ALBERTA MILLING OAT TRIAL 2025

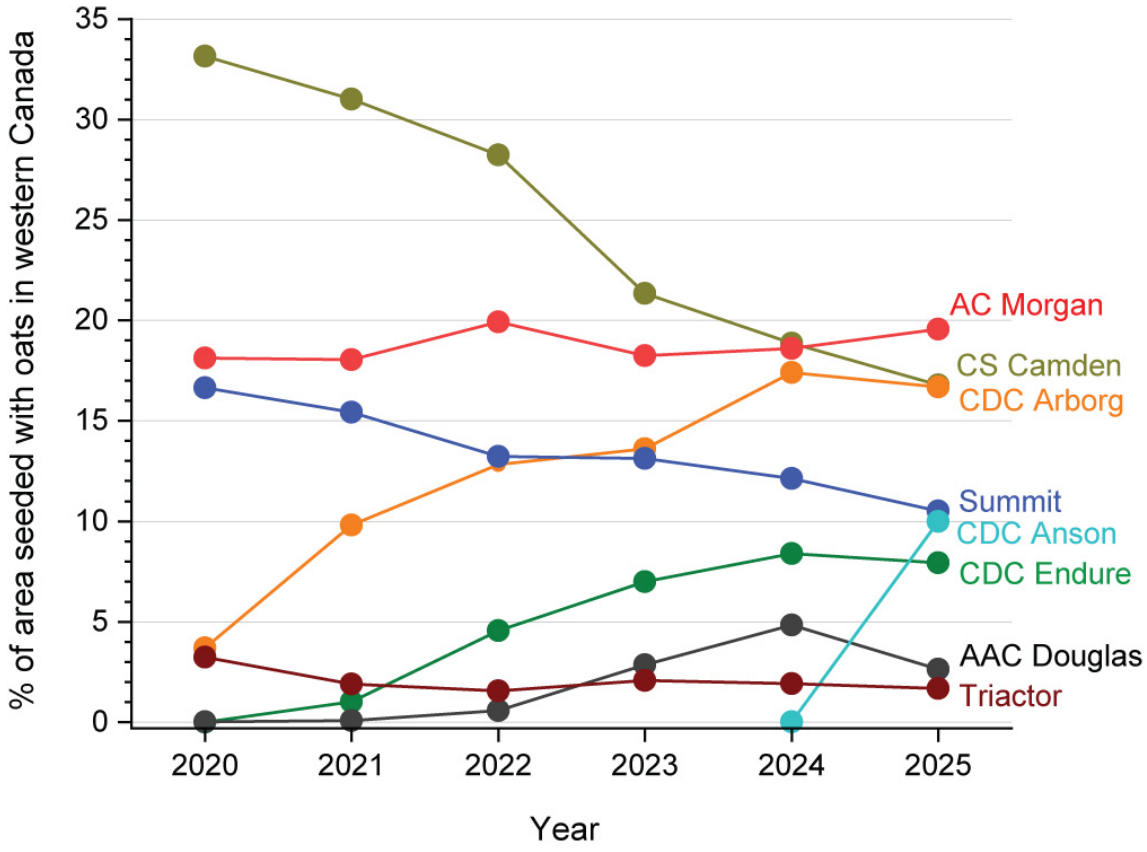
Abstract:

Since 2016, Gateway Research Organization (GRO) has collaborated with the Prairie Oat Growers Association (POGA) to conduct an in-depth evaluation of 11 approved oat milling varieties, focusing on their performance and beta-glucan content in north central Alberta (Westlock) and the Peace Region (Falher). This ongoing initiative aims to provide valuable insights into how different oat varieties and regional growing conditions influence both yield and the functional attributes associated with beta-glucan levels. Over the years, the study has consistently highlighted notable varietal differences in yield and beta-glucan content in the two regions. ***Nine years of research were successfully completed through to 2024, and POGA has agreed to continue its support for an additional three years, covering the 2025, 2026, and 2027 growing seasons. This ongoing commitment will ensure that the research continues to advance and support the oat industry.***

Project Background:

Oats are a beneficial rotational crop for producers to use, as they contribute to soil fertility and pest management. They provide disease and insect breaks for wheat, barley, and canola. Their rapid establishment and growth provide excellent weed suppression. Oats also work well as a "catch crop" for taking up and storing excess nitrogen, and the straw provides a nutrient source for the following year's crop. The straw also protects against soil erosion and contributes to an increase in the soil's organic matter content (Campbell et al., 1991). Well-planned management and appropriate selection of varieties make oats a profitable crop due to their low input requirements and favourable effects on succeeding crops in a rotation. Test weight is the most commonly used measure of grain quality. Growers who plan to sell oat grain typically aim for varieties with high test weights. However, in the processing industry, other properties, such as the solubility and viscosity of beta-glucan, are often more important. Research has shown that oat beta-glucan can help lower blood cholesterol, regulate blood sugar, and improve insulin response, which in turn may reduce the risk of heart disease and support diabetes prevention (Wang and Ellis, 2014).

As per the Canadian Grain Commission's recent report, oat acreage in Alberta declined in the early 2010s but has been on a steady upward path since 2018. After a slight dip in 2023, the trend recovered in 2024 and continues to grow into 2025.



Source: Government of Canada, Canadian Grain Commission (2025, November 4). *Quality of Western Canadian Oats in 2025*. https://www.grainscanada.gc.ca/en/grain-research/grain-harvest-export-quality/oats/2025/harvest-quality-report-oats-2025.html

This graph shows how the area seeded with different oat varieties in western Canada has changed from 2020 to 2025. CS Camden started off as the most popular choice, covering about 33 percent of the area in 2020, but its popularity steadily dropped to around 17 percent by 2025. Meanwhile, CDC Arborg gained substantial ground, starting at just 3 percent and growing to nearly 17 percent, catching up to CS Camden by 2025. **AC Morgan remained relatively stable, fluctuating between 18 and 20 percent over the years.** Summit experienced a gradual decline from approximately 16 percent to just above 10 percent. CDC Endure began almost unnoticed but gradually expanded to cover approximately 8 percent of the area by 2025. CDC Anson appeared in 2024 and quickly jumped to nearly 10 percent in 2025. Overall, the graph illustrates changing preferences, with some longtime favourites giving way to newer varieties that are becoming more popular.

To use the “Heart Healthy” label, a product must contain at least 4% beta-glucan. The beta-glucan content in oats may vary with changes in growing conditions (Perez Herrera et al., 2016). **In Alberta, the most commonly grown oat variety is AC Morgan, but it often struggles to reach the necessary beta-glucan levels, except in drier years**. Additionally, AC Morgan lacks crown rust resistance. Oat farmers in the region need a variety that can reliably match or exceed AC Morgan’s yields while also providing higher beta-glucan content and a strong

disease resistance package. Since 2015, Grain Millers Canada Corporation has supported these variety trials, aiming to find oat types that help Alberta producers access the milling market more consistently.

Helping producers discover oat varieties that perform better in their region is an important step toward keeping their farms profitable. This trial will provide Alberta farmers with useful insights, enabling them to grow oats that not only yield more but also offer added health benefits, such as higher levels of beta-glucan.

Objective:

The objective of the milling oat trial is to investigate how genotype and growing conditions affect the yield and beta-glucan content of milling oat varieties in Northern Alberta.

Methodology:

This study was conducted at two sites, **Westlock and Peace Region (Falher)**. At each location, a uniform field was selected for the trial, and soil testing was conducted to guide nutrient management. Fertilizer was applied in accordance with soil test recommendations to ensure optimal growing conditions. Seeding rates for each variety were calculated based on the 1000-kernel weight, target plant density (300 plants/m2), and germination percentage. Planting was carried out using a small 6-row Fabro seeder. Each plot measured 1.37 meters in width and 7 meters in length, with four replications included for statistical reliability. Herbicides were applied as needed to maintain weed-free plots. Harvesting was carried out using a Zurn 150 at Westlock and a Wintersteiger plot harvester at Falher. Total yields from each plot were recorded, and clean sub-samples were taken to create 500-gram composite samples, which were submitted for beta-glucan analysis.

