AGRI-FACTS
Practical Information for Alberta's Agriculture Industry

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Varieties of Cereal and Oilseed Crops for Alberta

Introduction

This publication provides information on cereal and oilseed variety performance within Alberta. Important agronomic characteristics are given in tabular form for varieties of wheat, oats, barley, flax, canola, triticale and rye. The agro-climatic areas, based primarily upon precipitation and length of growing season, are indicated on the map. This information can help farmers choose varieties that are best suited to their own particular farming situation.

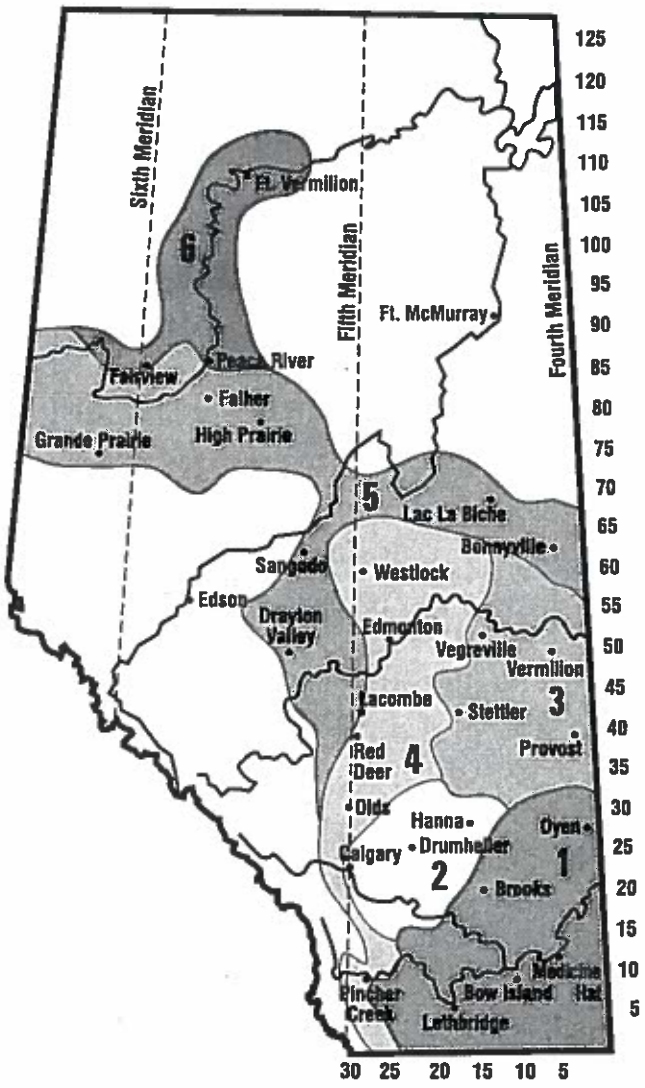
The information in this publication is supplied by the University of Alberta, Agriculture and Agri-Food Canada, the Canadian Seed Growers Association, cereal and oilseed commodity groups, applied research associations, the Canadian Seed Trade Association, Canola Council of Canada, and Alberta Agriculture, Food and Rural Development.

Plant Breeder's Rights

The use of the logo ♻ indicates a variety protected by law, and seed of this variety cannot be sold without permission and royalty payment.

Summary methods

Past versions of this publication summarized multi-year and multi-location yield data on a geographical basis (agro-climatic areas). This summary method averaged the effects of drought, heavy rainfall, high/low fertility, etc. that is often experienced at different sites or years in each agro-climatic area. This method of analysis did not reliably identify varieties more adapted to low or high yield conditions, and farmers were given the impression that varieties will respond closely to the long-term averages reported in each area.



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Another approach is included for several crops that summarizes yield data based on the yield category (low, medium, high) of the test sites, regardless of their geographical location. This newer method will allow producers to select the best performing varieties under high yielding conditions. Also, varieties that have consistent performance in both low and high yielding conditions indicate yield stability and thus reduced risk.

Yields tables show relative yields compared to a check variety. Although variety test plots are carefully conducted with statistical designs, small percentage differences in yield are usually statistically insignificant or meaningless. In Area 1, irrigated yields expressed as per cent of dryland yields are C.W. wheat 185, barley 160, oats 180, flax 210 and canola 125%. In Area 2, irrigated yields expressed as per cent of dryland yields are C.W. wheat 130, barley 125, oats 120, flax 145 and canola 120%.

Canola

The canola variety performance data is generated by the Prairie Canola Variety Trials (PCVT) and is appended to this factsheet. Trials are conducted over the three provinces of Alberta, Saskatchewan and Manitoba as well as the B.C. Peace River region. The PCVT system reports individual years of data for publication in the factsheet. The Alberta Cereal and Oilseed Advisory committee does not take any responsibility for accuracy or validity of the PCVT results.

Maturity

Maturity is indicated as +/- days relative to the check variety for each crop and cannot be used to compare different crops. In Areas 2, 3 and 5 of Alberta, the following can be used as a guide for estimating maturity in actual days from seeding to harvest when the crops are seeded on fallow land:

- AC Barrie wheat – 113 days
- Cascade oats – 108
- Harrington barley – 98
- Kasota barley – 93
- McGregor flax – 120
- 46A65 (Argentine) canola – 109
- Reward (Polish) canola – 92

Note: These days to maturity do not match the days to maturity shown in the charts because they are the average of only 3 of the 6 agro-climatic areas.

In Area 6, the longer daylight hours usually reduce the number of days to maturity required. Area 4 experiences the longest maturity. In southern Alberta, AC Barrie can be expected to mature in 103 to 108 days, and other crops are similarly earlier maturing. Maturity rankings of varieties within crops tend to be consistent regardless of where the crops are grown.

Diseases, seed treatment and seed testing

Disease ratings are compiled from various data sources in Alberta and other prairie provinces.

- Treat rye and flax seed to control seedling blight, cereal seed for smuts and fusarium, canola seed to control flea beetles, seedling blight and the seed borne phase of virulent blackleg.
- Treated seed must not be fed to livestock, poultry or wildlife or sold for feed. Refer to labels for maximum periods for storing treated seed.
- The Leaf Spot rating in the wheat charts is a combination of resistance to tan spot and septoria leaf disease complex.
- Currently, Fusarium Head Blight (FHB), caused by *Fusarium graminearum*, is a minor problem in Alberta. However, this pathogen has been appearing with greater frequency and intensity in Manitoba and eastern Saskatchewan. It has also appeared in trace levels in Alberta. The relative rating of crops from most susceptible to least is durum, CPS wheat, HRS wheat, triticale, barley and oats. Corn is a host of *F. graminearum* and can serve as a source of infection when residue is left on the ground. Under severe epidemics, all cereal varieties will suffer damage. All seed, especially seed brought in from infected areas of the eastern prairies, should be tested for FHB and treated with the appropriate seed treatment. Producers should choose varieties with the best FHB tolerance wherever possible.
- All seed tested in the Regional Cereal Program comes with a fusarium-free certificate and is treated with the appropriate fungicides. In addition, all regional trials are inspected for the disease at the most susceptible stage.

