Regional Variety Trials

Cereals - Barley - St. Paul

Mean values of yield, height, test weight, and tkw in 19 varieties of barley in St. Paul Alberta in 2025

Variety	Yield (% of AAC Synergy)		Height		Test weight		TKW	
	g plot^{-1}		cm		lb bu^{-1}		g/1000 seeds	
AAC Prairie	94%	ab*	81.2	bc	49.8	def	40.2	defg
AAC Stockton	98%	ab	77.1	bcd	51.7	cdef	42.8	bcde
AAC Synergy	100%	ab	76.3	bcde	52.5	cde	44.5	abcd
AB Dram	88%	ab	79.8	bcd	52.7	cde	43.5	bcde
AC Metcalfe	88%	ab	74.8	cde	52.6	cde	42.6	bcde
AS Lafleur	81%	ab	81.8	bc	54.8	bc	44.6	abcd
AS Manon	89%	ab	84.6	b	53.9	bcd	46.5	abc
CDC Armstrong	84%	ab	78.9	bcd	63.8	a	38.6	efg
CDC Austenson	91%	ab	74.8	cde	52.0	cdef	36.3	g
CDC Copeland	79%	b	77.1	bcd	50.2	def	38.6	efg
CDC Pristine	76%	b	78.8	bcd	63.2	a	36.2	g
FB21106	103%	ab	71.8	def	53.0	cde	46.7	abc
FB21704	102%	ab	78.6	bcd	57.4	b	49.1	a
FB22816	87%	ab	81.1	bc	50.3	def	37.2	fg
FB23113	106%	a	75.4	cde	51.7	cdef	47.9	ab
FB23618	97%	ab	76.3	bcde	51.8	cdef	43.3	bcde
Richer	91%	ab	93.1	a	47.9	f	41.8	cdef
SY Stanza	89%	ab	63.6	f	49.3	ef	40.7	defg
TR22669	87%	ab	68.3	ef	52.4	cde	43.5	bcde
Results								
Average	2870.9		77.1		53.2		42.3	
ANOVA p-value	0.0049		<0.0001		<0.0001		<0.0001	
CV%	9.5		3.5		2.6		4.1	

*Values followed by different letters are statistically different (P<0.05)

The check for the Barley trial in St. Paul was AAC Synergy, which is a 2-row malt variety. It is marketed as having a higher yield potential compared to AC Metcalfe and CDC Copeland. Of the 19 varieties tested in St. Paul in 2025, 17 varieties were on par with the check in terms of yield. Two varieties (CDC Copeland, and CDC Pristine) were significantly lower than the check. In terms of plant height, Richer was the tallest. SY Stanza, TR22669, and FB21106 were the shortest. CDC Armstrong and CDC Pristine had the highest grain test weight. Meanwhile, FB21704, FB23113, and AS Lafleur had the highest thousand kernel weight. Based on these results, there would be many good options. However, if we were to recommend one variety apart from the check, it would be FB21704. Yield was comparable to the check.

Regional Variety Trials

Cereals - Oat - Fort-Kent

Mean values of yield, height, test weight, and tkw in 12 varieties of oat in Fort Kent Alberta in 2025

Variety	Yield (% of CS Camden)		Height		Test weight		TKW	
	g plot^{-1}		cm		lb bu^{-1}		g/1000 seeds	
AAC Fedak	99%	abc*	74.0	b	41.0	ab	44.8	a
AAC Fetch	76%	cd	70.6	bcd	39.2	abc	37.8	c
AAC Wesley	83%	bcd	66.3	cd	39.0	bc	37.9	c
AC Morgan	89%	abcd	76.5	b	41.7	a	39.5	bc
CDC Anson	108%	a	64.5	d	40.0	abc	39.8	bc
CDC Byer	101%	ab	72.2	bc	40.8	ab	39.4	bc
CDC Hank	109%	a	75.4	b	39.6	abc	39.1	bc
CDC Westgate	87%	abcd	94.4	a	38.9	bc	40.5	bc
CS Camden	100%	ab	76.0	b	40.0	abc	40.3	bc
OReBoost	75%	d	75.9	b	38.0	c	45.1	a
OT2152	96%	abcd	72.5	bc	39.1	bc	42.1	ab
OT3125	87%	abcd	66.4	cd	39.1	bc	38.3	bc
Results								
Average	2531.6		73.7		39.7		40.4	
ANOVA p-value	0.0002		<0.0001		0.0017		<0.0001	
CV%	8.8		3.0		2.2		3.5	

