

LOCAL CANOLA VARIETIES TRIAL

Canola remains one of the most important crops for Alberta producers, both economically and agronomically. In 2025, Alberta accounts for 29 percent of Canada's total canola production, underscoring the province's significant role in supplying both domestic and global markets, according to Statistics Canada and the Canadian Oilseed Processors Association. The Prairie wide Canola Performance Trials program was discontinued at the end of 2022. This initiative had been a collaborative effort among Alberta Canola, SaskOilseeds, and the Manitoba Canola Growers Association, providing producers with coordinated variety performance data across the Prairies.

In the summer of 2023, the Manitoba Canola Growers Association surveyed more than 400 growers and agronomists to better understand the value of an independent small plot canola variety evaluation program for farm members. The response was overwhelmingly positive, with strong support expressed across Manitoba. As a result, the association launched the Canola Variety Evaluation Trials for the 2024 growing season and successfully completed a second year of testing in 2025. Despite this momentum, Alberta Canola maintains that this type of trial does not provide sufficient value for canola producers. However, canola producers in the Westlock region and Gateway Research Organization (GRO) Crop Committee, continue to recognize the importance of locally driven variety testing. **To help address this gap, GRO has conducted canola varieties trial since 2023 using base funding to support local producers.**

The canola industry is highly competitive, with seed companies actively promoting their hybrids as top performing options. In this environment, locally managed canola performance trial provides producers with a trusted and independent opportunity to compare varieties side by side under consistent field conditions, supporting informed and confident decision making.

This year's trial included 12 Roundup Ready (RR), TruFlex (TF), and Glyphosate (Gly) hybrids, along with 12 LibertyLink (LL) hybrids offering producers a comprehensive view of the options available to support their operational decisions.

AGRONOMIC INFORMATION:

Seeded: May 29, 2025

Seed depth: ½ inch

Soil temperature: 20°C

Rainfall recorded: May 25 to September 20, 2025: 165.6 mm

Fertilizer:

Deep Banded: 28.29-5.78-15.42-1.93 @ 415 lbs/ac

117.4 lbs/ac Actual N; 24.0 lbs/ac Actual P; 64.0 lbs/ac Actual K; 8.0 lbs/ac Actual S

Side Banded: 28.29-5.78-15.42-1.93 @ 104lbs/ac

29.4 lbs/ac Actual N; 6.0 lbs/ac Actual P; 16.0 lbs/ac Actual K; 2.0 lbs/ac Actual S

Seed Placed: 11-52-0 @28.8 lbs/ac

3.2 lbs/ac Actual N; 15 lbs/ac Actual P

Pre-Emergent: Avadex MicroActiv @ 19.3 lbs/ac on May 14, 2025

Herbicide Application: Lontrel + Poast @ 130 ml/ac + 450 ml/ac on June 24, 2025

**Trial was managed as a conventional canola trial.

Swathed: September 10, 2025

Harvested: September 22, 2025

LOCAL CANOLA PERFORMANCE TRIAL - GRO, WESTLOCK -2025

Adjusted @ 10% Moisture											
Trt No.	Treatment Name	Yield (kg/ha)	Yield (bu/ac)	Test Wt (kg/HL)	1000 KWT (g)	Oil (%)					
RR/TF/Gly Hybrids											
1	CP22T1C	3306	e-h	59.0	e-h	68.3	ab	4.73	a	43.2	ab
2	CP25T2C	3447	efg	61.5	d-g	69.1	ab	4.56	ab	43.2	ab
3	CS3000TF	3916	bc	69.5	bc	69.3	ab	4.05	ab	43.6	ab
4	CS3200TF	4090	b	72.8	b	69.0	ab	4.25	ab	44.2	a
5	CSEXP 25-8 TF	3421	efg	61.0	efg	69.1	ab	4.35	ab	42.8	ab
6	P1530G	4414	a	78.8	a	68.1	ab	3.98	ab	44.4	a
7	B4021	3799	bcd	67.8	bcd	68.8	ab	3.65	b	44.3	a
8	BY6223TF	3782	bcd	67.5	bcd	68.9	ab	4.61	a	42.8	ab
9	DKTFL22CRSC	3320	e-h	59.5	e-h	69.7	a	4.01	ab	43.7	ab
10	DK400TL	3809	bcd	68.0	bcd	68.9	ab	4.31	ab	44.3	a
11	DK901TF	3194	fgh	56.8	fgh	70.0	a	4.28	ab	43.7	ab
12	DK902TF	3680	cde	65.8	cde	69.6	ab	4.29	ab	43.5	ab
LL Hybrids											
13	CP24L3C	2991	h	53.3	h	69.0	ab	4.54	ab	42.2	ab
14	CP25L3C	3171	fgh	56.5	fgh	66.7	ab	4.26	ab	43.3	ab
15	CS4100LL	3252	fgh	58.0	fgh	67.4	ab	4.13	ab	42.6	ab
16	P516L	3070	gh	54.8	gh	67.6	ab	4.56	ab	42.4	ab
17	P519L	3319	e-h	59.3	e-h	69.7	a	4.55	ab	42.5	ab
18	P520L	3440	efg	61.5	d-g	68.0	ab	4.38	ab	43.6	ab
19	B3019	3132	gh	55.5	gh	68.2	ab	4.28	ab	42.3	ab
20	BY7202LL	3444	efg	61.5	d-g	66.9	ab	4.30	ab	43.5	ab
21	BY7204LL	3351	e-h	59.5	e-h	69.1	ab	4.49	ab	42.5	ab
22	BY7206LL	3557	def	63.3	def	69.2	ab	4.72	a	43.3	ab
23	InvigorL340PC	3270	fgh	58.3	fgh	68.1	ab	4.30	ab	41.6	b
24	Invigor341PC	3185	fgh	56.8	fgh	66.2	b	4.41	ab	42.0	ab
LSD P=.05 (% mean diff)		231.08 (7%)	4.15 (7%)		1.845 (3%)		0.4926 (12%)		1.366 (4%)		
Standard Deviation		163.81	2.94		1.308		0.349		0.968		
CV		4.72	4.76		1.91		8.06		2.24		

Means followed by same letter or symbol do not significantly differ (P= .05, Student-Newman-Keuls). Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

RESULTS AND DISCUSSION:

Results from the 2025 local canola performance trial show that P1530G was the top-yielding in RR/TF/Gly category, achieving 79 bu/ac. This canola hybrid also had the highest overall oil percentage at 44.40%. Among the LL hybrids, BY7206LL delivered the strongest performance with a yield of 63 bu/ac. Overall, RR/TF/Gly hybrids outperformed LL hybrids, averaging 66 bu/ac compared to 58 bu/ac. The trial site experienced water stress due to below-average precipitation throughout the growing season. As a result, no lodging was observed, and there were no notable signs of insect or disease pressure.

It is important to remember that each canola hybrid has its own strengths and potential. A hybrid's performance can vary depending on many factors, such as environmental conditions, soil types, management practices, disease pathotype tolerance, and other variables that affect crop growth. As a result, it is not ideal to make a canola hybrid decision based solely on this data. This trial represents just one year's worth of information, and we advise approaching the results with care, as they may not fully reflect how a hybrid will perform at your farm under different conditions.

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