



Canola Nitrogen Rate Trials

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

Summary: Two of the site locations showed a significant yield increase due to a higher nitrogen rate application, but the other three trial sites showed no significant yield differences due to the reduced or higher nitrogen fertilizer rate as compared to the standard.

Trial ID	Rural Municipality	Variety	Yield			CV	P-Value	Statistically Significant
			Reduced Nitrogen Application Rate (75%)	Standard Nitrogen Application Rate (100%)	High Nitrogen Application Rate (125%)			
			bu/ac			%	@ 95%	
Combined Analysis	--	--	46.1 ^b	46.9A ^b	47.8 ^a	--	0.0238	Yes
CNR_01	SWAN VALLEY WEST	L255P	46.7	46.8	47.4	2	0.8534	No
CNR_02	MACDONALD	L233P	54.6	53.2	54.5	4	0.4965	No
CNR_03	LORNE	L82SC	38.6	40.8	42.9	6	0.4965	No
CNR_04	MORRIS	L236	54.4 ^b	58.7 ^a	58.9 ^a	5	0.0023	Yes
CNR_05	TWO BORDERS	L233P	38.6 ^b	40.8 ^{ab}	42.9 ^a	12	0.0111	Yes

Indicates Statistical Difference at 95% Confidence Interval



Figure 1. 2022 MCGA on-farm trial locations organized by trial type.