

Pea Seeding Rate Trial

Trial ID: 2024-PSR04 – R.M. of Wallace-Woodsworth

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

Summary: The percent of seeding rate established for the low, normal and high rates was 83%, 85% and 75% respectively. There were no significant yield differences among seeding rates of 150, 180 and 210 lbs/ac. 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 (lbs/ac)	150 vs 180 vs 210
Soil Texture	Clay Loam
Previous Crop	Wheat
Tillage	Zero Till
Seeding Equipment	60ft Air Drill
Seeding Date	May 2
Variety	AAC Chrome
Row Spacing	12"
Harvest Date	August 16

Precipitation (mm)

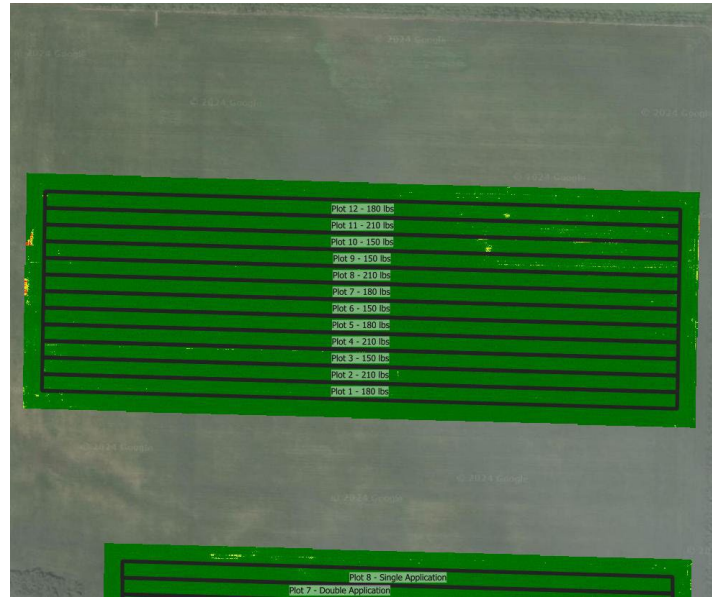
	May	June	July	Aug	Total
Rainfall	90.6	100.8	13.8	38	243.2
Normal	48	75.6	64.5	57.8	245.9
% Norm	189%	133%	21%	66%	99%

Plant Stand (plants/ac) †

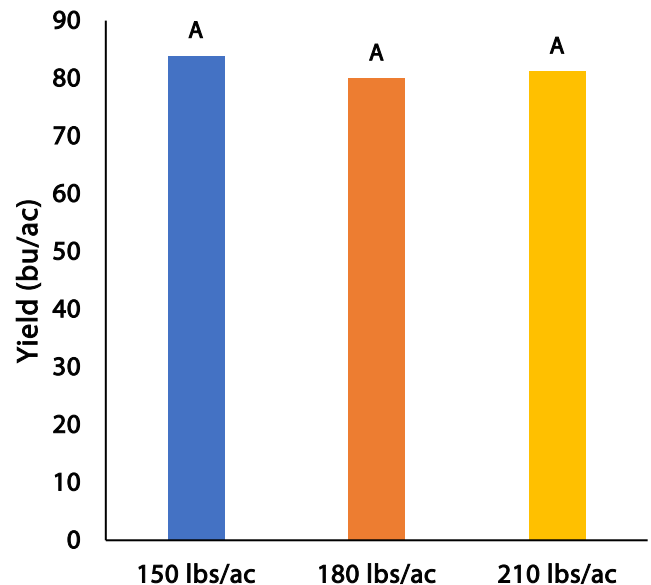
	V4	R8
150lbs/ac	237,000 B	N/A
180lbs/ac	290,000 A	N/A
210lbs/ac	300,000 A	N/A

† Averages followed by different letters in a column are significantly different at $p=0.05$.

NDVI Field Image July 18



Yield by Treatment





Overall Yield & Economics

	Mean (bu/ac)	Cost †	Change in Profit ††
150lbs/ac	83.9	\$73.33/ac	
180lbs/ac	80.0	\$87.99/ac	-\$14.67/ac
210lbs/ac	81.2	\$102.66/ac	-\$29.33/ac
P-Value	0.184		
CV	3.2%		
Significance	No	Economic	No

† Assuming a seed cost of \$29.33/bu (Source: Manitoba Agriculture 2024 Cost of Production Guidelines)

†† 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

Extreme Lodging at this trial prevented the late season (R8) plant counts

