

# CANADA WESTERN RED SPRING WHEAT

As grain yields increase, protein content generally decreases. Some of the newer varieties have both higher protein and grain yield. To control true *loose smut* of wheat only a systemic fungicide will work as the pathogen is found inside the seed. To control the other types of smut (*covered*, *false loose* and *bunt*) a non-systemic fungicide seed treatment will work as the disease pathogen is on the outside of the seed.

CWRS Wheat		Yield as % of Katepwa											
		Dawson Creek				Fort St. John				B.C. Peace			
Variety	2007 Yield		2003-2007		2007 Yield		2003-2007		2007	2003-2007			
	bus / acre	% of Check	Avg. (%)	Station Years	bus / acre	% of Check	Avg. (%)	Station Years	Avg. (%)	Avg. (%)	Station Years		
5602HR	90	a	101	82	[4]	68	abc	103	94	[4]	102	88	[8]
AC Barrie	88	a	99	97	[5]	69	abc	105	99	[5]	102	98	[10]
AC Intrepid	81	a	91	99	[5]	70	abc	107	105	[5]	99	102	[10]
AC Splendor	76	a	86	98	[5]	60	bc	91	95	[5]	88	97	[10]
Alvena	95	a	107	104	[2]	76	ab	115	107	[2]	111	105	[4]
CDC Abound	99	a	112	104	[2]	70	abc	107	109	[2]	109	107	[4]
CDC Alsask	92	a	104	106	[4]	75	abc	114	113	[4]	109	110	[8]
CDC Go	91	a	103	103	[5]	75	abc	114	103	[5]	108	103	[10]
CDC Imagine	79	a	89	99	[5]	71	abc	107	101	[5]	98	100	[10]
CDC Osler	82	a	93	103	[5]	76	ab	116	105	[5]	104	104	[10]
<i>Goodeve</i> *	85	a	95	95	[1]	76	ab	116	116	[1]	106	106	[2]
Harvest	85	a	96	95	[5]	74	abc	113	99	[5]	104	97	[10]
Infinity	90	a	102	108	[4]	78	a	119	107	[4]	110	108	[8]
Kanata**	76	a	86	83	[4]	58	c	89	84	[4]	87	84	[8]
<i>KANE</i> *	79	a	90	90	[1]	64	abc	97	97	[1]	93	93	[2]
<b>Katepwa</b>	<b>89</b>	<b>a</b>	<b>100</b>	<b>100</b>	<b>[5]</b>	<b>66</b>	<b>abc</b>	<b>100</b>	<b>100</b>	<b>[5]</b>	<b>100</b>	<b>100</b>	<b>[10]</b>
Peace	76	a	86	90	[4]	68	abc	104	98	[4]	95	94	[8]
Snowbird**	82	a	92	98	[5]	71	abc	108	103	[5]	100	100	[10]
Snowstar (BW315a)**	82	a	92	85	[2]	72	abc	109	104	[2]	100	95	[4]
Somerset	89	a	101	99	[2]	74	abc	112	103	[2]	106	101	[4]
Superb	94	a	106	116	[5]	77	ab	117	113	[5]	111	114	[10]
<i>Waskada</i> *	84	a	95	95	[1]	67	abc	102	102	[1]	98	98	[2]
	LSD (P=.05) =		18.27			9.28							
	CV value (%) =		12.93			9.28							
<u>Varieties not tested in 2007 (2003-2006)</u>						<u>Last Year Tested</u>							
Alikat			102	[4]				95	[4]	(2006)	99	[8]	
Park			98	[3]				92	[3]	(2006)	95	[6]	

Means followed by the same letter do not significantly differ (P=.05, LSD)

\* first year tested, very limited data available

**Katepwa - check variety**

\*\*CWHWS Canadian Western Hard White Spring Wheat

# CWRS Wheat

## Variety Descriptions

Variety	B.C. Peace Averages				Alberta Agdex 100/32									Distributor
	2003-2007				Resistance to:						Tolerance to:			
	Days to Maturity	Height	Bushel Weight	Kernel Protein %	Lodging	Shatter	Loose Smut	Common Bunt	Common Root Rot	Leaf Spot	Sprouting	FHB		
	+/- check	cm	lbs/bu	+/- check										
■ 5602HR	2	80	64	1.5 [8]	G	G	R	R	XX	F	F	G	Viterra/Proven	
■ AC Barrie	0	76	64	0.8 [10]	G	G	R	R	I	P	G	F	SeCan	
■ AC Intrepid	-1	80	63	0.1 [10]	G	G	I	R	I	F	P	P	Canterra / Cargill	
■ AC Splendor	-2	77	62	0.9 [10]	F	G	I	I	I	F	F	P	SeCan	
■ Alvena	-2	75	64	0.4 [4]	G	XX	G	F	XX	XX	F	P	SeCan	
■ CDC Abound	-2	67	65	0.7 [4]	G		F	F		P	G	P	Viterra/Proven	
■ CDC Alsask	0	79	63	0.1 [8]	F	G	R	R	I	P	F	P	Viterra/Proven	
■ CDC Go	-3	72	64	0.5 [10]	G	G	S	I	XX	P	P	F	CDC / U of S	
■ CDC Imagine	-1	75	63	0.2 [10]	G	G	R	R	I	P	F	VP	AgPro / Viterra/Proven	
■ CDC Osler	-3	75	64	0.4 [10]	G	G	R	I	XX	XX	F	P	U of S	
■ Goodeve *	-2	85	65	0.5 [2]	XX	XX	XX	XX	XX	XX	XX	XX	Viterra/Proven	
■ Harvest	-2	75	64	0.6 [10]	VG	G	R	S	I	P	EX	VP	FarmPure Seeds	
■ Infinity	-1	74	63	0.0 [8]	G	G	R	R	XX	P	G	VP	Canterra	
■ Kanata**	-1	69	64	0.9 [8]	G	G	I	S	I	P	G	F	FarmPure Seeds	
■ KANE *	-5	79	66	0.8 [2]	XX	XX	XX	XX	XX	XX	XX	XX	SeCan	
■ <b>Katepwa</b>	<b>0</b>	<b>79</b>	<b>64</b>	<b>0.0 [10]</b>	<b>F</b>	<b>G</b>	<b>R</b>	<b>R</b>	<b>I</b>	<b>P</b>	<b>F</b>	<b>F</b>	<b>SeCan</b>	
■ Peace	1	78	63	0.9 [8]	G	G	R	R	XX	XX	P	P	Canterra	
■ Snowbird**	0	79	64	0.4 [10]	G	G	R	S	I	P	G	P	FarmPure Seeds	
■ Snowstar (BW315a)**	-3	70	65	-0.1 [4]	XX	XX	S	S	XX	F	XX	F	SeCan	
■ Somerset	-2	76	63	0.5 [4]	G	XX	G	S	XX	P	F	P	SeCan	
■ Superb	0	75	64	-0.2 [10]	G	G	I	R	I	P	G	P	SeCan	
■ Waskada *	-3	88	67	0.4 [2]	XX	XX	XX	XX	XX	XX	XX	XX	SeCan	
<u>Varieties not tested in 2007 (Averages 2002-2006)</u>														
■ Alikat	0	73	63	0.4 [8]	F	G	R	R	I	P	F	F	Canterra	
■ Park	0	77	63	0.2 [6]	F	G	R	I	I	P	G	VP	Stock Seed Distribution	

\* first year tested, very limited data available

EX = excellent, VG = very good, G = good  
F = fair, P = poor (susceptible), VP = very poor

