.