Laboratories participating in the FHB testing program:

- 20/20 Seed Labs Ltd., Nisku, AB, 1-877-420-2099
- Brett Young Seeds (Rycroft Inc.), Rycroft, AB, 1-780-765-3069
- BioVision Seed Research Ltd., Edmonton, AB, 1-800-952-5407
- BioVision Seed Research Ltd., Grande Prairie, AB, 1-877-532-8889
- Parkland Laboratories, Red Deer, AB 1-403-342-0404
- Precision Seed Testing, Beaverlodge, AB 1-780-354-2259
- Seed Check Technologies Inc., Leduc, AB, 1-780-980-8324

Other variety information

For additional variety information, including varieties not listed in this factsheet, check Alberta Agriculture's website at www.agric.gov.ab.ca or call the Alberta Ag-Info Centre at 1-866-882-7677.

WHEAT

Variety	Area (see map) 1	2	3	4	5&6	Irr.	Comp. Mat.	Prot.	Te. Wt.	Kn. Wt.	Ht.	Resistance to: Ldg.	Shat.	Loose Smut	Bunt	Com. Rt. Rot	Tolerance to: Leaf Spot	Sprou	IE
	Yield as % of AC Barrie						days	%	lb/bu	g/1000	cm								
C.W. RED SPRING WHEAT																			
AC Barrie ♻	100	100	100	100	100	100	110	14.5	62	38	88	G	G	R	R	I	P	G	F
5602HR ♻	122*	106	98	109	100	124	1	0.3	62	39	89	G	G	R	R	XX	F	XX	G
AC Abbey ♻	103	100	92	105	103	96	-1	-1.2	62	35	79	F	G	I	R	I	P	P	F
AC Cadillac ♻	100	98	96	97	95	87	0	0.2	64	39	98	F	G	R	R	I	F	F	F
AC Eatonia	91	93	91	93	97	89	1	-0.1	62	35	92	P	G	I	R	I	P	G	XX
AC Elsa ♻	101	109	100	104	107	90	0	-0.4	62	35	89	G	G	R	I	I	G	F	P
AC Intrepid ♻	100	103	96	107	104	93	-1	-0.5	62	39	91	G	G	I	R	I	F	P	P
AC Splendor	94	94	93	99	95	94	-1	0.4	61	37	90	F	G	I	I	I	F	F	P
Alikat	94	94	93	97	99	82	-1	-0.4	63	36	87	F	G	R	R	I	P	F	F
CDC Alsask	126*	108	101	110	110	117	0	0.3	61	38	91	F	G	R	R	I	P	F	P
CDC Bounty	106	104	100	109	103	102	-1	-0.4	64	37	94	F	G	R	I	I	P	F	F
CDC Go	127*	111	106	109	106	133	-1	0.0	61	43	86	G	G	S	I	XX	P	P	F
CDC Imagine ♻	105	104	100	108	104	109	-1	-0.2	60	38	84	G	G	R	R	I	P	F	VP
CDC Osler	144*	108	101	108	99	113	XX	0.0	61	36	85	G	G	R	I	XX	XX	F	P
CDC Teal	100	99	91	104	101	100	-1	-0.2	62	36	89	G	G	I	I	I	P	P	VP
Harvest ♻	101	102	106	99	94	105	0	0.2	61	37	82	VG	G	R	S	I	P	EX	VP
Infinity ▲	123*	101	104	103	105	110	-1	-0.5	61	34	88	G	G	R	R	XX	P	G	VP
Journey ♻	109	104	96	93	97	108	1	0.6	61	36	83	VG	G	I	R	I	P	G	F
Katepwa	102	99	95	101	100	99	0	-0.5	61	35	92	F	G	R	R	I	P	F	F
Laura †	101	105	101	103	109	95	1	-0.6	62	35	93	G	G	I	S	I	P	F	P
Lillian ♻	148*	106	100	100	103	120	-1	0.0	60	38	86	G	G	R	I	I	P	G	VP
Lovitt ♻	102	92	99	99	98	94	-1	-0.3	61	35	89	G	G	G	I	I	XX	VG	P
McKenzie	107	103	101	103	102	109	-1	-0.9	62	34	90	F	G	S	R	I	F	EX	F
Park	105*	93	85	102	96	102	-2	-0.1	62	36	91	F	G	R	I	I	P	G	VP
Peace	XX	103*	99*	96	104	113*	-1	0.2	63	39	95	G	G	R	R	XX	XX	XX	P
Prodigy	104	100	104	107	105	93	0	0.4	63	35	94	G	F	I	R	I	P	F	P
Roblin	92	89	91	95	98	104	-1	0.1	62	36	87	G	G	R	S	I	VP	F	VP
Superb ♻	114	110	106	114	111	116	3	-0.7	62	43	84	G	G	I	R	I	P	G	P
C.W. HARD WHITE SPRING WHEAT																			
Kanata ♻	XX	92	89	90	83	95	-2	0.1	60	34	81	G	G	I	S	I	P	G	F
Snowbird ♻	90	100	109	101	103	105	2	-0.6	59	37	82	G	G	R	S	I	P	G	P

REMARKS: Park data is based on historic data. AC Abbey, AC Eatonia and Lillian – adapted to sawfly areas. AC Abbey has semi-dwarf stature. Varieties having rating of Susceptible (S) or Intermediate (I) to loose smut or bunt require a systemic fungicide seed treatment. C.W. Red Spring Wheat grown under irrigation tends to have lower grades. Alikat – special adaptation to acid soils. CDC Imagine is tolerant to the Clearfield system herbicides. McKenzie may be identified by purplish stem. CDC Alsask – no seed available in 2006. Kanata and Snowbird are eligible for the Canadian Wheat Board identity preserved contract program.

See page 17 for symbols used.