### Katepwa - check variety

Disease Rating: R = Resistant, I = Intermediate, S = Susceptible

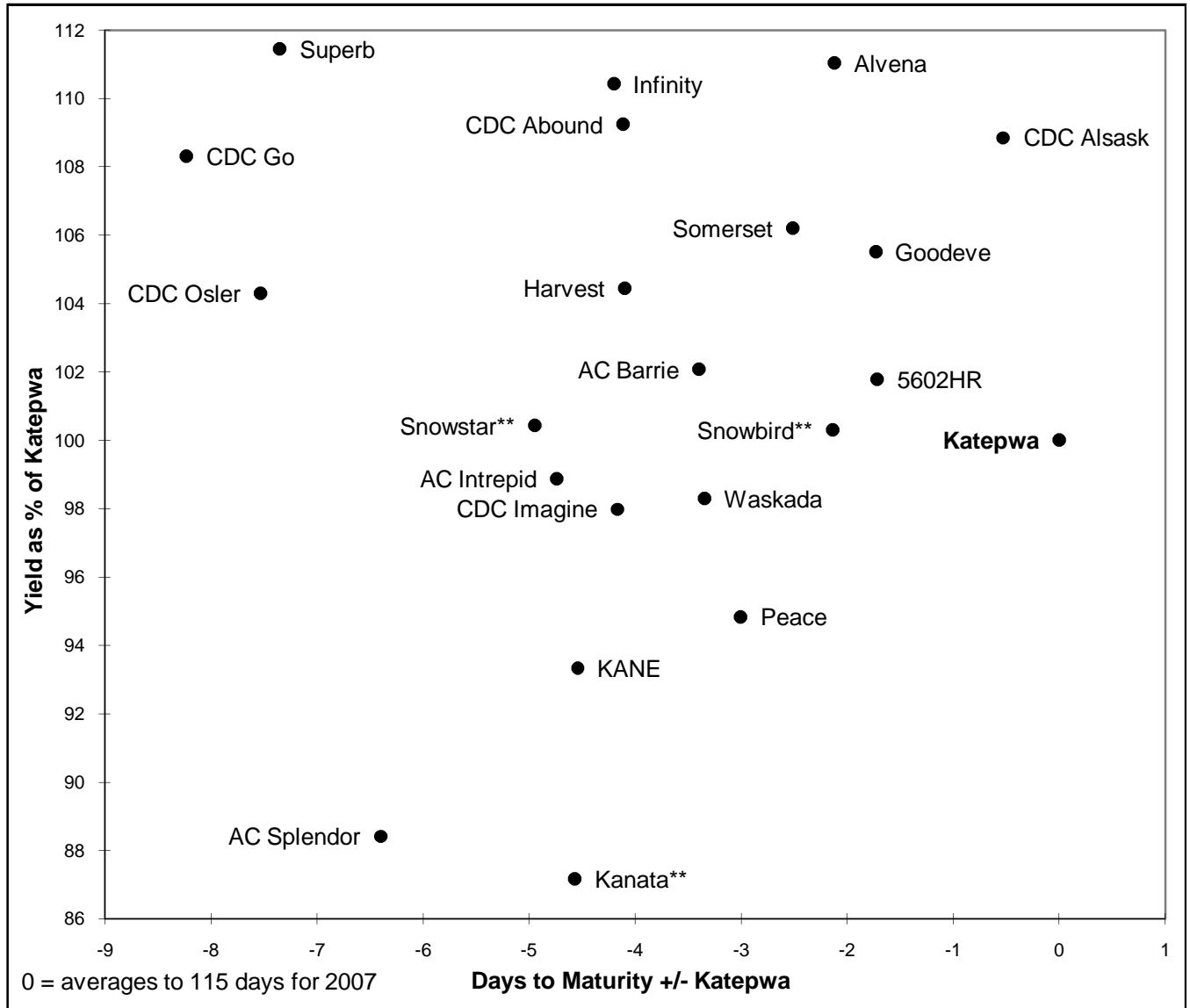
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XX = insufficient data

\*\*CWHWS Canadian Western Hard White Spring Wheat

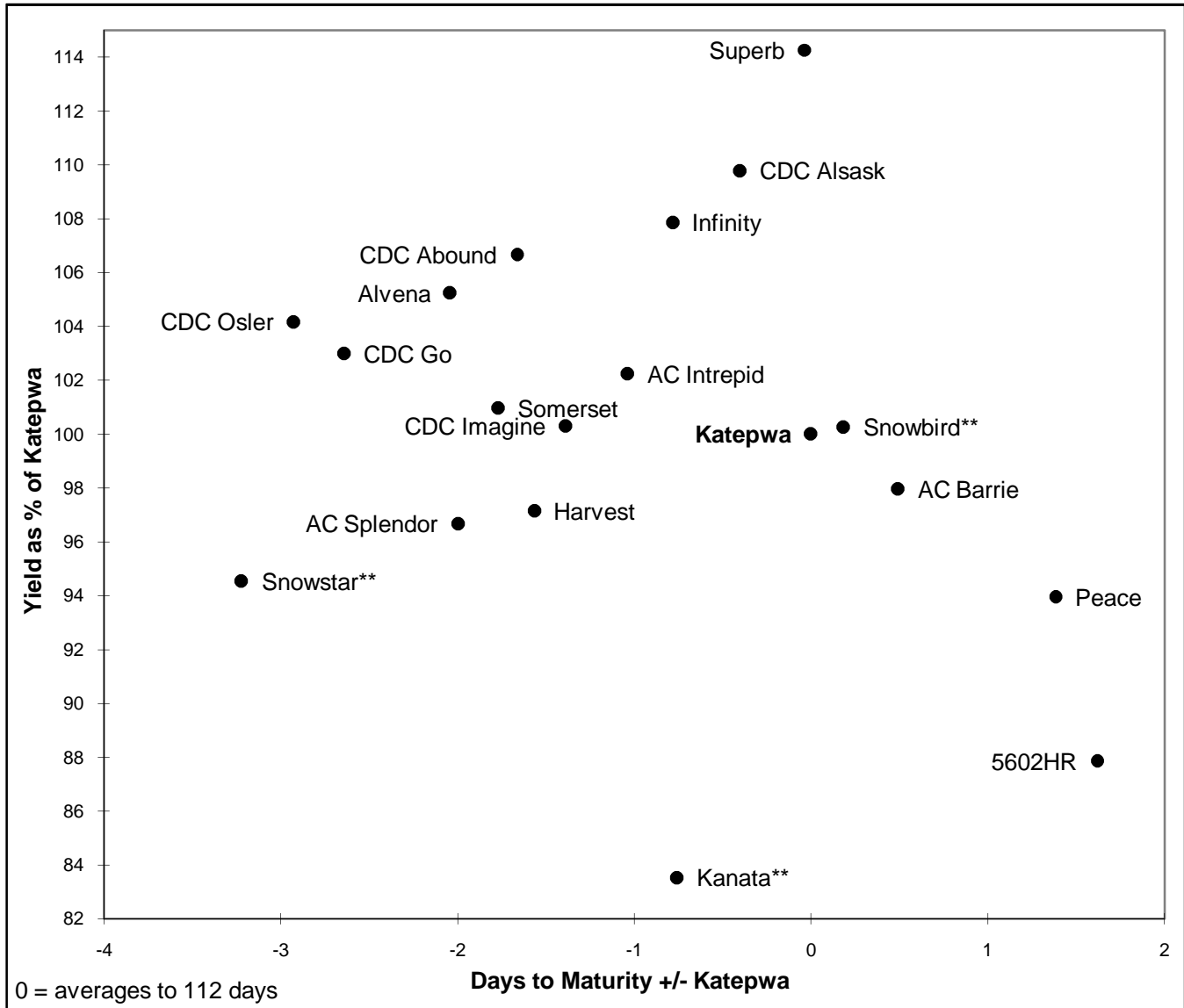
Average maturity for **Katepwa** is 112 days

Average protein for **Katepwa** is 13%



\*\* Canadian Western Hard White Spring Wheat

**Note:** Data from only 2007 clearly shows us that Katepwa, (the check used in the CWRS wheat trials), had a later than normal maturity period in 2007, averaging 115 days compared to a normal 111-112 days, likely a result of a prolonged period of poor dry-down conditions at harvest. However, it appears many other lines were less affected by these same conditions as their maturities match longer term trends more closely. (See the next graph on the next page for this comparison.)



\*\* Canadian Western Hard White Spring Wheat

# CANADA PRAIRIE SPRING WHEAT

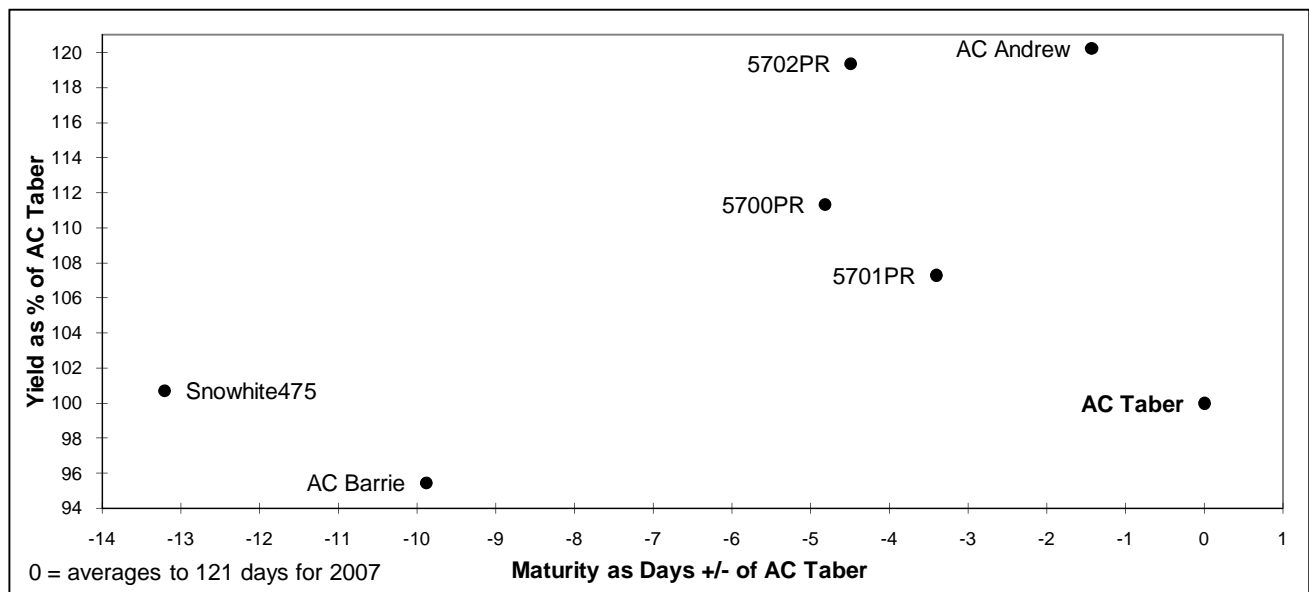
# CANADA WESTERN EXTRA STRONG WHEAT

All current Canada Prairie Spring varieties are awned and should be treated with a systemic fungicide seed treatment to control smut. Canada Western Extra Strong wheats have unique gluten properties. Avoid deep seeding CPS or CWES wheats. Seeding rates for these wheats should be increased 20 to 25% due to the larger kernel size.

