

CANOLA HYBRID COMPARISON TRIAL

Co-Operator: Justin Nanninga (NW 5-62-2-W5)

While this site hosted several industrial canola trials, including seed treatment efficacy assessments for flea beetle control, a foliar phosphorus application, and evaluations of various biological products aimed at promoting canola growth, in this report, we are only sharing the results from the GRO canola hybrids comparison trial. Given the highly competitive nature of the canola industry—where each seed company promotes its hybrids as the best— a canola hybrids comparison trial offered a unique opportunity to conduct side-by-side performance comparisons of various hybrids. The trial was self-funded, with support from seed companies that provided their hybrids for testing.

Rainfall at the site was about 80% of the typical yearly rainfall for the Neerlandia area. Soil test results revealed a magnesium deficiency at the trial site. To address this issue and ensure optimal plant health, we incorporated magnesium into the fertilizer blend, aiming to replenish the soil and support the plants' nutritional needs throughout the growing season. Magnesium (Mg) is a vital nutrient for canola, as it plays a crucial role in photosynthesis and supports the overall health of the plant. As the central element in chlorophyll, magnesium is essential for capturing light energy and converting it into chemical energy during the photosynthesis process.

Canola Hybrids Comparison Trial - 2024

Seeded: May 29, 2024

Seed depth: 3/4th inch

Soil temperature: 14 Degree Celsius

Rainfall recorded: May 25 to September 30, 2024: 237.4 mm

Fertilizer:

Deep banded: 28.5-4.75-11.4-4.75-1Mg @426 lbs/ac

121 lbs/ac Actual N; 20 lbs/ac Actual P; 49 lbs/ac Actual K; 20 lbs/ac Actual S; 4 lbs/ac Actual Mg

Side banded: 28.5-4.75-11.4-4.75- 1 Mg @ 100 lbs/ac

29 lbs/ac Actual N; 5 lbs/ac Actual P; 11 lbs/ac Actual K; 5 lbs/ac Actual S; 1 lbs/ac Actual Mg

Pre-Burn: Glyphosate + Heat @ 270g ae/ac + 10.5 g/ac on May 28, 2024

1st Herbicide Application:

Clearfield (CL) - Solo @ 325 ml/ac on June 18, 2024

Roundup Ready (RR)/True Flex (TF) - Glyphosate @ 270g ae/ac on June 18, 2024

Liberty Link (LL) - Liberty @ 1.6ml/ac on June 18, 2024

2nd Herbicide Application:

CL - Solo @ 325 ml/ac on July 4, 2024

RR/TF - Glyphosate @180g ae/ac on July 4, 2024

LL - Liberty + Poast Ultra @ 1.1 L/ac + 100 ml/ac on July 4, 2024

Swathed on: September 13, 2024

Harvested on: October 08, 2024

Results and Discussion:

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 decision on which hybrid to choose 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.

Canola Hybrids Performance Trial - 2024											
Trt	Treatment	Herbicide-Tolerant	Height	Yield		Bushel Weight	Test Weight	1000, KWT	Oil		
No.	Name	Trait	cm	kg/ha	bu/ac	lbs/bu	kg/HL	g	%		
				Values are adjusted at 10% Moisture Content							
1	UA CountyGold – non-GMO	Clearfield	112	e	1189	i	21				
2	P514CL		134	c	3751	bcd	67				
3	CP21T3P	Roundup Ready	120	d	2422	h	43				
4	CP22T1C (HSFA)	True Flex	133	c	3396	fg	61				
5	BY6216TF	Optimum®GLY	137	bc	3529	def	63				
6	BY6219TF		139	b	3223	g	58				
7	CS3000TF		130	c	3399	fg	61				
8	CS3200TF		145	a	3863	ab	69				
9	CS3300TF		132	c	3582	c-f	64				
10	CS2600 CR-T		131	c	3655	b-e	65				
11	DK901TF		132	c	3775	bcd	68				
12	DK902TF		131	c	4023	a	72				
13	CP21L3C	Liberty Link	133	c	3344	fg	60				
14	CP24L3C		134	c	3713	bcd	66				
15	BY7204LL		130	c	3810	bc	68				
16	P516L		131	c	3466	ef	62				
LSD P=.05			4		168.08	3.02	0.81	0.91	0.2185	0.597	
Standard Deviation			2.81		118.02	2.12	0.57	0.64	0.1534	0.42	
CV			2.13		3.49	3.51	1.02	0.93	3.22	0.96	
Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).											