WHEAT (continued)

Variety	Area (see map) 1	2	3	4	5&6	Irr.	Comp. Mat.	Comp. Prot.	Te. Wt.	Kn. Wt.	Ht.	Resistance to: Ldg.	Shat.	Loose Smut	Bunt	Com. Rt. Rot	Tolerance to: Leaf Spot	Sprout	FH
	Yield as % of AC Taber						days	%	lb/bu	g/1000	cm								
CANADA PRAIRIE SPRING WHEAT																			
RED SEEDED																			
AC Taber	100	100	100	100	100	100	110	12.6	61	43	79	G	G	S	R	I	F	P	VI
5700PR ♻	92	102	101	103	101	100	-1	0.0	62	42	75	EX	G	S	R	I	P	P	VI
5701PR ♻	93	102	99	102	99	103	0	0.3	60	43	78	G	G	I	S	I	P	P	VI
AC Crystal ♻	95	101	101	102	98	97	0	0.0	62	42	79	G	G	I	R	S	F	P	VI
AC Foremost	96	96	95	97	99	99	-1	XX	62	42	72	EX	G	R	R	I	P	F	VI
Cutler †	83	90	88	82	86	86	-4	XX	61	40	78	G	G	S	S	I	P	F	VI
WHITE SEEDED																			
AC Karma †	97	100	100	99	98	99	-1	XX	62	39	82	G	G	I	R	I	P	P	VI
AC Vista ♻ †	93	97	102	96	98	94	-2	XX	61	43	84	G	G	I	R	I	P	P	P

REMARKS: Varieties with susceptible (S) or intermediate (I) ratings to loose smut or bunt require a systemic fungicide seed treatment. Cutler – special adapta to acid soils but less drought tolerant than other CPS wheats. CPS wheat is more susceptible to take-all root rot than other wheat classes. AC Vista has better sprouting resistance than other white seeded CPS varieties. AC Taber yields about 20% higher than AC Barrie. AC Vista has higher protein content and strong gluten than AC Karma. AC Crystal, 5700PR and 5701PR have improved quality compared to AC Foremost and AC Taber. 5701PR is eligible for the Canadian Wheat Board identity preserved contract program.

WHEAT

Variety	Area (see map) 1	2	3	4	5&6	Irr.	Comp. Mat.	Te. Wt.	Kn. Wt.	Ht.	Resistance to: Ldg.	Shat.	Loose Smut	Bunt	Com. Rt. Rot	Tolerance to: Leaf Spot	Sprout	FHB
	Yield as % of Kyle						days	lb/bu	g/1000	cm								
C.W. AMBER DURUM WHEAT																		
Kyle	100	100	100	NS	NS	100	107	61	44	99	P	G	S	R	I	P	F	VP
AC Avonlea ♻	101	100	102	NS	NS	110	0	62	44	89	F	G	S	R	I	P	F	VP
AC Morse ♻	100	99	100	NS	NS	111	-1	61	44	84	G	G	S	R	I	VP	F	VP
AC Navigator ♻	105	101	104	NS	NS	110	0	62	45	76	G	G	S	R	I	VP	F	VP
Commander ▲	106*	110	112	NS	NS	112	-1	61	47	77	G	VG	I	R	XX	P	F	VP
Napoleon ▲	98	97*	108*	NS	NS	110	-1	61	46	87	F	G	S	R	I	P	F	VP
Plenty †	100	98	104*	NS	NS	109	0	62	44	98	F	G	S	R	I	F	F	VP
Strongfield ♻	116	104	101	106	106	115	0	61	46	89	F	VG	S	I	XX	P	VG	VP

REMARKS: Durum wheat should only be grown in areas 1 and 2 and the southeastern portion of area 3 due to late maturity. Outside these areas, durum is extremely late maturing and subject to quality loss. All durum varieties are susceptible to two new races of loose smut. Seed can be treated to provide control. Kyle – yields about 10% higher than AC Barrie in areas of best adaptation, and receives better grades than other varieties even under adverse harvesting conditions. Sceptre – lowest incidence of kernel smudge. For 2006-2007 the Canadian Wheat Board (CWB) is offering identity preserved contract programs for Strongfield, AC Navigator and Commander, please contact the CWB for more details. AC Navigator and Commander are semi-dwarf stature, Commander has limited seed available for 2006. AC Avonlea – shorter stronger straw than Kyle, higher pigment content in grain than other varieties.

	Yield as % of AC Andrew																	
C.W. SOFT WHITE SPRING WHEAT																		
AC Andrew	100	NS	NS	NS	NS	100	0	62	40	76	XX	XX	S	I	XX	XX	F	XX
AC Meena	98	NS	NS	NS	NS	93	0	62	38	75	XX	XX	S	S	XX	XX	F	XX
AC Nanda	99	NS	NS	NS	NS	90	5	64	35	76	EX	G	S	I	S	XX	F	XX
AC Phil †	103	NS	NS	NS	NS	90	0	62	37	67	EX	G	S	S	S	XX	F	XX
AC Reed	84	NS	NS	NS	NS	83	0	61	40	70	EX	VG	S	S	S	XX	F	XX
Bhishaj	96	NS	NS	NS	NS	96	2	62	40	84	EX	VG	I	S	XX	XX	F	XX

REMARKS: All soft white spring wheat varieties have a semi-dwarf stature and excellent straw strength. Seed should be treated with a systemic fungicide to control seed borne diseases. AC Andrew yields about 35% more than AC Barrie.

See page 17 for symbols used.

WHEAT (new yield class table)

Variety	Test Yield Category			Comp.		Te.	Kn.		Resistance to:					Tolerance to:		
	Low	Med	High	Mat.	Prot.	Wt.	Wt.	Ht.	Ldg.	Shat.	Loose Smut	Bunt	Com. Rt. Rot	Leaf Spot	Sprout	FH
	Yield as % of Test Mean			days	%	lb/bu	g/1000	cm								
C.W. RED SPRING WHEAT																
AC Barrie ♻	100	98	96	110	14.5	62	38	88	G	G	R	R	I	P	G	F
5602HR ♻	102	102	104	1	0.3	62	39	89	G	G	R	R	XX	F	XX	G
AC Abbey ♻	96	102	105	-1	-1.2	62	35	79	F	G	I	R	I	P	P	F
AC Cadillac ♻	99	96	97	0	0.2	64	39	98	F	G	R	R	I	F	F	F
AC Eatonia	89	95	92	1	-0.1	62	35	92	P	G	I	R	I	P	G	XX
AC Elsa ♻	102	105	105	0	-0.4	62	35	89	G	G	R	I	I	G	F	P
AC Intrepid ♻	102	102	105	-1	-0.5	62	39	91	G	G	I	R	I	F	P	P
AC Splendor	94	95	98	-1	0.4	61	37	90	F	G	I	I	I	F	F	P
Alikat	98	94	95	-1	-0.4	63	36	87	F	G	R	R	I	P	F	F
CDC Alsask	107	107	104	0	0.3	61	38	91	F	G	R	R	I	P	F	P
CDC Bounty	103	105	103	-1	-0.4	64	37	94	F	G	R	I	I	P	F	F
CDC Go	101	109	112	-1	0.0	61	43	86	G	G	S	I	XX	P	P	F
CDC Imagine ♻	102	103	104	-1	-0.2	60	38	84	G	G	R	R	I	P	F	VP
CDC Osler	102	103	102	XX	0.0	61	36	85	G	G	R	I	XX	XX	F	P
CDC Teal	97	100	101	-1	-0.2	62	36	89	G	G	I	I	I	P	P	VP
Harvest ♻	99	100	98	0	0.2	61	37	82	VG	G	R	S	I	P	EX	VP
Infinity ▲	103	101	103	-1	-0.5	61	34	88	G	G	R	R	XX	P	G	VP
Journey ♻	95	99	96	1	0.6	61	36	83	VG	G	I	R	I	P	G	F
Katepwa	98	95	92	0	-0.5	61	35	92	F	G	R	R	I	P	F	F
Laura †	103	107	100	1	-0.6	62	35	93	G	G	I	S	I	P	F	P
Lillian ♻	107	100	102	-1	0.0	60	38	86	G	G	R	I	I	P	G	VP
Lovitt ♻	97	95	96	-1	-0.3	61	35	89	G	G	G	I	I	XX	VG	P
McKenzie	106	102	105	-1	-0.9	62	34	90	F	G	S	R	I	F	EX	F
Park	90	95	90	-2	-0.1	62	36	91	F	G	R	I	I	P	G	VP
Peace	103	99	96	-1	0.2	63	39	95	G	G	R	R	XX	XX	XX	P
Prodigy	106	105	104	0	0.4	63	35	94	G	F	I	R	I	P	F	V
Roblin	94	95	95	-1	0.1	62	36	87	G	G	R	S	I	VP	F	VP
Superb ♻	109	112	112	3	-0.7	62	43	84	G	G	I	R	I	P	G	P
C.W. HARD WHITE SPRING WHEAT																
Kanata ♻	89	87	85	-2	0.1	60	34	81	G	G	I	S	I	P	G	F
Snowbird ♻	102	103	99	2	-0.6	59	37	82	G	G	R	S	I	P	G	P