[For testing purposes, the CPS and CWES wheats are traditionally grown together in the same trial]

CPS / CWSWS / CWES Wheat						Yield as % of AC Taber							
Variety	Type	Dawson Creek				Fort St. John				B.C. Peace			
		2007 Yield		2002-2007		2007 Yield		2003-2007		2007	2002-2007		
		bus / acre	% of check	Avg. (%)	Stn. Yrs.	bus / acre	% of check	Avg. (%)	Stn. Yrs.	Avg. (%)	Avg. (%)	Stn. Yrs.	
5700PR	CPS red	106 b	107	102	[5]	86 ab	116	107	[5]	111	105	[10]	
5701PR	CPS red	98 cd	99	103	[5]	85 ab	115	101	[5]	107	102	[10]	
5702PR *	CPS red	110 b	111	111	[1]	94 a	128	128	[1]	119	119	[2]	
<b>AC Taber</b>	<b>CPS red</b>	<b>99 cd</b>	<b>100</b>	<b>100</b>	<b>[5]</b>	<b>74 b</b>	<b>100</b>	<b>100</b>	<b>[5]</b>	<b>100</b>	<b>100</b>	<b>[10]</b>	
Snowwhite475	CPS white	100 c	101	95	[3]	74 b	100	100	[4]	101	98	[7]	
AC Andrew *	CWSWS	115 a	116	116	[1]	91 a	124	124	[1]	120	120	[2]	
AC Barrie	CWRS	93 d	94	88	[5]	71 b	97	86	[5]	95	87	[10]	
LSD (P=.05) =		4.83				11.03							
CV value (%) =		3.15				9.04							
<u>Varieties not tested in 2007 (2002-2006)</u>						<u>Last Year Tested</u>							
AC Crystal	CPS red			100	[4]			96	[5]	(2006)	98	[9]	
AC Foremost	CPS red			105	[4]			100	[4]	(2005)	102	[8]	
Snowwhite476	CPS white			101	[2]			107	[2]	(2006)	104	[4]	
Amazon	CWES			85	[4]			86	[5]	(2006)	86	[9]	
CDC Rama	CWES			94	[2]			96	[3]	(2006)	95	[5]	

## CPS / CWSWS Wheat Regional Variety Performance 2007



**CPS / CWSWS / CWES Wheat** **Variety Descriptions**

Variety	Type	B.C. Peace Averages 2003-2007				Data from Alberta Agdex 100/32										Distributor
		Maturity	Bushel	Kernel	Resistance to:	Tolerance to:										
		in days	Height	Weight		Lodging	Shatter	Loose	Common	Bunt	Root Rot	Leaf	Spot	Sprouting	FHB	
+/- check	cm	lbs/bu	Protein %	+/- check												
■ 5700PR	CPS red	-1	69	64	0 [10]	EX	G	S	R	I	P	P	VP	AgPro / Viterra/Proven		
■ 5701PR	CPS red	-1	70	63	0 [10]	G	G	I	S	I	P	P	VP	AgPro / Viterra/Proven		
■ 5702PR *	CPS red	-4	80	63	-1 [2]	XX	XX	XX	XX	XX	XX	XX	XX	Viterra/Proven		
<b>AC Taber</b>	<b>CPS red</b>	<b>0</b>	<b>68</b>	<b>63</b>	<b>0 [10]</b>	<b>G</b>	<b>G</b>	<b>S</b>	<b>R</b>	<b>I</b>	<b>F</b>	<b>P</b>	<b>VP</b>	<b>SeCan</b>		
■ Snowwhite475	CPS white	-6	72	63	0 [8]	XX	XX	R	R	XX	P	XX	VP	FarmPure Seeds		
AC Andrew *	CWSWS	-1	77	63	-1 [2]	XX	XX	S	I	XX	XX	F	XX	SeCan		
■ AC Barrie	CWRS	-5	78	64	2 [10]	G	G	R	R	I	P	G	F	SeCan		
<u>Varieties not tested in 2006 (Averages 2002-2005)</u>																
■ AC Crystal	CPS red	0	68	63	0.1 [8]	G	G	I	R	S	F	P	VP	SeCan		
AC Foremost	CPS red	-1	66	63	-0.1 [8]	EX	G	R	R	I	P	F	VP	SeCan		
■ Snowwhite476	CPS white	0	74	63	-0.7 [6]	XX	XX	MR	R	XX	P	XX	VP	FarmPure Seeds		
■ Amazon	CWES	0	87	63	1.2 [8]	G	G	R	I	I	F	P	P	Canterra		
CDC Rama	CWES	-1	87	64	1.4 [4]	F	G	R	R	XX	P	P	F	FarmPure Seeds		

\* first year tested, very limited data available

**AC Taber - check variety**

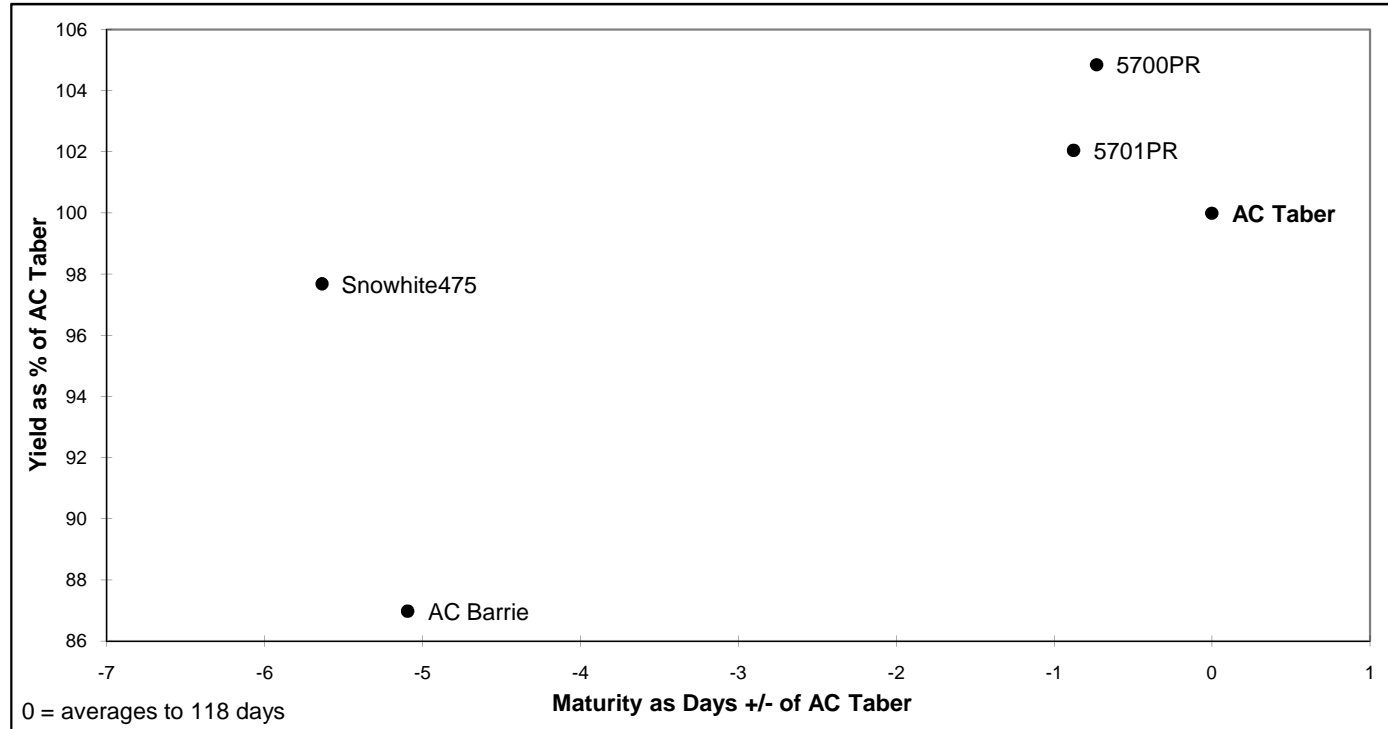
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Average maturity for **AC Taber** is 118 days.