Table: Soil Information - 2025

	Nitrogen (lbs/ac)	Phosphorous (lbs/ac)	Potassium (lbs/ac)	Sulphur (lbs/ac)	pH (0-14)	CEC (meq/100g)	Organic Matter (%)
Westlock	20	36	216	25	6.3	20.1	6.8
Peace Region	20	56	256	30	4.8	19.2	4.7

Before the start of the season, POGA reviewed the entry list and made a few updates**. They decided to remove CDC Ruffian and AAC Neville from the study and added CDC Hank and CDC Fetch in their place.**

Table: Agronomic Information

	Westlock	Peace Region
Legal Land Description	SW17-61-26-W4	SW29-77-20-W5
Seeded:	02-May-25	15-May-25

Seeding Depth:	1 ¼ inch	¾ inch
Soil Moisture:	Excellent	Good
Soil Temp:	12°C	13.1°C
Rainfall:	194.3 mm	102.5 mm
Fertilizer:	105.9N-35P-60K-20S	123N-40P-20K-30S
Pre-emergence:	None	Conquer II + Roundup Weathermax @ 200 ml/ac + 1000 ml/ac on May 22, 2025
In-crop Application:	Buctril M @ 400 ml/ac on June 3, 2025	Stellar XL @ 405 ml/ac on June 18, 2025
Desiccant:	Reglone Ion @ 1 L/ac on Sept. 4, 2025	None
Harvested:	September 16, 2025	September 21, 2025

Results and Discussion:

In 2025 at Westlock, the site averaged 143.3 bu/ac, and variety selection had a significant impact on yield, as indicated by ANOVA, which showed clear statistical differences among entries. **CDC Anson** and **AAC Anthony** were the top performers, both yielding just over 152 bu/ac and finishing well above the site average and the check, **AC Morgan**. Other varieties, such as **CS Camden**, **CDC Endure**, and **AAC Fetch,** also performed slightly above the check.

At the Peace Region site, the average yield was 157.6 bu/ac, with strong performance across varieties. **AAC Anthony** led the trial at 167.7 bu/ac, followed closely by **CDC Byer** and **AAC Wesley**, all delivering excellent yields. However, the ANOVA test indicated that differences among varieties were not statistically significant at this location, meaning yields were more uniform despite the numerical spread.

2025 Yield Comparison

		Westlock			Peace Region		
Trt	**Treatment**	**% of**	**Yield @14% Moisture**		**% of**	**Yield @ 14 % Moisture**	
No.	**Name**	**AC Morgan**	**(bu/ac)**		**AC Morgan**	**(bu/ac)**	
1	AC Morgan	100	143.0	b	100	158.4	a
2	CS Camden	102	145.5	b	100	157.9	a
3	CDC Arborg	100	143.0	b	95	150.4	a
4	CDC Endure	101	144.3	b	96	152.6	a
5	AAC Douglas	98	140.8	b	98	154.7	a
6	CDC Byer	97	138.5	b	104	164.5	a
7	CDC Anson	107	152.5	a	96	151.4	a
8	CDC Hank	98	140.3	b	101	159.7	a
9	AAC Wesley	92	132.0	c	101	160.6	a
10	AAC Anthony	106	152.0	a	106	167.7	a

11	AAC Fetch	101	143.8	b	98	155.4	a
Average		143.35			157.6		
p-Value		0.0001			0.1945		
CV		2.77			5.62		

Means followed by the same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

Overall, Trial Summary - Top 3 Varieties for Yield from 2016-2025

Crop Year	Westlock		
2025	CDC Anson	AAC Anthony	CS Camden
2024	CDC Byer	CDC Endure	CS Camden
2023	CDC Arborg	AAC Douglas	CS Camden
2022	CDC Ruffian	AAC Wesley	CDC Arborg
2021	AC Morgan	CDC Arborg	CS Camden
2020	CDC Anson	CS Camden	CDC Skye
2019	CDC Endure	AC Summit	CDC Arborg
2018	Triactor	CDC Endure	AC Morgan
2017	CDC Ruffian	CS Camden	Akina
2016	CDC Ruffian	CDC Seabiscuit	AC Morgan
Crop Year	**Peace Region**		
2025	AAC Anthony	CDC Byer	AAC Wesley
2024	CDC Ruffian	AAC Anthony	AAC Wesley
2023	OT 6024	CDC Arborg	CS Camden
2022	CDC Arborg	CDC Anson	AAC Wesley
2021	CS Camden	CDC Arborg	ORe3541M
2020	AC Morgan	CDC Ruffian	CDC Endure
2019	CDC Seabiscuit	CDC Arborg	CS Camden
2018	Triactor	AC Morgan	CDC Endure
2017	CDC Ruffian	Triactor	CDC Orrin
2016	CDC Ruffian	CDC Seabiscuit	AC Morgan

Test weight is a vital parameter in assessing the milling quality of grain, particularly oats. A higher test weight typically correlates with better processing characteristics, reduced waste and improved end-product quality, making it an essential metric for both producers and processors in the oat industry.

