



Canola Nitrogen Rate Trial

Trial ID: CNR_01 – Swan River, MB [RM of SWAN VALLEY WEST]

Objective: To identify optimal nitrogen fertilizer rates based on return on investment and nitrogen use efficiency.

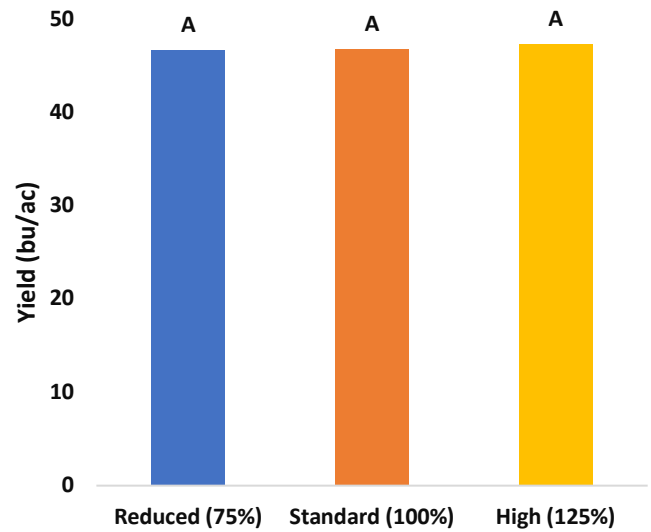
Summary: There was no significant yield difference between applied nitrogen fertilizer rates of 75%, 100%, or 125% relative to normal application.

Trial Information

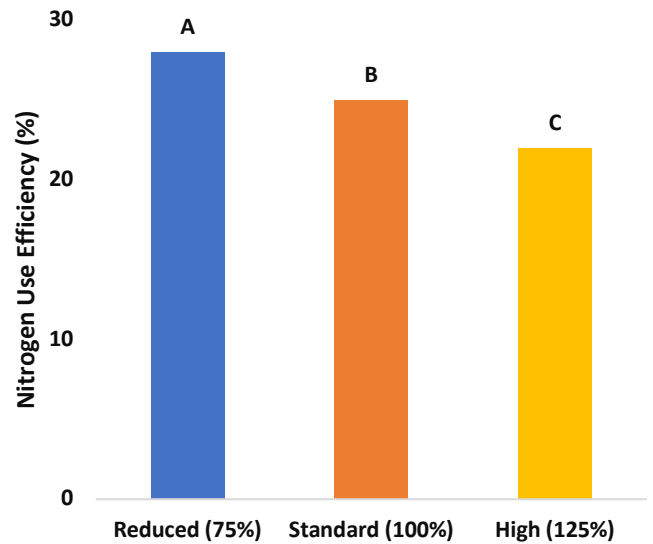
- Treatment**
- **Reduced N rate (75%):**
90 lbs N/ac
 - **Standard N rate (100%):**
112.5 lbs N/ac
 - **High N rate (125%):**
135 lbs N/ac

Soil Texture	Fine-textured
Previous Crop	Wheat
Seeding Date	May 25, 2022
Seeding Equipment	Versatile Air Drill
Residual N (0-2 ft)	76 lb/ac
N Application Method and Timing	3" deep before seeding
Variety	L255P
TKW	4.2 g/100 seeds
Seed Treatment	Vercoras, Lumiderm
Seeding Rate	4.2 lbs/ac
Row Spacing	10 inches
Harvest Date	September 11, 2022

Yield by Treatment



Nitrogen Use Efficiency by Treatment



Growing Season Conditions

	Rainfall (mm) (% of average)	Average Daily Temp. (C°)
April	11 (32%)	-1
May	91 (161%)	9
June	88 (98%)	15
July	43 (45%)	18
Aug	35 (44%)	17
Sept	30 (60%)	1
Total	297	

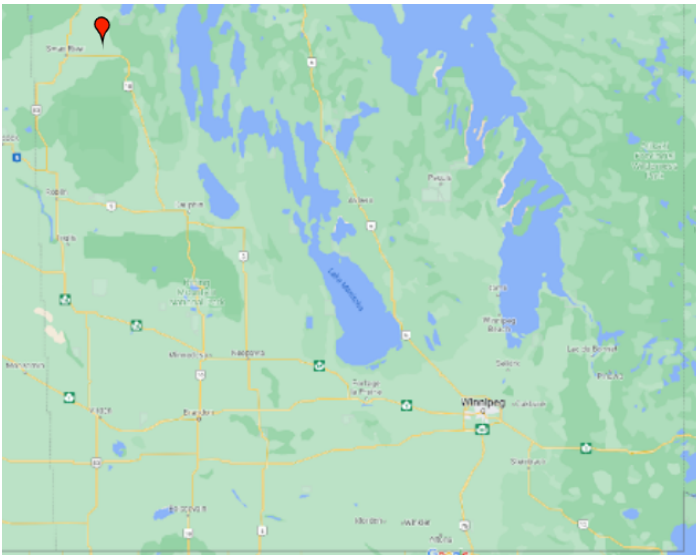


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Overall Yield & Results

	N Rate (lbs N/ac)	Plant Count 4-leaf	Tissue N Bolting (%)	Yield (bu/ac)
Reduced (75%)	90	8.3	6.6	46.7
Standard (100%)	112.5	7.9	6.6	46.8
High (125%)	135	8.6	6.7	47.4
P-Value		0.5732	0.898	0.8534
CV		7	2	2
Significance		No	No	No

Location of Trial



MCGA would like to thank New Era Ag Research for their research support for this trial.