Average protein for **AC Taber** is 12%

EX = excellent, VG = very good, G = good  
 F = fair, P = poor (susceptible), VP = very poor (very susceptible)  
 Disease Rating: R = Resistant, I = Intermediate, S = Susceptible  
 XX = insufficient data

**CPS / CWSWS Wheat** **Regional Variety Performance** **2003-2007**



# Barley

## Six Row Barley

### Yield as % of AC Metcalfe

Variety	Type	Dawson Creek		Fort St. John				B.C. Peace					
		2007 Yield**		2004-2005		2007 Yield		2004-2007		2007	2004-2007		
		bus / acre	% of check	Avg. (%)	Stn. Yrs.	bus / acre	% of check	Avg. (%)	Stn. Yrs.	Avg. (%)	Avg. (%)	Stn. Yrs.	
AC Albright	feed			90	[2]	74	b	71	88	[4]	71	89	[6]
AC Lacombe	feed			97	[2]	98	ab	94	102	[4]	94	100	[6]
<b>AC Metcalfe<sup>1</sup></b>	<b>2R malt</b>			<b>100</b>	<b>[2]</b>	<b>105</b>	<b>ab</b>	<b>100</b>	<b>100</b>	<b>[4]</b>	<b>100</b>	<b>100</b>	<b>[6]</b>
<i>Alston</i> *	feed					94	ab	90	102	[2]	90	102	[2]
CDC Battleford	malt			104	[2]	95	ab	90	96	[4]	90	99	[6]
CDC Clyde	malt			110	[1]	94	ab	90	98	[3]	90	101	[4]
CDC YORKTON	malt			92	[1]	80	b	76	83	[2]	76	86	[3]
Harrington	2R malt			91	[2]	76	b	72	94	[4]	72	93	[6]
<i>Johnston</i> *	feed					100	ab	96	96	[1]	96	96	[1]
LEGACY	malt			97	[2]	83	b	79	91	[4]	79	93	[6]
<i>Stellar-ND</i> *	malt					75	b	71	78	[2]	71	78	[2]
Sundre	feed(smooth awn)			116	[1]	114	a	109	116	[3]	109	116	[4]
Tradition	malt			92	[2]	102	ab	97	96	[4]	97	95	[6]
Trochu	feed			99	[2]	87	ab	83	102	[4]	83	101	[6]
Vivar	feed (sd)			110	[1]	92	ab	87	99	[3]	87	102	[4]
		LSD (P=.05) =				17.87							
		CV value (%) =				13.59							
<u>Varieties not tested in 2007 ( Averages 2004-2006 )</u>												<u>Last Year Tested</u>	
Kasota	feed(sd)			86	[2]				95	3	( 2006 )	91	[5]
Lacey	malt(white)			88	[1]				100	2	( 2006 )	96	[3]
Manny	feed			102	[2]				109	3	( 2006 )	106	[5]
<i>Tyto</i> *	feed (hullless)								58	1	( 2006 )	58	[1]

## Two Row Barley

### Yield as % of AC Metcalfe

Variety	Type	Dawson Creek		Fort St. John				B.C. Peace						
		2007 Yield		2003-2007		2007 Yield		2004-2007		2007	2003-2007			
		bus / acre	% of check	Avg. (%)	Stn. Yrs.	bus / acre	% of check	Avg. (%)	Stn. Yrs.	Avg. (%)	Avg. (%)	Stn. Yrs.		
<b>AC Metcalfe<sup>1</sup></b>	<b>malt</b>	<b>120</b>	<b>b</b>	<b>100</b>	<b>100</b>	<b>[4]</b>	<b>101</b>	<b>a</b>	<b>100</b>	<b>100</b>	<b>[4]</b>	<b>100</b>	<b>100</b>	<b>[8]</b>
<i>CDC Coalition</i> *	feed	122	ab	102	102	[1]	106	a	105	105	[1]	103	103	[2]
CDC Copeland	malt	116	b	97	96	[4]	99	a	98	95	[4]	97	95	[8]
CDC Cowboy	forage	124	ab	103	97	[2]	99	a	98	93	[3]	101	95	[5]
CDC Helgason	feed	123	ab	103	101	[4]	101	a	100	100	[4]	101	100	[8]
<i>CDC Mindon</i> *	feed	121	ab	101	101	[1]	100	a	99	99	[1]	100	100	[2]
CDC Trey	feed	127	ab	106	99	[3]	98	a	96	93	[4]	101	96	[7]
Champion	feed	132	ab	110	110	[1]	107	a	105	106	[2]	108	107	[3]
CONLON	malt	117	b	97	98	[2]	85	a	84	83	[3]	91	89	[5]
Formosa	malt	121	ab	101	101	[1]	81	a	80	84	[2]	91	90	[3]
Harrington	malt	118	b	98	94	[4]	93	a	91	92	[4]	95	93	[8]
McLeod	feed	123	ab	102	102	[4]	84	a	83	93	[4]	93	97	[8]
Millhouse	food (hullless)	72	c	75	75	[1]	61	b	75	71	[2]	75	72	[3]
Newdale	malt	123	ab	102	100	[2]	108	a	107	104	[2]	105	102	[4]
Ponoka	feed	133	ab	111	114	[4]	109	a	108	109	[4]	109	111	[8]
Seebe	feed	131	ab	110	105	[4]	97	a	96	99	[4]	103	102	[8]
XENA	feed	153	a	127	109	[4]	99	a	98	105	[4]	113	107	[8]
		LSD (P=.05) =		18.13				16.30						
		CV value (%) =		10.37				11.98						
<u>Varieties not tested in 2007 ( Averages 2004-2006 )</u>												<u>Last Year Tested</u>		
Calder	malt			103	[2]				97	[3]	( 2006 )	100	[5]	

<sup>1</sup>AC Metcalfe (2R malt) is the new barley check

(sd) semi-dwarf type

Means followed by the same letter do not significantly differ (P=.05, LSD)

**AC Metcalfe - check variety**

\* first year tested, very limited data available

\*\*no 6 row yield data available for Dawson Creek

Feed Barley										Variety Descriptions							
Variety	Type	B.C. Peace Averages					Alberta Agdex 100/32 info										Distributor
		2004-2007				0-9 scale (0=nil)**	Resistance to										
		Days to Maturity	Height	Bushel Weight	Kernel Protein %	Scald	Net	Blotch	Lodging	Loose Smut	False Smut	Root Rot	Scald	FHB	Tolerance		
		+/- check	cm	lbs/bu	+/- check												
Eligible for General Purpose Grades Only																	
AC Albright	6 row	-5	77	51	-1	[5]	1.8	1.5		S	S	S	S		SeCan		
■ AC Lacombe	6 row	-1	70	49	-2	[5]	1.6	1.7	G	S	R	S	I	VP	SeCan		
■ Alston *	6 row	-3	71	50	-2	[3]	XX	XX	G	S	R	I	S	P	Viterra/Proven		
■ CDC Coalition *	2 row	1	74	56	0	[2]	XX	XX	XX	XX	XX	XX	XX	XX	Canterra		
■ CDC Helgason	2 row	-1	72	54	0	[7]	2.0	1.5	G	R	R	I	S	P	SeCan		
■ CDC Mindon *	2 row	0	85	56	0	[2]	XX	XX	XX	XX	XX	XX	XX	XX	SeCan		
■ CDC Trey	2 row	-1	73	55	0	[5]	3.1	1.4	G	I	R	R	I	F	FarmPure Seeds		
■ Champion	2 row	1	77	55	0	[3]	XX	XX	G	S	R	I	S	G	Viterra/Proven		
■ McLeod	2 row	3	63	54	1	[7]	3.1	1.7	G	S	R	I	S	P	Viterra/Proven		
■ Ponoka	2 row	2	72	55	-1	[7]	1.3	1.0	G	R	R	I	I	F	SeCan		
Seebe	2 row	4	79	55	1	[7]	0.8	1.3	G	S	R	S	R	G	SeCan		
■ Sundre	6 row	2	81	54	-2	[5]	1.5	2.8	G	S	I	S	R	P	Mastin Seeds, AB		
■ Trochu	6 row	-2	67	51	-2	[5]	2.0	1.1	G	S	R	R	I	P	SeCan		
■ XENA	2 row	1	70	54	0	[7]	2.1	1.5	G	S	I	R	S	G	Viterra/Proven		
Semi-dwarf varieties																	
■ Vivar	6 row	-2	65	52	-2	[5]	2.4	1.4	VG	I	R	R	I	VP	SeCan		
Hulless varieties																	
■ Millhouse	2 row (food)	0	82	61	2	[3]	XX	XX	F	S	I	I	S	G	FarmPure Seeds		
Forage varieties																	
■ CDC Cowboy	2 row	2	97	55	0	[5]	2.4	1.3	G	S	R	XX	S	G	SeCan		
Johnston *	6 row	0	86	54	-3	[2]	XX	XX	XX	XX	XX	XX	XX	XX	SeCan		
Varieties not tested in 2007 ( Averages 2004-2006)																	
■ Kasota	6 row	-1	57	53	-1	[3]	1.6	2.3	EX	S	R	I	R	VP	SeCan		
■ Manny	6 row	0	74	50	-2	[3]	1.0	2.5	G	I	R	S	R	P	SeCan		
■ Tyto *	6 row	0		58	2	[1]	XX	XX	EX	S	R	I	I	P	Progressive Seeds		