More Results from the Alberta Milling Oats Trial - GRO, Westlock - 2025

Trt	Treatment	Height		Lodging		Test Weight				TKW	
No.	Name	(cm)		1 (erect) - 9 (flat)		lbs/bu		kg/HL		(g/1000 seeds)	
1	AC Morgan	107.8	b	1.5	bc	44.7	ab	55.1	ab	41.4	bcd
2	CS Camden	100.5	c	1.0	c	44.8	ab	55.3	ab	39.3	de
3	CDC Arborg	110.3	ab	2.0	b	45.1	a	55.6	a	40.1	cde
4	CDC Endure	111.8	a	1.0	c	43.3	bcd	53.4	bcd	42.3	b
5	AAC Douglas	101.3	c	1.5	bc	43.5	abc	53.7	abc	41.9	bc
6	CDC Byer	101.3	c	1.5	bc	45.0	ab	55.6	a	40.0	cde
7	CDC Anson	91.5	e	1.0	c	44.5	ab	54.9	ab	40.3	b-e
8	CDC Hank	102.0	c	1.5	bc	42.9	cd	52.9	cd	42.5	b
9	AAC Wesley	91.0	e	1.0	c	44.0	abc	54.3	abc	39.0	e
10	AAC Anthony	109.3	ab	1.8	bc	42.1	d	52.0	d	46.2	a
11	AAC Fetch	96.3	d	3.5	a	44.2	abc	54.5	abc	38.9	e
Average		102.1		1.6		44.0		54.3		41.1	
p-Value		0.0001		0.0001		0.0001		0.0001		0.0001	
CV		1.82		26.39		1.6		1.6		2.62	

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

More Results from the Alberta Milling Oats Trial - SARDA, Peace Region - 2025

Trt	Treatment	Height		Lodging		Test Weight				TKW	
No.	Name	(cm)		1 (erect) - 9 (flat)		lbs/bu		kg/HL		(g/1000 seeds)	
1	AC Morgan	75.3	ab	1	na	43.2	ab	53.3	ab	35.5	bc
2	CS Camden	71.8	ab	1	na	41.1	c	50.7	c	34.1	bc
3	CDC Arborg	77.4	a	1	na	43.2	ab	53.2	ab	34.5	bc
4	CDC Endure	77.9	a	1	na	42.8	abc	52.8	abc	36.5	abc
5	AAC Douglas	73.4	ab	1	na	41.4	bc	51.1	bc	34.6	bc
6	CDC Byer	70.2	ab	1	na	44.0	a	54.3	a	34.9	bc
7	CDC Anson	62.4	c	1	na	42.2	bc	52.0	bc	34.7	bc

