



## Sunflower Planting Rate

**Trial ID: 2023-SFLP07 — R.M. of Stuartburn**

**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 22,000, 25,000 and 28,000 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	22k vs. 25k vs. 28k
Soil Texture	Fine Loams
Previous Crop	Grass/Pasture
Tillage	Zero Till
Planting Equipment	40' Planter
Planting Date	May 25
Variety	P63HE60 (oil-type)
Germination	90%
Row Spacing	30"
Harvest Date	October 20

### NDVI Imagery August 12



### Sunflower Response<sup>†</sup>

	Plant Stand (plants/ac)	Oil (%)	TWT (lbs/bu)	Sizing 8 Slot
22k	19,222	42.3	31.0	80
25k	22,889	42.0	31.0	54
28k	23,889	42.0	31.0	52

<sup>†</sup>Analysis performed by Scoular

### Precipitation<sup>†</sup> (mm)

	May	June	July	Aug	Cumulative
Rainfall	33	96	123	26	278
Normal	62	101	89	72	325
% Normal	54%	95%	138%	36%	86%

<sup>†</sup>Growing season precipitation (mm)

### Overall Yield & Economics

	Mean (lbs/ac)	Cost <sup>†</sup>	Change in Profit/ac <sup>††</sup>
22k	1600	\$50.60/ac	+ \$6.90/ac
25k	1474	\$57.50/ac	\$0/ac
28k	1451	\$64.40/ac	- \$6.90/ac
P-Value	0.3585	<b>Economics: There is an increase in profit for the lower planting rate due to the lower cost of seed/acre.</b>	
CV	7.99%		
Significance	No		

<sup>†</sup>Based on MB Agriculture 2023 Cost of Production Guidelines (\$46.00/ac)

<sup>††</sup>Change in profit is calculated as the difference in cost between planting rate treatments.



MCA would like to thank Tone Ag Consulting Ltd. for the research support and Scoular for quality analysis for this trial.



**MANITOBA  
CROP  
ALLIANCE**

Phone: 204-745-6661  
Website: [mbcropalliance.ca](http://mbcropalliance.ca)  
Email: [hello@mbcropalliance.ca](mailto:hello@mbcropalliance.ca)