Malt Barley										Variety Descriptions							
Variety	Type	B.C. Peace Averages					Alberta Agdex 100/32 info										Distributor
		2004-2007				0-9 scale (0=nil)**	Resistance to										
		Days to Maturity	Height	Bushel Weight	Kernel Protein %	Scald	Net	Blotch	Lodging	Loose Smut	False Smut	Root Rot	Scald	FHB	Tolerance		
		+/- check	cm	lbs/bu	+/- check												
■ AC Metcalfe <sup>1</sup>	2 row	0	70	54	0	[7]	2.0	1.8	F	R	I	I	S	F	SeCan		
■ CDC Battleford	6 row	-2	71	51	-1	[5]	2.4	1.3	G	S	R	R	S	VP	SeCan		
■ CDC Clyde	6 row	-4	70	52	-2	[5]	3.3	1.7	G	S	S	R	S	P	Viterra/Proven		
■ CDC Copeland	2 row	1	76	52	0	[7]	2.5	1.4	F	S	I	I	S	F	SeCan		
■ CDC YORKTON	6 row	-2	67	49	-2	[2]	1.8		G	S	R	R	S	P	Canterra		
■ CONLON	2 row	-3	77	55	1	[5]	3.9	2.8	G	XX	S	R	S	G	Seed Depot Corp.		
Formosa	2 row	-1	80	56	1	[3]	XX	XX	XX	XX	XX	XX	XX	XX	FarmPure Seeds		
Harrington	2 row	1	69	53	0	[7]	2.8	2.7	F	S	S	I	S	G	SeCan		
■ LEGACY	6 row	-2	69	51	-1	[7]	2.5	1.6	G	I	R	R	S	P	Busch Ag		
■ Newdale	2 row	-1	72	54	0	[3]	XX	XX	F	S	R	R	S	F	FarmPure Seeds		
■ Stellar-ND *	6 row	-4	78	49	-2	[3]	XX	XX	XX	XX	XX	XX	XX	XX	Busch Ag		
■ Tradition	6 row	-3	71	52	-1	[7]	3.0	1.2	G	S	R	R	S	VP	Busch Ag		
Varieties not tested in 2007 ( Averages 2004-2006)																	
■ Calder	2 row	0	69	53	0	[3]	2.1	1.6	F	R	R	I	S	G	AAFC Brandon		
■ Lacey	6 row	-2	63	51	-1	[3]	2.4		G	I	R	R	S	VP	FarmPure / Viterra		

(sd) semi-dwarf variety

\* first year tested, very limited data available

EX = excellent, VG = very good, G = good

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\*\* 0 - 9 scale; 0 = none, 9 = 100% affected

F = fair, P = poor, VP = very poor

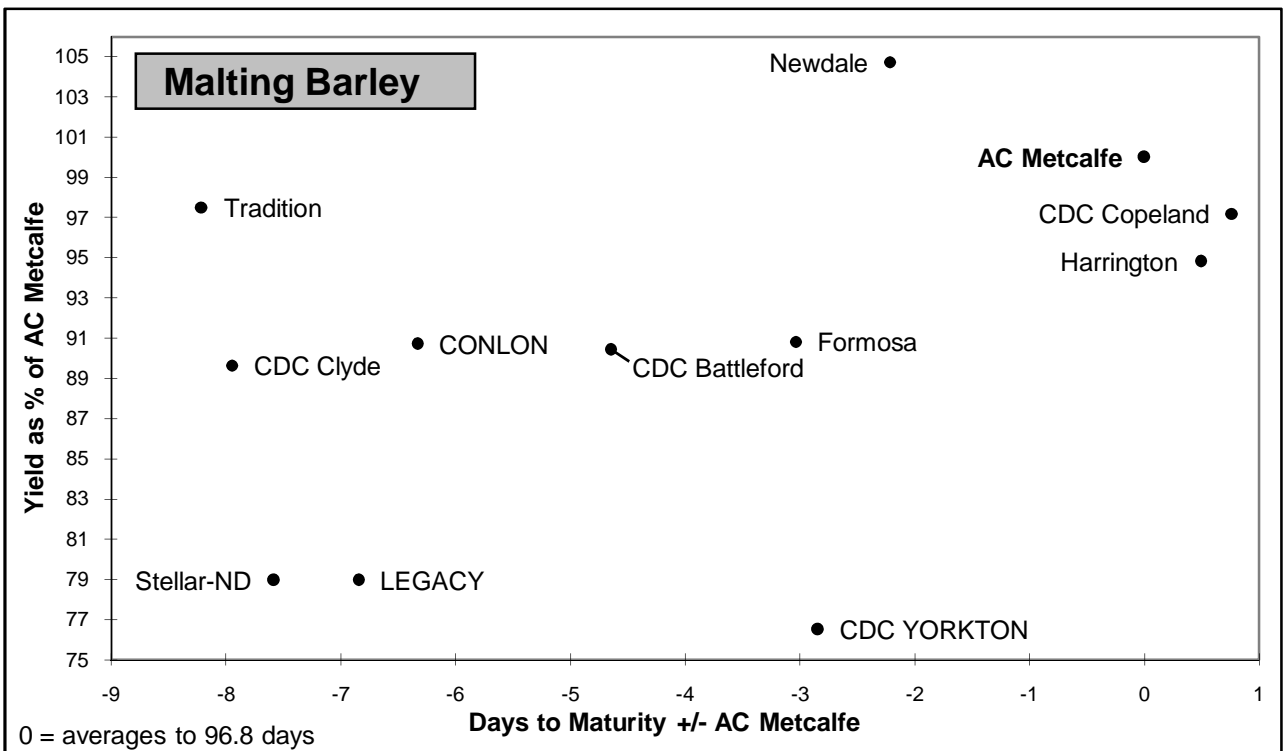
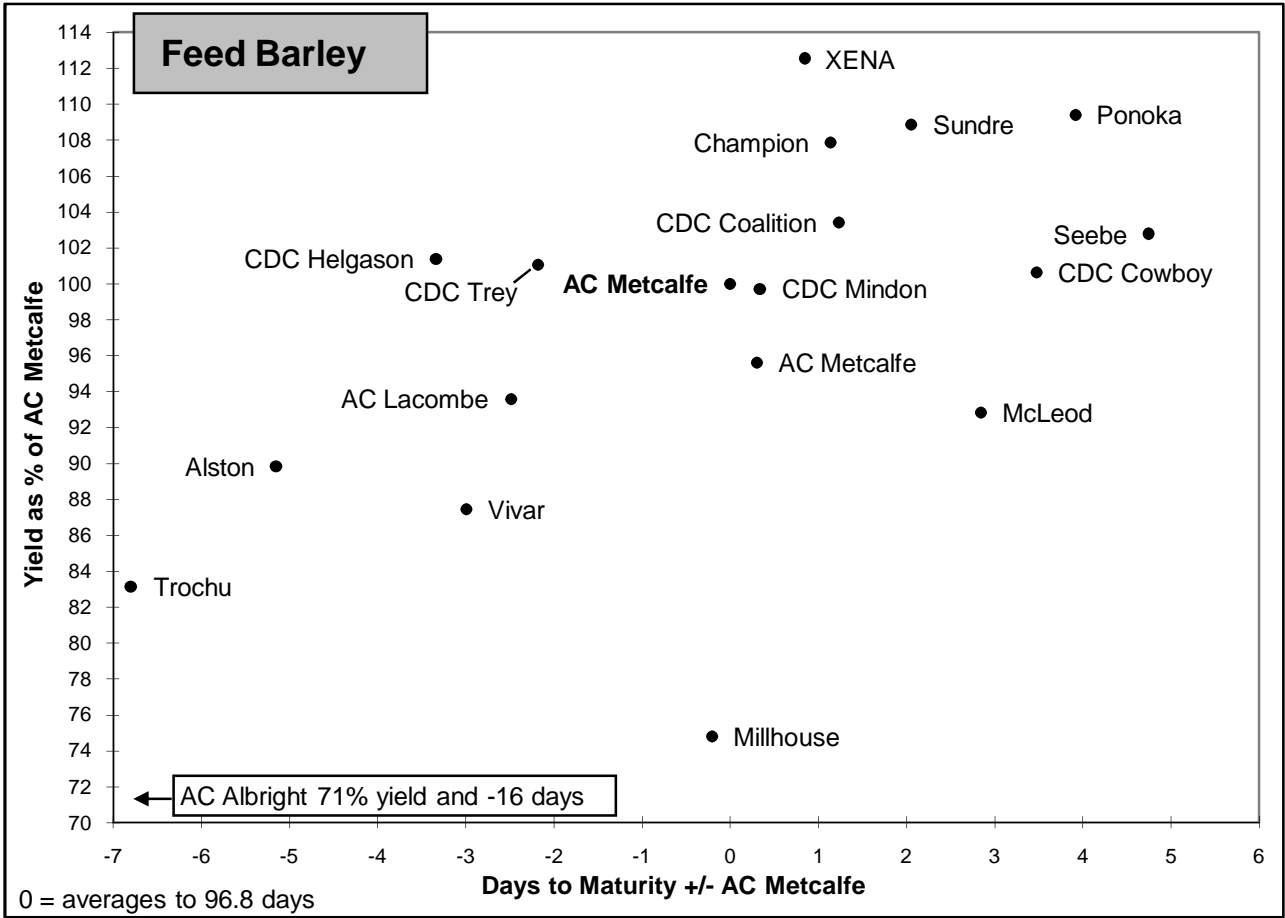
**AC Metcalfe - check variety**

