



Sunflower Planting Rate

Trial ID: 2023-SFLP08 — R.M. of Tache

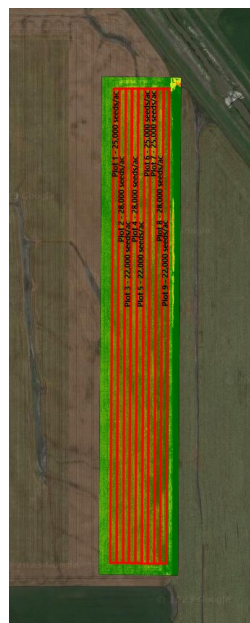
Objective: The purpose of this project is to quantify the agronomic and economic impacts of reducing and increasing normal planting rate in oil-type sunflower.

Summary: There was no significant yield difference between planting rates of 22,275, 24,740 and 27,844 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	22.3k vs. 24.7k vs. 27.8k
Soil Texture	Clay
Previous Crop	Wheat
Tillage	Conventional Tillage
Planting Equipment	44' Planter
Planting Date	May 26
Variety	P63ME80 (oil-type)
Germination	94%
Row Spacing	22"
Harvest Date	November 23

NDVI Imagery August 09



Sunflower Response[†]

	Plant Stand (plants/ac)	TWT (lbs/bu)	Sizing 8 Slot
22.3k	21,778	30.0	83
24.7k	23,667	30.0	83
27.8k	26,000	30.0	72

[†]Analysis performed by Scoular

Precipitation[†] (mm)

	May	June	July	Aug	Cumulative
Rainfall	22	43	64	49	179
Normal	57	90	80	77	303
% Normal	38%	48%	81%	64%	59%

[†]Growing season precipitation (mm)

Overall Yield & Economics

	Mean (lbs/ac)	Cost [†]	Change in Profit/ac ^{††}
22.3k	2970	\$51.23/ac	+ \$5.67/ac
24.7k	3061	\$56.90/ac	\$0/ac
27.8k	3013	\$64.04/ac	-\$7.14/ac
P-Value	0.3127	Economics: There is an increase in profit for the lower planting rate due to the lower cost of seed/acre.	
CV	2.08%		
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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