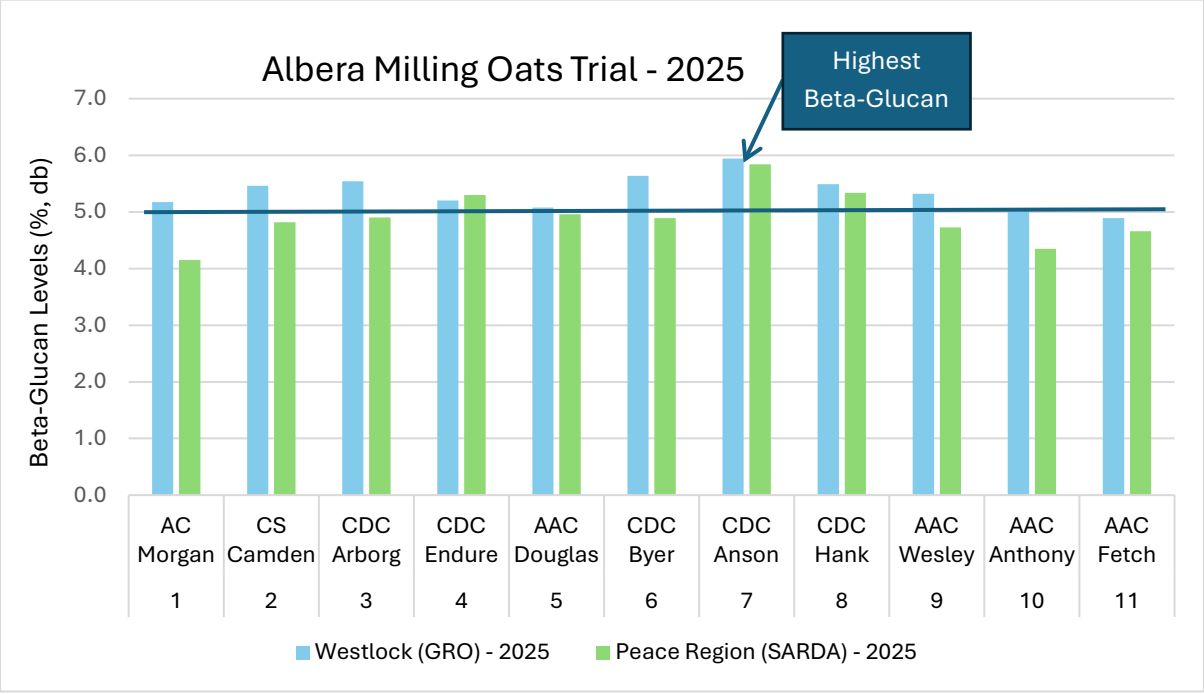
8	CDC Hank	75.9	ab	1	na	43.0	ab	53.1	ab	37.3	ab
9	AAC Wesley	66.8	bc	1	na	41.2	bc	50.9	bc	33.7	c
10	AAC Anthony	72.3	ab	1	na	41.7	bc	51.4	bc	38.6	a
11	AAC Fetch	71.8	ab	1	na	42.0	bc	51.8	bc	34.0	bc
Average		72.3		1		42.3		52.5		35.3	
p-Value		0.0002		-		0.0002		0.0002		0.0003	
CV		5.55		0		1.98		1.98		3.86	

Means followed by same letter or symbol do not significantly differ (P=.05, Student-Newman-Keuls).

The Peace Region site received less precipitation during the growing season, and that likely contributed to the shorter crop height and lower test weights observed there. When moisture is limited, the grain filling period is often shorter or less effective, which can result in lighter kernels and reduced bushel weight. That helps explain why the Peace Region averaged 42.3 lbs per bushel, compared to 44.0 lbs per bushel at Westlock. At Westlock, we also saw lodging in AAC Fetch, whereas under the drier conditions in the Peace Region, no lodging was observed in any variety. CDC Byer stood out at both sites, recording test weights above the site averages and showing strong consistency across environments. Overall, the results highlight how closely plant growth, standability, and grain quality are tied to seasonal moisture and overall growing conditions.

Beta-Glucan Test Results from the Alberta Milling Oats Trial

		Westlock (GRO)		Peace Region (SARDA)	
Trt No.	Treatment Name	Hull Percentage (%)	Flour BG (%, db)	Hull Percentage (%)	Flour BG (%, db)
1	AC Morgan	24.5	5.2	31.3	4.2
2	CS Camden	26.7	5.5	31.0	4.8
3	CDC Arborg	26.1	5.5	29.3	4.9
4	CDC Endure	21.3	5.2	26.7	5.3
5	AAC Douglas	23.3	5.1	32.4	5.0
6	CDC Byer	25.2	5.6	27.0	4.9
7	CDC Anson	23.5	5.9	27.2	5.8
8	CDC Hank	24.0	5.5	26.9	5.3
9	AAC Wesley	21.9	5.3	28.0	4.7
10	AAC Anthony	25.9	5.1	33.8	4.4
11	AAC Fetch	28.1	4.9	32.3	4.7



All the oat varieties in the trial exceeded the industry's minimum standard of 4% beta-glucan, confirming they meet the expected nutritional benchmark. **CDC Anson** was the standout variety, consistently showing the highest beta-glucan content in both Westlock at 5.9% and the Peace Region at 5.8%. **CDC Hank** also performed reliably at both locations. Interestingly, **AC Morgan** recorded beta-glucan levels above 5% at the Westlock site, which is unusual given that data from the past nine years has consistently shown lower values for this variety. The reason for this unexpected result is not certain. One possibility is that a sample mix-up occurred, either during sample preparation at the shop or during analysis in the lab.