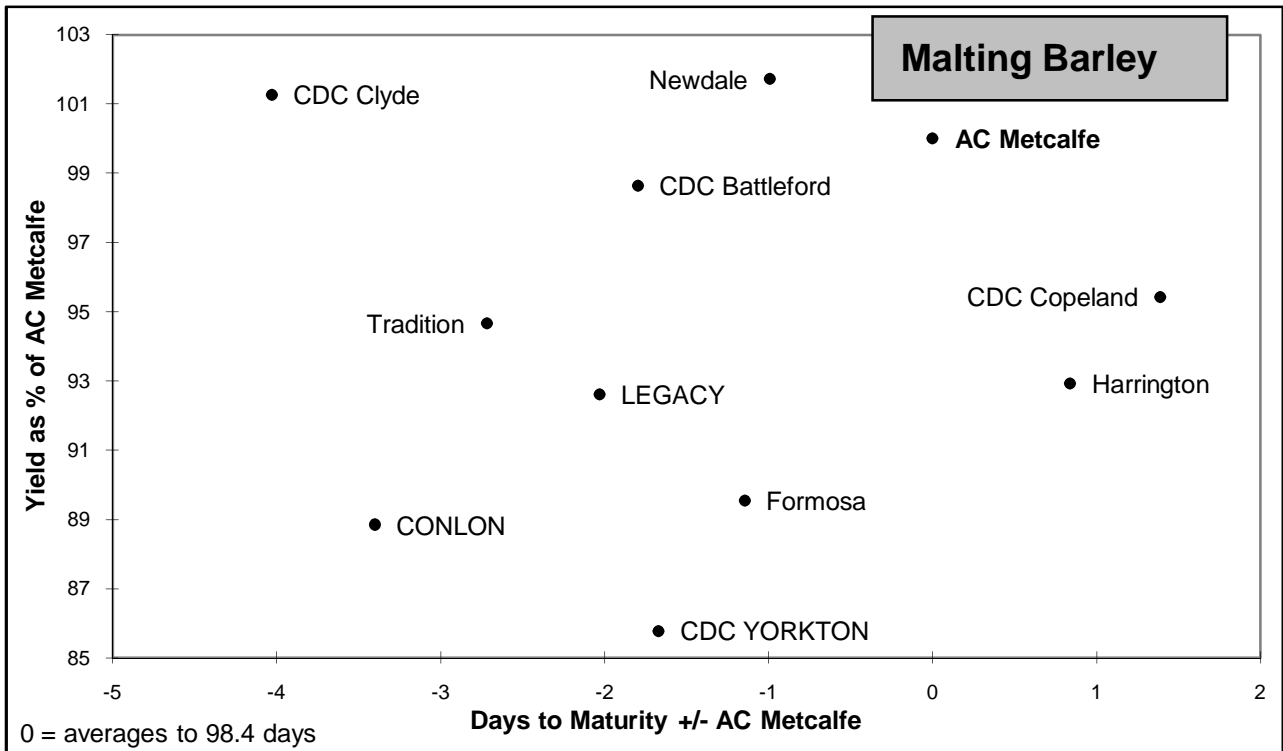
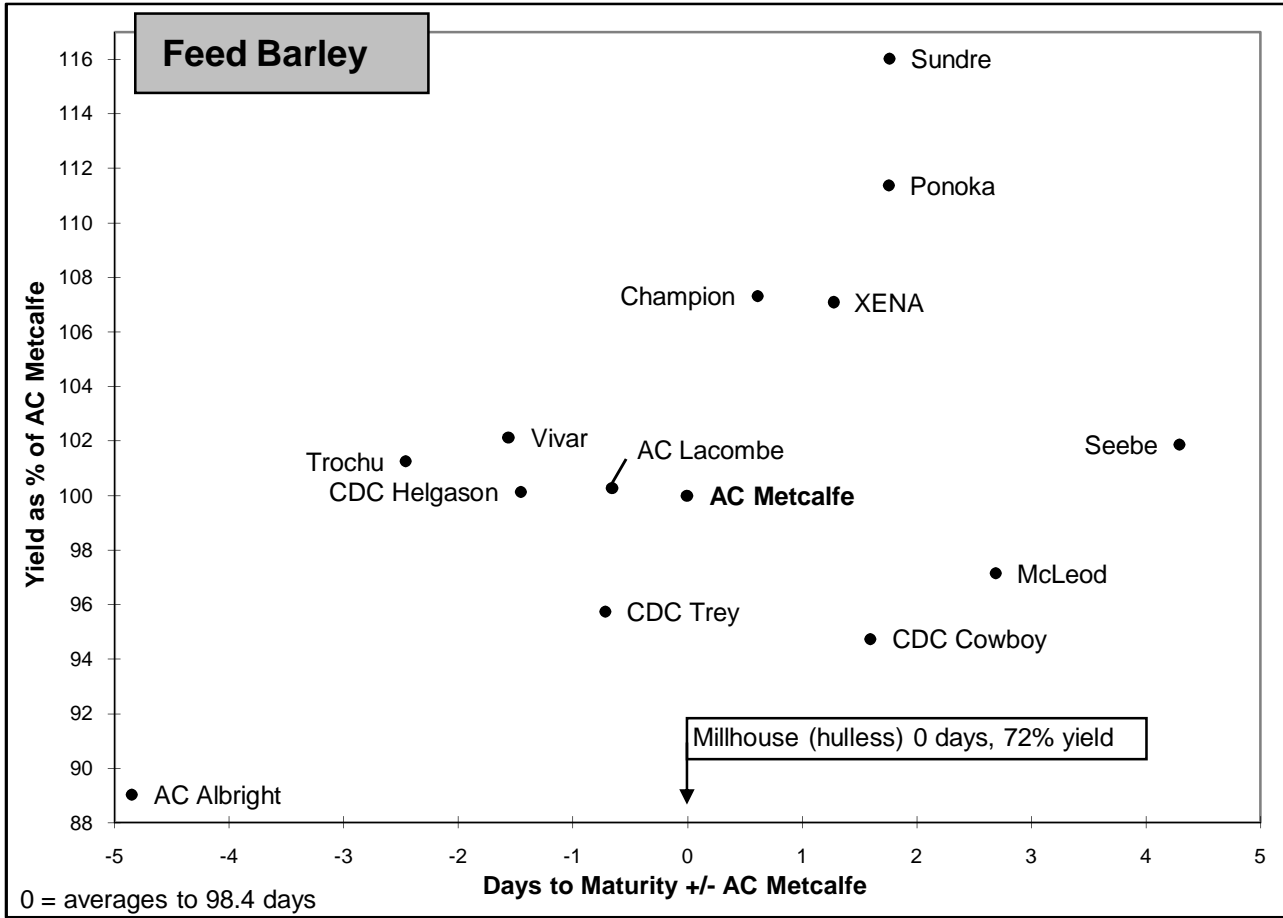
<sup>1</sup>AC Metcalfe (2R Malt) is the new barley check.

R = Resistant I = Intermediate S = Susceptible

Average maturity for **AC Metcalfe** is 98.4 days.

Average Protein for **AC Metcalfe** is 13.3%





# OATS

Oats are usually a feed crop but some varieties are also suitable for higher value feed and food markets. The milling industry prefers higher protein varieties with plump kernels and lower hull content, while the horse industry prefers white hulled varieties. Hulless oat varieties have excellent feed and food value but need to be stored drier than normal varieties ( <12% moisture ) and do not flow as well in the bin due to their pubescence (hairs), which seem to "lock together". Yield values for hulless oat varieties are expressed after hull removal, which reduces the seed weight by 20-25% compared to the normal varieties. Keep in mind while comparing hulless to hulled. No hulless lines are currently being tested (see earlier reports).