REMARKS: AC Abbey, AC Eatonia and Lillian – adapted to sawfly areas. AC Abbey has semi-dwarf stature. Varieties having a rating of Susceptible (S) or Intermediate (I) to loose smut or bunt require a systemic fungicide seed treatment. C.W. Red Spring Wheat grown under irrigation tends to have lower grades. Alikat – special adaptation to acid soils. CDC Imagine is tolerant to the Clearfield system herbicides. McKenzie may be identified by a purplish stem. Kanata and Snowbird are eligible for the Canadian Wheat Board identity preserved contract program.

Test yield categories based on small plot yields were Low = <45 bu/ac; Medium = 45 to 75 bu/ac; and High = >75 bu/ac.
CDC Alsask – no seed available in 2006.

See page 17 for symbols used.

WHEAT (new yield class table)

Variety	Test Yield Category Low	Med	High	Comp. Mat.	Prot.	Te. Wt.	Kn. Wt.	Ht.	Resistance to: Ldg.	Shat.	Loose Smut	Bunt	Com. Rt. Rot	Tolerance to: Leaf Spot	Sprout	FHB
	Yield as % of Test Mean			days	%	lb/bu	g/1000	cm								
CANADA PRAIRIE SPRING WHEAT																
RED SEEDED																
AC Taber	106	105	106	110	12.6	61	43	79	G	G	S	R	I	F	P	VP
5700PR ♻	106	106	108	-1	0.0	62	42	75	EX	G	S	R	I	P	P	VP
5701PR ♻	102	105	102	0	0.3	60	43	78	G	G	I	S	?	P	P	VP
AC Crystal ♻	103	106	108	0	0.0	62	42	79	G	G	I	R	S	F	P	VP
AC Foremost	103	102	104	-1	XX	62	42	72	EX	G	R	R	I	P	F	VP
Cutler †	87	89	93	-4	XX	61	40	78	G	G	S	S	I	P	F	VP
WHITE SEEDED																
AC Karma †	106	103	105	-1	XX	62	39	82	G	G	I	R	I	P	P	VP
AC Vista ♻ †	104	102	102	-2	XX	61	43	84	G	G	I	R	I	P	P	P

REMARKS: Varieties with susceptible (S) or intermediate (I) ratings to loose smut or bunt require a systemic fungicide seed treatment. Cutler – special adaptation to acid soils but less drought tolerant than other CPS wheats. CPS wheat is more susceptible to take-all root rot than other wheat classes. AC Vista has better sprouting resistance than other white seeded CPS varieties. AC Taber yields about 20% higher than AC Barrie. AC Vista has higher protein content and stronger gluten than AC Karma. AC Crystal, 5700PR and 5701PR have improved quality compared to AC Foremost and AC Taber. 5701PR is eligible for the Canadian Wheat Board identity preserved contract program.

Test yield categories based on small plot yields were Low = <50 bu/ac; Medium = 50 to 90 bu/ac; and High = >90 bu/ac.

WHEAT

Variety	Area (see map) 1	2	3	4	5&6	Irr.	Comp. Mat.	Te. Wt.	Kn. Wt.	Ht.	Resistance to: Ldg.	Shat.	Loose Smut	Bunt	Com. Rt. Rot	Tolerance to: Leaf Spot	Sprout	FHB
	Yield as % of Amazon						days	lb/bu	g/1000	cm								
C.W. EXTRA STRONG WHEAT																		
Amazon ♻	100	100	100	100	100	100	110	61	44	97	G	G	R	I	I	F	P	P
AC Corinne †	99	102	99	100	105	92	1	61	44	97	G	G	R	I	I	P	G	P
Bluesky	97	101	96	101	102	94	-2	61	44	95	F	G	R	I	R	P	P	P
CDC Rama	98*	114	106*	120	110	110	-1	63	49	97	F	G	R	R	XX	P	P	F
Glenavon †	99	108	104	101	106	105	0	62	46	97	G	G	R	I	I	P	P	P
Glenlea	98	105	95	103	103	95	0	61	43	97	G	G	R	I	R	P	G	P
Laser	95	99	92	98	96	101	-2	60	39	87	EX	G	R	I	I	P	F	VP

WHEAT (new yield class table)

Variety	Test Yield Category Low	Med	High	Comp. Mat.	Te. Wt.	Kn. Wt.	Ht.	Resistance to: Ldg.	Shat.	Loose Smut	Bunt	Com. Rt. Rot	Tolerance to: Leaf Spot	Sprout	FHB
	Yield as % of Test Mean			days	lb/bu	g/1000	cm								
C.W. EXTRA STRONG WHEAT															
Amazon ♻	94	90	87	110	61	44	97	G	G	R	I	I	F	P	P
AC Corinne †	98	88	90	1	61	44	97	G	G	R	I	I	P	G	P
Bluesky	95	89	93	-2	61	44	95	F	G	R	I	R	P	P	P
CDC Rama	99	96	96	-1	63	49	97	F	G	R	R	XX	P	P	F
Glenavon †	90	90	92	0	62	46	97	G	G	R	I	I	P	P	P
Glenlea	97	89	91	0	61	43	97	G	G	R	I	R	P	G	P
Laser	89	86	92	-2	60	39	87	EX	G	R	I	I	P	F	VP

REMARKS: Bluesky and Laser are comparable in maturity to Katepwa. AC Corinne, Glenavon, Amazon and Glenlea – should only be grown in Areas 1, 2 and 3 due to late maturity. Amazon yields approximately 10% more than Katepwa.