Alternatively, favourable growing conditions during critical stages of grain development may have temporarily elevated the beta-glucan content. Further investigation is recommended to determine whether this observation reflects a true increase in nutritional quality or an anomaly in sampling or measurement.

Trial Summary - Top 3 Varieties for Beta-Glucan from 2016-2025

Crop Year	Westlock		
2025	CDC Anson	CDC Byer	CDC Hank
2024	CDC Anson	CDC Endure	CDC Byer
2023	AAC Douglas	CDC Anson	AAC Wesley
2022	CDC Endure	CDC Anson	AAC Douglas
2021	CDC Anson	CDC Endure	CDC Skye
2020	CDC Anson	CDC Endure	CDC Skye
2019	CDC Endure	CDC Arborg	AC Morgan
2018	CDC Endure	CDC Arborg	Triactor
2017	CS Camden	Akina	CDC Ruffian
2016	CDC Seabiscuit	CDC Ruffian	CDC Orin
Crop Year	**Peace Region**		
2025	CDC Anson	CDC Endure	CDC Hank
2024	CDC Anson	CS Camden	AAC Douglas
2023	CDC Anson	CDC Endure	OT 6024
2022	CDC Endure	OT 6024	CDC Arborg
2021	CDC Anson	CDC Endure	CDC Skye
2020	CDC Skye	CDC Anson	CDC Endure
2019	CDC Seabiscuit	CDC Arborg	CS Camden
2018	Triactor	AC Morgan	CDC Endure
2017	CDC Ruffian	CS Camden	CDC Orin
2016	CDC Ruffian	AC Morgan	CDC Seabiscuit

Overall Summary - Yields from 2016 to 2025 at Westlock, Alberta

Variety Name	Most Recent Year of Testing	Overall Years of Testing	Yield	Overall Average	2025	2024	2023	2022	2021	2020	2019	2018	2017	2016
			% of AC Morgan	Yield (Bu/Ac)	Yield (Bushel/Acre)									
AC Morgan	2025	10	100%	199	143	179	257	192	161	203	243	226	212	178
CS Camden	2025	10	99%	198	146	186	257	189	150	211	241	206	226	167
CDC Arborg	2025	8	101%	202	143	186	263	198	150	208	244	221	-	-
CDC Endure	2025	8	100%	199	144	190	252	195	143	194	249	226	-	-
CDC Anson	2025	6	95%	189	153	180	254	195	140	213	-	-	-	-
AAC Douglas	2025	5	92%	183	141	173	261	193	148	-	-	-	-	-
AAC Wesley	2025	4	92%	183	132	171	230	199	-	-	-	-	-	-
CDC Byer	2025	2	85%	169	139	199	-	-	-	-	-	-	-	-
AAC Anthony	2025	2	81%	163	152	173	-	-	-	-	-	-	-	-
CDC Hank	2025	1	70%	140	140	-	-	-	-	-	-	-	-	-
AAC Fetch	2025	1	72%	144	144	-	-	-	-	-	-	-	-	-
CDC Ruffian	2024	9	103%	205	-	184	239	208	147	206	219	207	245	193
AAC Neville	2024	1	85%	169	-	169	-	-	-	-	-	-	-	-
Kalio	2023	3	96%	191	-	-	252	180	141	-	-	-	-	-
ORE Level 50	2023	2	103%	205	-	-	227	182	-	-	-	-	-	-
OT 6024	2023	2	109%	217	-	-	241	193	-	-	-	-	-	-
AC Summit	2021	6	95%	189	-	-	-	-	121	178	245	203	217	167
CDC Skye	2021	3	94%	188	-	-	-	-	115	211	237	-	-	-
ORE3541M	2021	1	58%	115	-	-	-	-	115	-	-	-	-	-
CDC Seabiscuit	2020	5	106%	211	-	-	-	-	-	205	239	212	208	189
ORE3542M	2020	3	100%	199	-	-	-	-	-	183	214	201	-	-
CDC Norseman	2020	3	104%	208	-	-	-	-	-	190	222	213	-	-
Triactor	2019	4	106%	212	-	-	-	-	-	-	238	229	208	172