*Values followed by different letters are statistically different (P<0.05)

We know that oats are more sensitive to drought conditions compared to wheat and barley, and that certainly influenced the results. In the 2025 growing season, of the twelve varieties tested, nine were not statistically different from the check (CS Camden) in terms of yield. The other three varieties (AAC Fetch, AAC Wesley, OReBoost) were significantly lower than the check. In terms of plant height, again owing to the drought, most varieties were shorter than normal. As such, we did not observe issues with lodging in Fort Kent. The tallest variety was CDC Westgate. The shortest varieties were CDC Anson, AAC Wesley, OT3125, and AAC Fetch. AC Morgan produced the highest test weight. On the other hand, AAC Fedak, OT2152, OReBoost produced the highest thousand kernel weight (TKW). Based on the data from the 2025 growing season in Fort Kent, CDC Anson would be the recommendation. It was on par with the check in terms of yield (and/or slightly higher). It was one of the shorter varieties. Test weight was also on par with the check, while the TKW was middle of the run.

Plant height was amongst the lowest in the group. Grain test weight and TKW, was among the highest. However, since it's a newer variety, seed availability may be difficult. Another good option would be AS Lafleur, which was on par with AAC Synergy (yield, height, test weight, and TKW).

Regional Variety Trials

Cereals - Wheat CPSR - St. Paul

Mean values of yield, height, test weight, and tkw in 15 varieties of CPSR wheat in St. Paul Alberta in 2025

Variety	Yield (% of AAC Brandon)		Height		Test weight	TKW	
	g plot^{-1}		cm		lb bu^{-1}	g/1000 seeds	
AAC Awesome	92%	abc*	83.4	ab	63.3	47.7	a
AAC Brandon	100%	abc	85.5	ab	65.4	39.9	b
AAC Camrose	95%	abc	80.3	bcd	64.5	39.6	b
AAC Galore	85%	abc	81.6	abc	62.0	39.0	b
AAC Goodwin	98%	abc	87.5	a	65.8	38.8	b
AAC Penhold	90%	abc	79.6	bcd	42.9	38.0	bc
AC Andrew	93%	abc	84.5	ab	62.9	37.3	bc
AC Sadash	85%	abc	83.3	ab	62.7	36.9	bc
Alotta	110%	a	83.5	ab	64.8	36.6	bc
Fierce	81%	bc	83.1	ab	57.9	36.6	bc
GP266	79%	bc	78.7	bcd	61.3	36.1	bc
GP267	98%	abc	75.9	cd	62.8	33.5	bcd
HY2152	82%	abc	85.2	ab	62.5	31.8	cd
HY2161	106%	ab	75.1	cd	64.5	31.6	cd
Recoil	72%	c	73.9	d	61.1	29.6	d
Results							
Average	3126.4		81.4		61.6	36.9	
ANOVA p-value	0.0018		<0.0001		0.4907	<0.0001	
CV%	10.5		2.9		15.7	5.8	

*Values followed by different letters are statistically different (P<0.05)

None of the varieties tested in St. Paul in 2025 outyielded the check (AAC Brandon). Only three varieties were significantly different from the check (Fierce, GP266, and Recoil), and they were lower than the check. Recoil was the shortest recorded variety, along with HY2161, GP267, GP266, AAC Penhold, and AAC Camrose. No significant differences were observed in grain test weights. However, AAC Awesome did record the highest thousand kernel weight. Based on the data from the 2025 growing season in St. Paul, AAC Camrose and/or AAC Penhold would be recommended. They are both on par with the check in terms of yield. They are shorter varieties. Thousand kernel weights are middle of the run. AAC Awesome also performed well but was it recorded as a taller variety compared to the other two.