Oats		Yield as % of Cascade										
Variety	Colour	Dawson Creek				Fort St. John				B.C. Peace		
		2007 Yield		2003-2007		2007 Yield		2003-2007		2007	2003-2007	
		bus / acre	% of check	Avg. (%)	Stn. Yrs.	bus / acre	% of check	Avg. (%)	Stn. Yrs.	Avg. (%)	Avg. (%)	Stn. Yrs.
7600M	white	172 ab	93	87	[4]	77 ab	93	95	[4]	93	91	[8]
AC Juniper	white	187 ab	101	91	[5]	88 ab	107	98	[5]	104	95	[10]
AC Morgan	white	198 ab	106	103	[5]	80 ab	97	105	[5]	102	104	[10]
AC Mustang	white	210 a	113	106	[5]	94 ab	114	110	[5]	113	108	[10]
<b>Cascade</b>	<b>yellow</b>	<b>186 ab</b>	<b>100</b>	<b>100</b>	<b>[5]</b>	<b>83 ab</b>	<b>100</b>	<b>100</b>	<b>[5]</b>	<b>100</b>	<b>100</b>	<b>[10]</b>
CDC Baler (forage oat)	white	182 ab	98	91	[5]	95 ab	115	108	[5]	107	99	[10]
<i>CDC Charger</i> *		165 ab	89	89	[1]	86 ab	104	104	[1]	96	96	[2]
CDC Dancer	white	159 ab	85	91	[3]	86 ab	104	98	[3]	95	95	[6]
CDC Orrin	white	207 a	111	106	[5]	98 a	119	109	[5]	115	108	[10]
<i>CDC ProFi</i> *		144 b	78	78	[1]	73 ab	88	88	[1]	83	83	[2]
CDC Weaver	white	173 ab	93	92	[3]	90 ab	109	103	[3]	101	98	[6]
Hi-Fi	white	153 ab	83	81	[2]	68 b	82	82	[2]	82	82	[4]
Jordan (AC Jordon)	white	207 a	111	99	[2]	97 ab	117	115	[2]	114	107	[4]
Leggett	white	183 ab	98	86	[4]	79 ab	95	92	[4]	97	89	[8]
Lu	yellow	197 ab	106	93	[5]	83 ab	101	97	[5]	103	95	[10]
Murphy (forage oat)	white	193 ab	104	92	[4]	87 ab	106	106	[4]	105	99	[8]
<i>OT 2040</i> *		173 ab	93	93	[1]	78 ab	94	94	[1]	94	94	[2]
SW Betania	white	175 ab	94	92	[3]	81 ab	99	98	[3]	96	95	[6]
<i>Triactor</i> *		211 a	114	114	[1]	88 ab	107	107	[1]	110	110	[2]
	LSD (P=.05) =	33.47				16.04						
	CV value (%) =	12.89				13.38						
		Varieties not tested in 2007 ( Averages 2003-2006 )						Last Year Tested				
<i>CANMORE</i> *	white			79	[1]			90	[1]	( 2006 )	84	[2]
CDC Sol-Fi	white			80	[2]			86	[2]	( 2006 )	83	[4]
Furlong	tan			84	[3]			95	[3]	( 2006 )	90	[6]
Ronald	yellow			89	[3]			102	[3]	( 2006 )	95	[6]

Means followed by the same letter do not significantly differ (P=.05, LSD)

Average maturity for **Cascade** is 104 days.

Oats		Variety Descriptions					
Variety	Type	BC Peace Avg. (2003-2007)			Resistance to:		Distributor
		Maturity as days +/- check	Height cm	Bushel Weight lbs/bu	Lodging	Smuts	
■7600M	milling	1	81	43	F	R	Viterra/Proven
■AC Juniper	milling	-1	77	41	VG	I	Viterra/Proven
AC Morgan	milling / feed	3	78	42	VG	R	SeCan
AC Mustang	feed / forage	1	83	43	G	I	Viterra/Proven
<b>Cascade</b>	<b>feed</b>	<b>0</b>	<b>85</b>	<b>42</b>	<b>G</b>	<b>S</b>	<b>SeCan</b>
CDC Baler	forage	6	88	40	XX	S	FarmPure Seeds
CDC Charger *	milling	3	76	43	XX	XX	FarmPure Seeds
■CDC Dancer	milling	0	65	42	G	R	FarmPure Seeds
■CDC Orrin	milling	3	80	43	G	R	FarmPure Seeds
CDC ProFi *		2	71	39	XX	XX	FarmPure Seeds / U of S
■CDC Weaver	milling	5	75	41	F	R	FarmPure Seeds
■Hi Fi	milling	2	63	41	XX	XX	Seed Depot
■Jordan (AC Jordon)	milling / feed	5	70	41	G	R	SeCan
■Leggett	milling	3	73	41	G	R	FarmPure Seeds
Lu	feed	-2	74	41	G	R	SeCan
■Murphy	forage	3	95	40	XX	S	SeCan
■OT 2040 *		7	89	40	XX	XX	AAFC, Winnipeg
■SW Betania	milling	0	71	41	G	R	Agricore United
■Triactor *	feed	3	76	40	XX	XX	Canterra Seeds
Varieties not tested in 2007 (Averages 2003-2006)							
■CANMORE *	milling	2	46	41	XX	XX	Semican Atlantic
■CDC Sol-Fi	milling	0	81	39	F	R	Viterra/Proven
■Furlong	milling / feed	1	80	40	G	R	Canterra/Cargill
■Ronald	milling	1	67	43	VG	R	SeCan

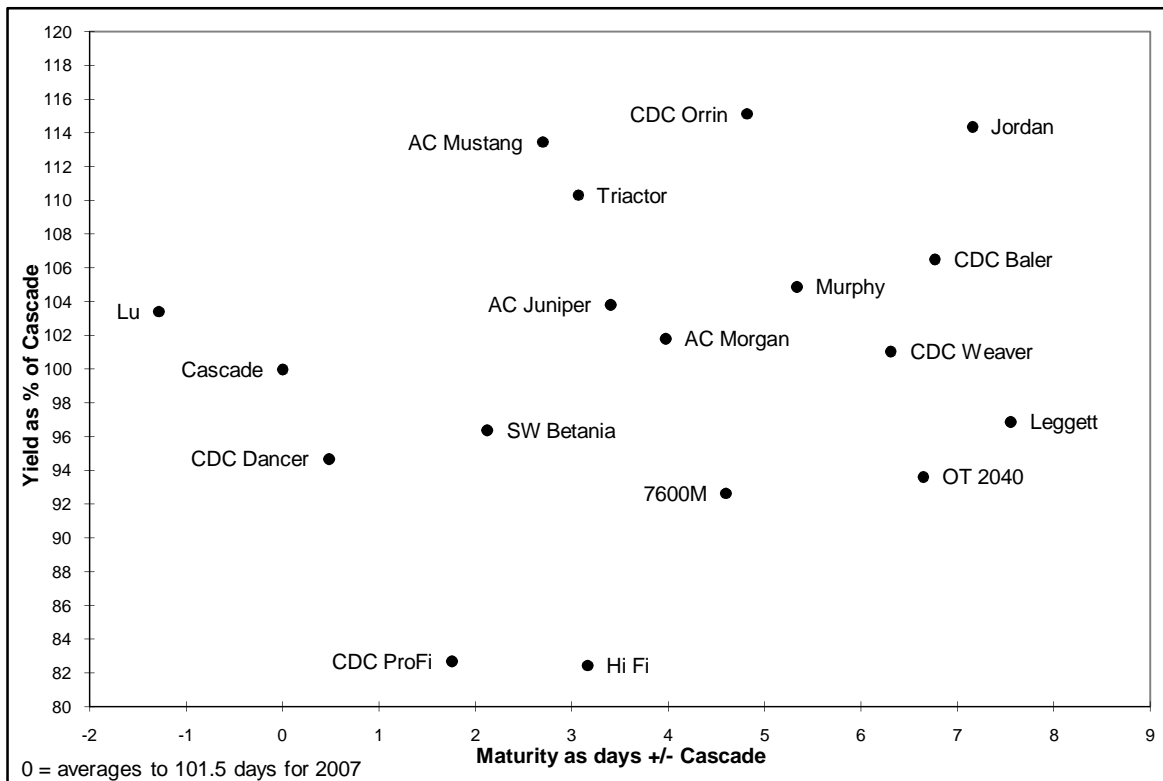
**Cascade - check variety**

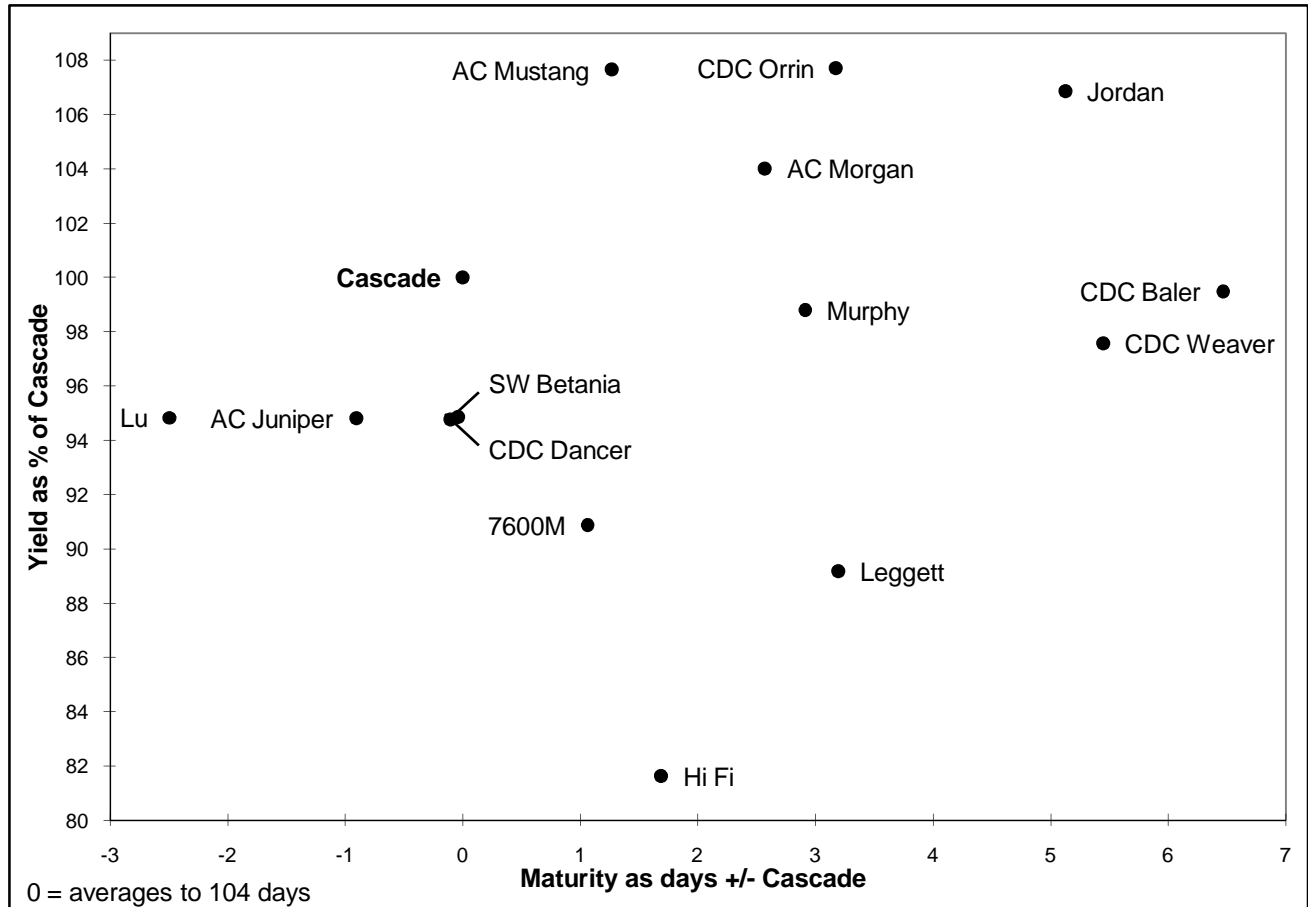
■ Protected by Plant Breeders' Rights  
 XX = insufficient data