Akina	2018	3	103%	206	-	-	-	-	-	-	-	221	222	176
CDC Orrin	2018	3	101%	202	-	-	-	-	-	-	-	218	221	168
Souris	2017	2	88%	175	-	-	-	-	-	-	-	-	194	155
Kara	2017	2	100%	199	-	-	-	-	-	-	-	-	222	175
CDC Minstrel	2017	2	94%	188	-	-	-	-	-	-	-	-	202	174

Overall Summary - Yields from 2016 to 2025 at Peace Region, Alberta

Variety Name	Most Recent Year of Testing	Overall Years of Testing	Yield	Overall Average	2025	2024	2023	2022	2021	2020	2019	2018	2017	2016
			% of AC Morgan	Yield (Bu/Ac)	Yield (Bushel/Acre)									
AC Morgan	2025	10	100%	189	158	184	187	235	20	211	224	252	220	203
CS Camden	2025	10	98%	187	158	173	192	265	29	183	232	217	226	190
CDC Arborg	2025	8	98%	187	150	179	194	269	28	199	236	237	-	-
CDC Endure	2025	8	96%	182	153	182	184	240	25	206	225	243	-	-
CDC Anson	2025	6	85%	162	151	172	177	268	23	180	-	-	-	-
AAC Douglas	2025	5	83%	157	155	173	185	254	20	-	-	-	-	-
AAC Wesley	2025	4	106%	201	161	185	190	266	-	-	-	-	-	-
CDC Byer	2025	2	91%	173	165	181	-	-	-	-	-	-	-	-
AAC Anthony	2025	2	93%	177	168	185	-	-	-	-	-	-	-	-
CDC Hank	2025	1	84%	160	160	-	-	-	-	-	-	-	-	-
AAC Fetch	2025	1	82%	155	155	-	-	-	-	-	-	-	-	-
CDC Ruffian	2024	9	104%	197	-	188	188	259	21	207	203	241	249	218
AAC Neville	2024	1	94%	178	-	178	-	-	-	-	-	-	-	-
Kalio	2023	3	80%	151	-	-	184	248	22	-	-	-	-	-
ORE Level 50	2023	2	106%	200	-	-	181	219	-	-	-	-	-	-

OT 6024	2023	2	118%	223	-	-	196	250	-	-	-	-	-	-
AC Summit	2021	6	91%	173	-	-	-	-	19	181	227	228	210	173
CDC Skye	2021	3	76%	143	-	-	-	-	20	196	213	-	-	-
ORE3541M	2021	1	14%	27	-	-	-	-	27	-	-	-	-	-
CDC Seabiscuit	2020	5	117%	221	-	-	-	-	-	196	240	242	224	203
ORE3542M	2020	3	110%	209	-	-	-	-	-	197	205	225	-	-
CDC Norseman	2020	3	113%	214	-	-	-	-	-	190	214	238	-	-
Triactor	2019	4	120%	227	-	-	-	-	-	-	224	256	240	189
Akina	2018	3	114%	215	-	-	-	-	-	-	-	242	214	190
CDC Orrin	2018	3	112%	211	-	-	-	-	-	-	-	239	227	168
Souris	2017	2	95%	180	-	-	-	-	-	-	-	-	191	169
Kara	2017	2	110%	208	-	-	-	-	-	-	-	-	226	190
CDC Minstrel	2017	2	102%	194	-	-	-	-	-	-	-	-	196	192