Regional Variety Trials

Cereals - Wheat CWRS - St. Paul

Mean values of yield, height, test weight, and tkw in 22 varieties of CWRS wheat in St. Paul Alberta in 2025

Variety	Yield (% of AAC Brandon)		Height		Protein	Test weight	TKW	
	g plot^{-1}		cm		%	lb bu^{-1}	g/1000 seeds	
AAC Brandon	100%	a*	83.6	abc	14.8	63.1	32.8	ab
AAC Craven	105%	a	85.6	abc	12.8	64.5	33.0	ab
AAC Darby VB	82%	a	91.8	ab	14.8	59.1	33.1	ab
AAC Oakman VB	92%	a	83.7	abc	13.5	64.8	31.0	ab
AAC Spike	91%	a	81.6	c	16.4	64.2	31.3	ab
AAC Stoughton	103%	a	85.0	abc	12.5	64.2	34.7	ab
AAC Walker	112%	a	86.5	abc	12.2	65.4	32.7	ab
AAC Walsh	108%	a	86.2	abc	14.3	65.4	38.6	a
AAC Westking	104%	a	80.9	c	15.1	63.3	35.9	ab
AAC Wheatland VB	97%	a	84.3	abc	11.9	64.3	35.5	ab
Baker	80%	a	80.3	c	15.0	62.9	31.0	ab
Breadwinner	115%	a	85.3	abc	13.2	64.9	38.3	a
BW1141	98%	a	84.5	abc	14.6	63.0	33.4	ab
BW1143	88%	a	82.9	bc	15.3	63.2	34.7	ab
BW5115	89%	a	78.0	c	16.9	64.1	30.1	b
CDC Power CL Plus	113%	a	83.1	abc	13.8	64.3	31.7	ab
Donalda	87%	a	84.9	abc	15.4	61.8	32.1	ab
Flame	97%	a	84.6	abc	12.9	65.1	33.4	ab
Garde	108%	a	79.8	c	13.2	64.3	29.4	b
LAR19-22824	115%	a	83.5	abc	12.0	64.4	38.7	a
Palisade	85%	a	84.2	abc	16.6	62.5	32.3	ab
Zealand	77%	a	91.9	a	16.7	63.7	33.4	ab
Results								
Average	2572		84.2			63.7	33.5	
ANOVA p-value	0.0037		<0.0001			0.1106	0.0005	
CV%	12.8		3.4			3.0	7.4	

*Values followed by different letters are statistically different (P<0.05)

Like the CPSR trial in St. Paul, none of the varieties in the CWRS trial in St. Paul outyielded the check (AAC Brandon). In terms of plant height, the shortest varieties were AAC Spike, AAC Westking, Baker, BW5115, and Garde. No significant differences were observed for test weight (p=0.1106) and protein (p=0.1681). AAC Walsh, Breadwinner, and Palisade recorded the highest thousand kernel weights. Based on the results from this trial, it is inconclusive which varieties are performing the best. This scenario can happen on drought years. However, keep a close eye on AAC Spike and AAC Westking in the future.

Regional Variety Trials

Cereal - Triticale - St. Paul

Mean values of yield, height, test weight, and tkw in 5 varieties of triticale in St. Paul Alberta in 2025								
Variety	Yield (% of Brevis)		Height		Test weight		TKW	
	g plot^{-1}		cm		lb bu^{-1}		g/1000 seeds	
AB Sunbeam	87%	c*	93.9	b	54.2	b	35.8	b
Brevis	100%	ab	90.3	c	56.7	a	37.5	b
Pronghorn	92%	bc	98.7	a	53.4	b	37.8	b
T301	106%	a	93.3	bc	56.8	a	44.1	a
T317	95%	bc	98.3	a	54.1	b	36.8	b
Results								
Average	2079.0		94.9		55.0		38.4	
ANOVA p-value	0.0018		0.0001		0.0001		0.0002	
CV%	3.7		1.3		1.0		3.1	

*Values followed by different letters are statistically different (P<0.05)

Brevis was the check in the Triticale trial in St. Paul. T301 outyielded the check by 6%. In terms of plant height, the shortest variety was Brevis. The tallest varieties in the trial were Pronghorn and T317. Grain test weight was highest in Brevis and T301. In terms of thousand kernel weight, T301 was the clear winner. Based on the data from the 2025 growing season in St. Paul, T301 would be recommended. It performed the best overall (yield, test weight, height, and TKW). T301 is a dual-purpose, reduced awn spring triticale, and suitable for feed and forage uses. For specific seed availability and purchasing, contact Olds College Field Crop Development Centre or specialized seed retailers in Alberta. Brevis is also another good option.