EX = excellent, VG = very good, G = good, F = fair, P = poor (susceptible)

S = Susceptible I = Intermediate R = Resistant  
 \* first year tested, very limited data available

**Oats Regional Variety Performance 2007**





### Oats for Feed

Oats are often sown to provide fodder in the form of silage or greenfeed. Oats will yield more silage or greenfeed per unit area than any other cereal crop. If managed properly, it can provide 3-4.5 tons of dry matter per acre, or more, of high quality feed containing up to 10 percent protein<sup>1</sup>. Many years of comparing yields of oats with barley have shown oats to be superior in the Black and Grey Wooded soil zones<sup>1</sup>. Although the percent protein level in barley is higher than in oats, the total amount of protein produced on a given area is higher with oats than with barley<sup>1</sup>. Oats have about 22-26 percent hull whereas barley averages about 12-14 per cent hull on a weight basis<sup>1</sup>. When choosing a variety, the seed yield as well as the forage yield should be considered, thereby keeping one's options open to harvest as forage or grain<sup>1</sup>. We do not currently evaluate oat varieties for forage yield in these tests.

### Forage Oats

It is believed by some farmers that one variety might be better than another because it appears "leafier"; however, tests on a number of varieties have shown very little variation in leafiness<sup>2</sup>. Having said that however, such work has not likely included the newer lines of forage oats that are entering the market place now. These new "forage only" lines, such as *CDC Baler* and *Murphy*, have usually been much larger plants in our tests than their traditional counterparts developed for seed quality, which should translate to more biomass to be available for forage production. Note however, that traditionally our oat tests do not lodge and so it is unclear as to whether larger plants are going to be a concern for early lodging in a large-scale forage production practice in our area. Lodging data here is from Alberta Agdex 100/32.

### Other Comments

On heavier soils and in the more moist areas, lodging resistance should be considered, but again, traditionally lodging has not been a concern in our BC Peace oat trials, and as mentioned above, lodging data provided here is from Alberta Agdex 100/32. The variation in straw feed quality between oat varieties is insignificant and should not be used as a variety selection criterion<sup>3</sup>. The average feed values are: protein 4%, fibre 49%, calcium 0.27%, and phosphorus 0.08%<sup>3</sup>.

Source<sup>1,2,3</sup>: Alberta Agriculture, Food, and Rural Development website [www.agric.gov.ab.ca](http://www.agric.gov.ab.ca)

## SPRING TRITICALE

Triticale is a genetic cross (not a hybrid) developed by crossing wheat (*Triticum turgidum* or *Triticum aestivum*) with rye (*Secale cereale*). Most varieties of spring triticale currently available are approximately 10 days or more later maturing than CWRS wheats, and as such they should not be grown in the B.C. Peace River region for grain production. However, a few varieties are proving to be earlier than traditional spring triticale varieties, and perhaps as breeding continues earlier lines may come along that can be grown here for grain. Their high grain yields are "attention grabbers", and so it is worth watching their development, especially as triticale seems to hold a lot of potential for ethanol production in the Peace region if breeding efforts could produce earlier maturing lines. Drought tolerance is the primary advantage that spring triticales have over other spring cereal crops. Spring triticales are also a valuable alternative or compliment to barley & oats as forage feed. It is for these reasons, especially its potential use as a high volume ethanol feedstock, that data is included in this report.

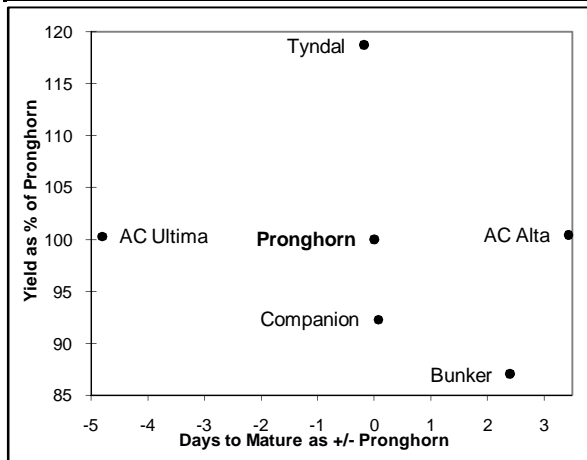
Variety	Yield as % of Pronghorn											
	Dawson Creek				Fort St. John				B.C. Peace			
	2007 Yield		2003-2007		2007 Yield		2003-2007		2007		2003-2007	
	bus / acre	% of check	Avg. Stn. (%) Yrs.		bus / acre	% of check	Avg. Stn. (%) Yrs.		Avg. Stn. (%) Yrs.	Avg. Stn. (%) Yrs.		
AC Alta	119	c	85	100 [4]	97	a	110	101 [4]	97	100	[8]	
AC Ultima	148	a	106	109 [5]	77	d	88	92 [5]	97	100	[10]	
Bunker	138	b	99	87 [2]	80	cd	91	88 [2]	95	87	[4]	
Companion (forage type)	124	c	89	94 [4]	84	bcd	95	91 [4]	92	92	[8]	
<b>Pronghorn</b>	<b>140</b>	<b>ab</b>	<b>100</b>	<b>100 [5]</b>	<b>88</b>	<b>bc</b>	<b>100</b>	<b>100 [5]</b>	<b>100</b>	<b>100</b>	<b>[10]</b>	
Tyndal	145	ab	104	138 [2]	90	ab	103	99 [2]	103	119	[4]	
	LSD (P=.05) = 6.83				6.85							
	CV value (%) = 3.34				5.29							

Means followed by the same letter do not significantly differ (P=.05, LSD)

### Pronghorn - check variety

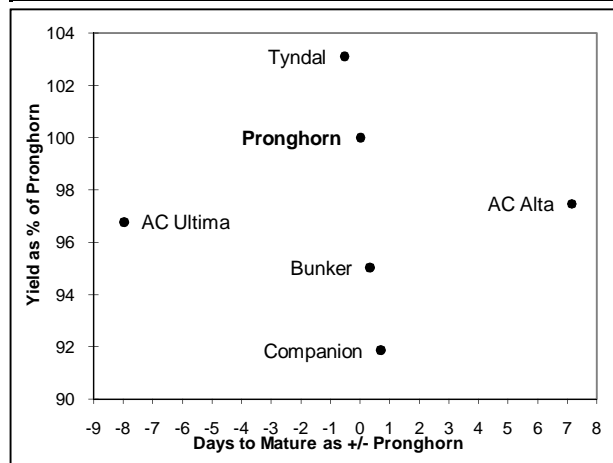
Spring Triticale	Variety Descriptions					
	Maturity as days +/- check	Height (cm)	Bushel Weight (lbs/bus)	TKW (g / 1000)	Distributor	
	AC Alta	3	89	53	53	Progressive
AC Ultima	-5	89	57	45	FarmPure Seeds	
Bunker	2	89	58	51	FarmPure Seeds	
Companion (forage type)	0	107	54	48	FarmPure Seeds	
<b>Pronghorn</b>	<b>0</b>	<b>92</b>	<b>56</b>	<b>43</b>	<b>Progressive</b>	
Tyndal	0	82	58	45	SeCan	

### Regional Variety Performance 2003-2007



Average long-term maturity for **Pronghorn** is 124 days.

### Regional Variety Performance 2007



2007 days to maturity for **Pronghorn** is 125 days