Test yield categories based on small plot yields were Low = <50 bu/ac; Medium = 50 to 90 bu/ac; and High = >90 bu/ac.

See page 17 for symbols used.

WINTER WHEAT

Variety	Irr. 1	Area (see map) 1	2	3	4	5&6	All Data	Relative Mat.	Relative Prot.	Te. Wt.	Kn. Wt.	Ht.	Winter Survival	Resistance to: Ldg.	Shat.	Piebald	Bunt	FHB
	Yield as % of CDC OSPREY							days	%	lb/bu	g/1000	cm						
CWRW SELECT VARIETIES																		
CDC OSPREY	100	100	100	100	100	100	100	0	0.0	63	32	86	VG	G	G	F	VP	P
AC Bellatrix	98	103	109	XX	107	110	104	+2	+0.3	64	36	85	F	G	G	VG	F	P
AC Readymade	100	94	97	NS	NS	NS	–	+5	+1.8	64	37	87	P	EX	F	VG	P	–
AC Tempest	106	95	100	NS	NS	NS	–	+5	+1.5	64	37	85	P	EX	G	VG	P	–
CDC Buteo	XX	98	103	XX	99	XX	98	+1	0.0	65	34	85	VG	F	G	–	VP	P
McClintock ♳	XX	97	91	XX	96	XX	96	+3	-0.6	65	32	87	P	VG	G	–	VP	P
Norstar	89	95	98	XX	94	104	95	+2	-0.2	64	33	104	VG	VP	G	G	VP	F
Radiant ▲	109	103	107	XX	101	100	103	+2	-0.2	64	37	86	VG	VG	G	G	P	P
OTHER CWRW VARIETIES																		
CDC CLAIR	100	101	112	XX	107	XX	104	+1	-0.4	63	34	85	VG	F	G	F	VP	P
CDC Falcon	107	101	102	XX	101	XX	100	-2	-0.3	63	31	72	F	VG	G	F	VP	VP
CDC Harrier	118	105	112	XX	107	XX	109	+1	-1.3	62	31	90	VG	G	G	F	VP	P
CDC Kestrel	108	102	107	XX	105	XX	104	+1	-1.4	63	32	89	VG	F	G	P	VP	P
CDC Raptor	XX	101	109	XX	101	XX	102	0	-0.6	64	30	79	VG	VG	G	–	VP	P

REMARKS: Winter wheat can be grown successfully in all areas of Alberta if seeded into standing stubble within the optimal seeding date period (generally before September 15) and if there is adequate snowfall. Yield figures are from trials with good winter survival. All comparisons are relative to CDC OSPREY, the current standard check variety. The provincial average maturity date for CDC OSPREY is August 8 (220 days after January 1). Radiant has resistance to the wheat curl mite which carries Wheat Streak Mosaic Virus. AC Bellatrix has resistance to common bunt – varieties that have poor resistance to this disease should be treated with a systemic seed treatment. CDC HARRIER has stem rust resistance; CDC Buteo, CDC Falcon, CDC Raptor, and McClintock have stem and leaf rust resistance. All winter wheat varieties are susceptible to stripe rust. Fields in southern Alberta should be inspected in the fall for infestation by Russian wheat aphid, as it may reduce winter survival. Winter wheat will normally escape Fusarium head blight infection if seeded before September 15. CWRW Select varieties receive price and protein premiums under a CWB Identity Preserved program. For further details see http://www.cwb.ca.

WINTER WHEAT (new yield class table)

Variety	Test Yield Category Low	Med	High	V. High	All Data	Relative Mat.	Relative Prot.	Te. Wt.	Kn. Wt.	Ht.	Winter Survival	Resistance to: Ldg.	Shat.	Piebald	Bunt	FHB
	Yield as % of CDC OSPREY					days	%	lb/bu	g/1000	cm						
CWRW SELECT VARIETIES																
CDC OSPREY (bu/A)	35	60	86	120	70	220	12.4									
CDC OSPREY	100	100	100	100	100	0	0.0	63	32	86	VG	G	G	F	VP	P
AC Bellatrix	110	103	103	103	104	+2	+0.3	64	36	85	F	G	G	VG	F	P
AC Readymade	99	95	96	XX	96	+5	+1.8	64	37	87	P	EX	F	VG	P	–
AC Tempest	100	96	100	XX	98	+5	+1.5	64	37	85	P	EX	G	VG	P	–
CDC Buteo	101	96	97	XX	98	+1	0.0	65	34	85	VG	F	G	–	VP	P
McClintock ♳	88	101	93	XX	96	+3	-0.6	65	32	87	P	VG	G	–	VP	P
Norstar	103	96	92	88	95	+2	-0.2	64	33	104	VG	VP	G	G	VP	F
Radiant ▲	105	101	106	XX	103	+2	-0.2	64	37	86	VG	VG	G	G	P	P
OTHER CWRW VARIETIES																
CDC CLAIR	104	103	104	108	104	+1	-0.4	63	34	85	VG	F	G	F	VP	P
CDC Falcon	89	103	101	106	100	-2	-0.3	63	31	72	F	VG	G	F	VP	VP
CDC Harrier	111	107	110	106	109	+1	-1.3	62	31	90	VG	G	G	F	VP	P
CDC Kestrel	106	104	103	103	104	+1	-1.4	63	32	89	VG	F	G	P	VP	P
CDC Raptor	97	103	102	XX	102	0	-0.6	64	30	79	VG	VG	G	–	VP	P

REMARKS: Winter wheat can be grown successfully in all areas of Alberta if seeded into standing stubble within the optimal seeding date period (generally before September 15) and if there is adequate snowfall. Yield figures are from trials with good winter survival. Productivity divisions are based on individual small plot trial yields: Low = under 45 bu/A; Medium = 45 to 75 bu/A; High = 75 to 105 bu/A; V. High = over 105 bu/A. Note that small plot yields are often 10-15% higher than field scale results. All comparisons are relative to CDC OSPREY, the current standard check variety. The provincial average maturity date for CDC OSPREY is August 8 (220 days after January 1). Radiant has resistance to the wheat curl mite which carries Wheat Streak Mosaic Virus. AC Bellatrix has resistance to common bunt – varieties that have poor resistance to this disease should be treated with a systemic seed treatment. CDC Harrier has stem rust resistance; CDC Buteo, CDC Falcon, CDC Raptor, and McClintock have stem and leaf rust resistance. All winter wheat varieties are susceptible to stripe rust. Fields in southern Alberta should be inspected in the fall for infestation by Russian wheat aphid, as it may reduce winter survival. Winter wheat will normally escape Fusarium head blight infection if seeded before September 15. CWRW Select varieties receive price and protein premiums under a CWB Identity Preserved program. For further details see http://www.cwb.ca.

See page 17 for symbols used.

