



Sunflower Planting Rate

Trial ID: 2023-SFLP04 — R.M. of Emerson-Franklin

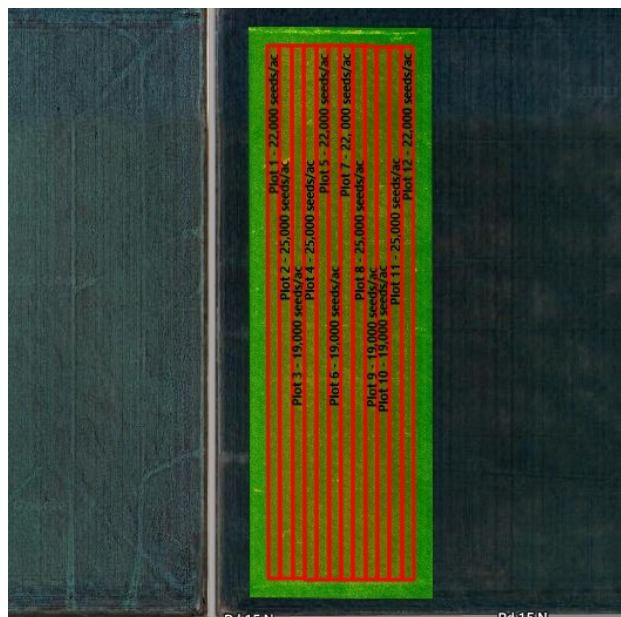
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal planting rate in oil-type sunflower.

Summary: There was no significant yield difference between planting rates of 19,000, 22,000 and 25,000 plants/ac. As a result, there was a decrease in profit equivalent to the increase in seed cost for the higher planting rates.

Trial Information

Treatment	19k vs. 22k vs. 25k
Soil Texture	Clay
Previous Crop	Wheat
Tillage	Conventional Tillage
Planting Equipment	55' Planter
Planting Date	May 20
Variety	CP455E (oil-type)
Germination	88%
Row Spacing	20"
Harvest Date	October 15

NDVI Imagery August 11



Sunflower Response[†]

	Plant Stand (plants/ac)	Oil (%)	TWT (lbs/bu)	Sizing 8 Slot
19k	17,333 ^B	43.3	30.0	75
22k	18,583 ^B	42.5	29.7	74
25k	22,000 ^A	44.9	29.6	62

[†]Analysis performed by Scoular

Precipitation[†] (mm)

	May	June	July	Aug	Cumulative
Rainfall	10	69	44	26	148
Normal	69	102	86	84	340
% Normal	15%	68%	51%	31%	44%

[†]Growing season precipitation (mm)

Overall Yield & Economics

	Mean (lbs/ac)	Cost [†]	Change in Profit/ac ^{††}
19k	2682	\$43.70/ac	+ \$6.90/ac
22k	2774	\$50.60/ac	\$0/ac
25k	2769	\$57.50/ac	- \$6.90/ac
P-Value	0.5236	Economics: There is an increase in profit for the lower planting rate due to the lower cost of seed/acre.	
CV	4.42%		
Significance	No		

[†]Based on MB Agriculture 2023 Cost of Production Guidelines (\$46.00/ac)

^{††}Change in profit is calculated as the difference in cost between planting rate treatments.



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**MANITOBA
CROP
ALLIANCE**

Phone: 204-745-6661
Website: mbcropalliance.ca
Email: hello@mbcropalliance.ca