Overall Summary -Beta -Glucan Content from 2016 to 2025

Variety Name	Average		2025		2024		2023		2022		2021		2020		2019		2018		2017		2016	
	WL	PR	WL	PR	WL	PR	WL	PR	WL	PR	WL	PR	WL	PR	WL	PR	WL	PR	WL	PR	WL	PR
AC Morgan	3.94	3.88	5.20	4.20	4.75	4.86	3.21	3.36	3.3	3.7	3.5	3.5	3.9	3.8	3.9	3.7	3.9	3.4	3.8	4.2	3.9	4.1
CS Camden	4.44	4.50	5.50	4.80	5.28	5.59	4.2	4.61	3.8	4.2	4	4	4.7	4.3	4.4	5.2	4.4	3.8	4.4	4.6	3.7	3.9
CDC Arborg	4.52	4.45	5.50	4.90	5.24	4.90	4.25	4.41	4.2	5.5	3.8	4.2	4.6	3.6	4.2	4.3	4.4	3.8	-	-	-	-
CDC Endure	4.80	4.97	5.20	5.30	5.31	5.41	4.52	5.04	4.9	6	4.1	4.5	5.2	4.6	4.5	4.7	4.7	4.2	-	-	-	-
CDC Anson	5.51	5.39	5.90	5.80	6.08	6.13	5.19	5.12	4.9	5.4	4.9	5.1	6.1	4.8	-	-	-	-	-	-	-	-
AC Douglas	4.92	4.77	5.10	5.00	5.14	5.43	5.85	4.11	4.8	5.2	3.7	4.1	-	-	-	-	-	-	-	-	-	-
AAC Wesley	4.77	4.87	5.30	4.70	4.90	5.14	4.88	4.35	4	5.3	-	-	-	-	-	-	-	-	-	-	-	-
CDC Byer	5.45	5.04	5.60	4.90	5.30	5.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AAC Anthony	5.08	4.70	5.10	4.40	5.06	5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CDC Hank	5.50	5.30	5.50	5.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AAC Fetch	4.90	4.70	4.90	4.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CDC Ruffian	3.67	3.76	-	-	4.59	4.41	3.51	3.3	3.6	5.1	3.3	3.9	4.3	3.5	3.6	3.7	3.6	2.7	3.8	3.9	2.7	3.3
AAC Neville	4.52	4.88	-	-	4.52	4.88	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kalio	4.01	3.67	-	-	-	-	3.84	3.11	4.6	4.1	3.6	3.8	-	-	-	-	-	-	-	-	-	-
ORE Level 50	4.43	4.28	-	-	-	-	4.16	3.35	4.7	5.2	-	-	-	-	-	-	-	-	-	-	-	-
OT 6024	4.53	5.37	-	-	-	-	4.76	4.83	4.3	5.9	-	-	-	-	-	-	-	-	-	-	-	-
AC Summit	4.12	4.05	-	-	-	-	-	-	-	-	3.4	3.4	4.8	4.5	4.3	4.6	4.3	3.7	4.3	4.4	3.6	3.7
CDC Skye	4.47	4.73	-	-	-	-	-	-	-	-	4	4.2	4.9	5	4.5	5	-	-	-	-	-	-
ORE 3541M	3.60	3.80	-	-	-	-	-	-	-	-	3.6	3.8	-	-	-	-	-	-	-	-	-	-
CDC Seabiscuit	4.36	4.04	-	-	-	-	-	-	-	-	-	-	4.6	4	4.5	4.2	4.4	3.7	4.6	4.6	3.7	3.7
ORE3542M	4.07	3.83	-	-	-	-	-	-	-	-	-	-	4.4	3.8	3.8	4.2	4	3.5	-	-	-	-
CDC Norseman	4.67	4.27	-	-	-	-	-	-	-	-	-	-	4.8	4.6	4.7	4.4	4.5	3.8	-	-	-	-
Triactor	4.10	4.13	-	-	-	-	-	-	-	-	-	-	-	-	4.1	4.3	4.4	4	4.4	4.5	3.5	3.7
Akina	4.53	4.20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.8	4	5	4.9	3.8	3.7
CDC Orrin	3.90	3.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	3.4	4.4	4	3.2	3.7
Souris	4.25	4.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.9	4.4	3.6	4.4
Kara	3.95	4.35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.3	5	3.6	3.7
CDC Minstrel	3.40	3.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.9	4.3	2.9	3.5

In conclusion, weather conditions once again played a pivotal role in shaping trial outcomes this year. Both sites experienced rainfall below the long-term averages for their regions, with the Peace Region facing particularly severe drought, receiving less than 40 percent of its typical precipitation. By late June, the Peace Region recorded the lowest soil moisture ratings in the province, and a state of agricultural disaster was declared in the Municipal District of Smoky River at the beginning of August. This lack of moisture explains why plants were shorter, exhibited little to no lodging, and why average yields were substantially lower than in previous years.

This comprehensive study underscores the potential of modern genetics to deliver strong performance in both yield and quality. **However, it is important to note that not all newer varieties will consistently outperform older ones. Careful research and selection remain essential when choosing the right variety.**

Overall, both cultivar selection and location significantly influence crop yield and beta-glucan levels. Environmental factors continue to play a critical role in determining a variety's productivity and quality traits, highlighting the ongoing need for research to optimize performance under diverse conditions.

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