FALL RYE

Variety	Area (see map) 1	2	3	4	5&6	All Data	Rel. Mat.	Te. Wt.	Kn. Wt.	Ht.	Winter Survival	Resistance to: Ldg.	Shat.	Ergot	Stem Smut
	Yield as % of Prima						days	lb/bu	g/1000	cm					
Prima	100	100	100	100	100	100	214	58	33	119	EX	F	F	G	G
AC Remington	116*	105	XX	92*	XX	104	0	57	30	96	EX	EX	VG	G	–
AC Rifle	114	100	XX	92	95	99	0	57	30	87	EX	EX	VG	G	G
Musketeer	87	89	XX	96	95	91	+1	56	33	120	EX	G	F	F	G

REMARKS: The provincial average maturity date for Prima is August 2 (214 days after January 1). AC Rifle and AC Remington are semi-dwarf varieties.

FALL RYE (new yield class table)

Variety	Test Yield Category Low	Med	High	V. High	All Data	Rel. Mat.	Te. Wt.	Kn. Wt.	Ht.	Winter Survival	Resistance to: Ldg.	Shat.	Ergot	Stem Smut
	Yield as % of Prima					days	lb/bu	g/1000	cm					
Prima	100	100	100	100	100	214	58	33	119	EX	F	F	G	G
AC Remington	120	100*	99*	90*	104	0	57	30	96	EX	EX	VG	G	–
AC Rifle	114	101	93	88	99	0	57	30	87	EX	EX	VG	G	G
Musketeer	88	92	93	93*	91	+1	56	33	120	EX	G	F	F	G

REMARKS: Productivity divisions are based on individual small plot trial yields: Low = under 48 bu/A; Medium = 48 to 80 bu/A; High = 80 to 112 bu/A; V. High = over 112 bu/A. The provincial average maturity date for Prima is August 2 (214 days after January 1). AC Rifle and AC Remington are semi-dwarf varieties.

FLAX

Variety	Area (see map) 1	2	3	4	5&6	Irr.	Overall Average	Comp. Mat.	Ht.	Seed Size	Resistance to: Ldg.	Rust
	Yield as % of Norlin							days	cm			
NorLin	100	100	100	100	100	100	100	114	58	M	G	R
CDC Arras	116*	104*	XX	105*	86	105*	102	0	59	L	F	R
CDC Bethune ♳	115	102	102*	111	107	112	108	2	56	M	G	R
CDC Normandy	101	98	97*	105	107	110	104	0	58	M	F	R
CDC Sorrel	122*	102*	XX	91*	105*	XX	103	3	56	L	G	R
CDC Valour	103	94	XX	106*	91	103*	97	0	59	M	F	R
Flanders	116	114	87*	100	107	113	109	2	57	S	G	R
Hanley ♳	127*	96*	XX	105*	94*	113*	103	3	50	M	G	R
Macbeth ♳	XX	102*	83*	97*	95	110*	95	4	53	M	G	R
Taurus ♳	104*	102	98*	105*	107	103*	104	2	53	M	G	R
						SOLIN						
1084 ♳	112	103	XX	101	106	98*	104	2	57	S	G	R
2047 ♳	94*	91*	91*	90	88	107*	91	4	51	M	EX	R
2090 ▲	88*	110*	85*	95	99	110*	98	5	51	L	G	R
2126 ▲	XX	XX	XX	98*	97*	103*	99*	8	49	L	G	R
2149 ▲	90*	92*	XX	98*	96*	XX	95	8	57	L	G	R

REMARKS: Solin refers to edible oil flax varieties. Linola is the registered trademark of Agricore United solin varieties. Solin varieties are available only through identity preserved contracts. Flax is daylight sensitive and maturity will vary by the zone it is grown in.

See page 17 for symbols used.

SPRING TRITICALE

Variety	Area (see map) 1	2	3	4	5&6	Irr.	Comp. Mat.	Te. Wt.	Kn. Wt.	Ht.	Resistance to: Ldg.	Shat.	Loose Smut	Bunt	Com. Rt. Rot	Sprout Toler.	FHB
							days	lb/bu	g/1000	cm							
	Yield as % of Pronghorn																
Pronghorn	100	100	100	100	100	100	115	55	44	100	G	G	R	R	I	F	F+
AC Alta	106	104	103	93	100	106	5	53	50	90	G	G	R	R	I	F	XX
AC Ultima	108	94	108	101	97	108	0	56	46	96	G	G	R	R	I	F	F
Companion	111	83	92	92	97	112	XX	53	52	115	XX	XX	R	R	XX	XX	XX

SPRING TRITICALE (new yield class table)

Variety	Test Yield Category Low	Med	High	V. High	Comp. Mat.	Te. Wt.	Kn. Wt.	Ht.	Resistance to: Ldg.	Shat.	Loose Smut	Bunt	Com. Rt. Rot	Sprout Toler.	FHB
	Yield as % of Pronghorn				days	lb/bu	g/1000	cm							
Pronghorn	100	100	100	100	115	55	44	100	G	G	R	R	I	F	F+
AC Alta	101	103	102	98	5	53	50	90	G	G	R	R	I	F	XX
AC Ultima	109	100	113	98	0	56	46	96	G	G	R	R	I	F	F
Companion	114	94	xx	89	XX	53	52	115	XX	XX	R	R	XX	XX	XX

REMARKS: AC Alta, AC Ultima and Pronghorn are dual purpose (grain and forage) varieties. All varieties are late maturing compared to CWRS wheat (approximately 10 days later). Pronghorn and AC Ultima are earlier maturing than other spring triticale varieties. Pronghorn yields about 30% greater than AC Barrie CWRS wheat in areas of adaptation. Large seeded varieties should have an increased seeding rate. Companion is a forage type-seed supply limited in 2006. Triticale susceptibility to FHB is similar to wheat.

Test yield categories: Low = <50 bu/acre; Med = 50-80 bu/acre; High = 80-100 bu/acre; and Very High = >100 bu/acre.

OTHER CEREAL CROPS

SPRING RYE: Gazelle and Rogo are the only available spring rye varieties and have similar maturity to spring wheat.

WINTER TRITICALE: Pika – a tall dual purpose (grain and forage) winter triticale variety with winter hardiness similar to the most hardy winter wheat. Bobcat ♻, a beardless dual purpose winter triticale, shorter in stature than Pika, is best adapted to higher snowfall areas and is easy threshing. Fridge is a forage type winter triticale. Winter triticale matures approximately three weeks earlier than spring triticale.

SPRING SPELTS: CDC Nexon is the only registered variety developed for production in Western Canada.

See page 17 for symbols used.

BARLEY

Variety	Area (see map) 1	2	3	4	5&6	Irr.	No. of Row	Awn Type	Comp. Mat.	Te. Wt.	Kn. Wt.	Ht.	Resistance to: Ldg.	Loose Smut	FL & Cov. Smut	Com. Rt. Rot	Scald	Net Blt.	Toler. FHB
	Yield as % of Harrington								days	lb/bu	g/1000	cm							
GENERAL PURPOSE																			
CDC Dolly	102	112	112	112	107	104	2	R	1	53	49	75	F	S	R	I	I	S	F
CDC Helgason ♳	96	111	119	115	117	104	2	R	-1	52	46	76	G	R	R	I	S	I	P
CDC Trey ♳	107*	118	120	117	110	116	2	R	-1	51	52	79	G	I	R	R	I	I	F
McLeod ♳	123*	128	117	122	115	120	2	R	1	50	49	75	G	S	R	I	S	I	P
Niobe ♳	101	122	125	118	109	111	2	R	-1	50	46	76	G	I	R	I	I	I	P
Ponoka ▲	112*	127	120	122	128	120	2	R	2	50	48	80	G	R	R	I	I	I	F
Rivers ♳	102	117	122	111	111	109	2	R	0	49	49	74	G	R	R	R	S	R	F
Seebe	99	107	115	110	112	99	2	R	5	52	50	86	G	S	R	S	R	S	G
XENA ♳	107	125	131	124	121	121	2	SS	2	52	50	79	G	S	I	R	S	S	F
AC Harper ♳	106	110	121	122	109	111	6	SS	0	48	40	80	G	S	I	I	I	I	P
AC Lacombe ♳	110	113	123	124	111	111	6	S	-1	48	42	85	G	S	R	S	I	I	VP
AC Ranger	XX	112	128	115	115	116	6	S	1	49	43	75	F	XX	XX	XX	S	I	VP
AC Rosser ♳	115	113	123	123	116	121	6	S	1	48	41	82	F	S	R	I	S	I	VP
Manny ▲	102*	126	124	131	120	126	6	R	0	47	40	87	G	I	R	S	R	I	P
Stander ♳ †	108	105	116	123	106	109	6	SS	1	51	40	85	G	S	S	I	S	S	VP
Trochu ♳	110	123	126	124	119	121	6	S	0	49	41	79	G	S	R	R	I	I	P
SEMI-DWARF																			
CDC Bold	110	106	124	113	119	107	2	R	0	53	48	73	G	S	R	I	I	S	VP
CDC THOMPSON †	90	92	98	101	95	96	2	R	-1	53	47	63	G	S	R	I	I	I	F
CDC EARL †	102	111	106	125	103	106	6	R	0	47	36	73	EX	S	R	I	S	I	VP
Kasota †	98	109	113	118	104	106	6	R	-4	49	36	72	EX	S	R	I	R	I	VP
Mahigan †	101	106	122	118	105	109	6	SS	-3	50	35	73	EX	S	R	I	R	I	VP
Vivar ♳	98	109	129	127	124	121	6	R	0	49	44	74	VG	I	R	R	I	I	VP
HULLESS																			
CDC McGwire ♳ †	95	112	112	110	100	100	2	R	2	61	40	79	EX	S	R	I	R	I	F
AC Bacon	92	100	109	107	93	92	6	S	0	57	37	85	F	S	I	I	I	S	G
Falcon ♳	78	89	96	84	81	86	6	S	-1	58	35	68	EX	S	R	I	I	I	VP
Tyto ♳	XX	98	94	106	88	94	6	S	0	55	39	73	EX	S	R	I	I	I	P

BARLEY (continued)

Variety	Area (see map) 1	2	3	4	5&6	Irr.	No. of Row	Awn Type	Comp. Mat.	Te. Wt.	Kn. Wt.	Ht.	Resistance to: Ldg.	Loose Smut	FL & Cov. Smut	Com. Rt. Rot	Scald	Net Blt.	Toler. FHB
	Yield as % of Harrington								days	lb/bu	g/1000	cm							
MALTING																			
Harrington	100	100	100	100	100	100	2	R	98	50	44	78	F	S	S	I	S	S	G
AC Bountiful †	103	104	119	113	114	100	2	R	1	52	47	86	G	R	R	I	S	I	F
AC Metcalfe ♻	100	107	114	110	109	102	2	R	1	52	46	82	F	R	I	I	S	I	F
Calder ♻	109*	125	123	116	111	116	2	R	0	49	50	78	F	R	R	I	S	I	F
CDC Copeland ♻	101	110	120	113	116	114	2	R	1	50	48	83	F	S	I	I	S	I	F
CDC Kendall ♻	97	102	113	109	105	101	2	R	-1	52	45	78	F	S	S	I	S	I	F
CDC Select ♻	104	110	122	116	115	103	2	R	1	50	45	75	F	R	I	I	S	I	VP
CDC STRATUS †	99	101	111	109	105	104	2	R	0	52	46	78	G	I	I	I	S	I	F
Merit ♻	108	114	117	113	122	113	2	R	4	50	45	78	F	S	R	I	S	I	F
Newdale ♻	103	105	117	107	115	102	2	R	0	52	46	72	F	S	R	R	S	I	F
CDC Battleford ♻	105*	125	118	124	114	120	6	S	0	49	41	82	G	S	R	R	S	I	VP
CDC Sisler †	104	108	112	114	107	106	6	S	-1	49	36	93	P	S	S	I	S	S	F
CDC Tisdale ♻ †	XX	117	121	122	109	121	6	S	-1	47	42	84	G	S	R	I	S	I	P
CDC YORKTON ♻ †	106	119	124	122	112	117	6	S	0	48	38	85	G	S	R	R	S	I	P
Excel	96	107	127	112	111	105	6	S	0	50	41	76	G	S	I	R	S	S	VP
Lacey ♻ †	XX	124*	117*	128*	106*	114*	6	SS	-1	49	41	78	G	I	R	R	S	I	VP
LEGACY ♻	101	112	120	116	111	112	6	SS	-1	49	39	81	G	I	R	R	S	I	P
Tradition ♻	110*	116	123	119	108	116	6	SS	-1	49	41	82	G	S	R	R	S	S	VP

REMARKS: Only systemic seed treatments will control loose smut in cultivars without resistance. Alberta now has races of the scald pathogen that are capable of attacking most of the varieties rated as resistant. Varieties with excellent straw strength respond to high levels of fertilizer with less lodging than other varieties. Numerical values for yield, maturity, test weight, kernel weight and height are strongly influenced by environmental conditions such as rainfall, soil fertility and temperature. Shattering is also strongly influenced by environmental conditions, but generally two rowed cultivars have good resistance, six rowed cultivars have fair resistance.The maturities are stated in days plus or minus the difference from Harrington. CDC Clyde (BT490), CONLON, Conrad, CDC Cowboy, and TR03661, insufficient data to describe. AC Ranger and CDC Cowboy are forage varieties. Calder, CDC Clyde, CDC Laurence, CDC Select, CDC Tisdale, CDC YORKTON, and Newdale – limited quantities being grown for market development and testing. CDC Laurenceand CDC Speedy – not being tested. For recommendations from the Canadian Malting Barley Technical Centre, see appended table.

See page 17 for symbols used.

BARLEY (new yield class table)

Variety	Test Yield Category Low	Med	High	V. High	No. of Row	Awn Type	Comp. Mat.	Te. Wt.	Kn. Wt.	Ht.	Resistance to: Ldg.	Loose Smut	FL & Cov. Smut	Com. Rt. Rot	Scald	Net Blt.	Toler. FHB
	Yield as % of Test Mean						days	lb/bu	g/1000	cm							
GENERAL PURPOSE																	
CDC Dolly	100	104	103	98	2	R	1	53	49	75	F	S	R	I	I	S	F
CDC Helgason ♻	99	99	101	104	2	R	-1	52	46	76	G	R	R	I	S	I	P
CDC Trey ♻	99	98	99	99	2	R	-1	51	52	79	G	I	R	R	I	I	F
McLeod ♻	104	104	104	103	2	R	1	50	49	75	G	S	R	I	S	I	P
Niobe ♻	101	99	103	101	2	R	-1	50	46	76	G	I	R	I	I	I	P
Ponoka ▲	96	108	108	105	2	R	2	50	48	80	G	R	R	I	I	I	F
Rivers ♻	100	101	99	105	2	R	0	49	49	74	G	R	R	R	S	R	F
Seebe	101	104	101	98	2	R	5	52	50	86	G	S	R	S	R	S	G
XENA ♻	107	111	110	111	2	SS	2	52	50	79	G	S	I	R	S	S	F
AC Harper ♻	99	100	105	101	6	SS	0	48	40	80	G	S	I	I	I	I	P
AC Lacombe ♻	105	104	106	103	6	S	-1	48	42	85	G	S	R	S	I	I	VP
AC Ranger	108	111	108	105	6	S	1	49	43	75	F	XX	XX	XX	S	I	VP
AC Rosser ♻	109	108	106	107	6	S	1	48	41	82	F	S	R	I	S	I	VP
Manny ▲	104	108	107	113	6	R	0	47	40	87	G	I	R	S	R	I	P
Stander ♻ †	101	100	104	102	6	SS	1	51	40	85	G	S	S	I	S	S	VP
Trochu ♻	106	108	108	115	6	S	0	49	41	79	G	S	R	R	I	I	P
SEMI-DWARF																	
CDC Bold	109	104	106	106	2	R	0	53	48	73	G	S	R	I	I	S	VP
CDC THOMPSON †	83	91	96	90*	2	R	-1	53	47	63	G	S	R	I	I	I	F
CDC EARL †	99	100	103	103	6	R	0	47	36	73	EX	S	R	I	S	I	VP
Kasota †	95	98	99	101	6	R	-4	49	36	72	EX	S	R	I	R	I	VP
Mahigan †	93	99	102	104	6	SS	-3	50	35	73	EX	S	R	I	R	I	VP
Vivar ♻	107	110	108	115	6	R	0	49	44	74	VG	I	R	R	I	I	VP
HULLESS																	
CDC McGwire ♻ †	111	105	99	106*	2	R	2	61	40	79	EX	S	R	I	R	I	F
AC Bacon	106	103	108	XX	6	S	0	57	37	85	F	S	I	I	I	S	G
Falcon ♻	85	89	91	89	6	S	-1	58	35	68	EX	S	R	I	I	I	VP
Tyto ♻	89	86	85	93	6	S	0	55	39	73	EX	S	R	I	I	I	P

BARLEY (new yield class table) (continued)

Variety	Test Yield Category Low	Med	High	V. High	No. of Row	Awn Type	Comp. Mat.	Te. Wt.	Kn. Wt.	Ht.	Resistance to: Ldg.	Loose Smut	FL & Cov. Smut	Com. Rt. Rot	Scald	Net Blt.	Toler. FHB
	Yield as % of Test Mean						days	lb/bu	g/1000	cm							
MALTING																	
Harrington	98	96	93	90	2	R	98	50	44	78	F	S	S	I	S	S	G
AC Bountiful †	106	103	105	113*	2	R	1	52	47	86	G	R	R	I	S	I	F
AC Metcalfe ♻	102	102	101	100	2	R	1	52	46	82	F	R	I	I	S	I	F
Calder ♻	101	101	100	101	2	R	0	49	50	78	F	R	R	I	S	I	F
CDC Copeland ♻	101	103	103	102	2	R	1	50	48	83	F	S	I	I	S	I	F
CDC Kendall ♻	97	100	98	96	2	R	-1	52	45	78	F	S	S	I	S	I	F
CDC Select ♻	98	99	99	99	2	R	1	50	45	75	F	R	I	I	S	I	VP
CDC STRATUS †	101	104	102	95	2	R	0	52	46	78	G	I	I	I	S	I	F
Merit ♻	106	107	107	103	2	R	4	50	45	78	F	S	R	I	S	I	F
Newdale ♻	106	103	104	103*	2	R	0	52	46	72	F	S	R	R	S	I	F
CDC Battleford ♻	101	104	104	104	6	S	0	49	41	82	G	S	R	R	S	I	VP
CDC Sisler †	101	98	98	99	6	S	-1	49	36	93	P	S	S	I	S	S	F
CDC Tisdale ♻ †	100	104	104	101	6	S	-1	47	42	84	G	S	R	I	S	I	P
CDC YORKTON ♻ †	99	101	104	98	6	S	0	48	38	85	G	S	R	R	S	I	P
Excel	102	100	99	99*	6	S	0	50	41	76	G	S	I	R	S	S	VP
Lacey ♻ †	102	103	105	95	6	SS	-1	49	41	78	G	I	R	R	S	I	VP
LEGACY ♻	98	100	99	93	6	SS	-1	49	39	81	G	I	R	R	S	I	P
Tradition ♻	99	99	101	94	6	SS	-1	49	41	82	G	S	R	R	S	S	VP

REMARKS: Only systemic seed treatments will control loose smut in cultivars without resistance. Alberta now has races of the scald pathogen that are capable of attacking most of the varieties rated as resistant. Varieties with excellent straw strength respond to high levels of fertilizer with less lodging than other varieties. Numerical values for yield, maturity, test weight, kernel weight and height are strongly influenced by environmental conditions such as rainfall, soil fertility and temperature. Shattering is also strongly influenced by environmental conditions, but generally two rowed cultivars have good resistance, six rowed cultivars have fair resistance.The maturities are stated in days plus or minus the difference from Harrington. CDC Clyde (BT490), CONLON, Conrad, CDC Cowboy, and TR03661, insufficient data to describe. AC Ranger and CDC Cowboy are forage varieties. Calder, CDC Clyde, CDC Laurence, CDC Select, CDC Tisdale, CDC YORKTON, and Newdale – limited quantities being grown for market development and testing. CDC Laurence and CDC Speedy – not being tested. For recommendations from the Canadian Malting Barley Technical Centre, see appended table.

See page 17 for symbols used.

OATS

Variety	Area (see map) 1	2	3	4	5&6	Comp. Mat.	Te. Wt.	Kn. Wt.	Resistance to: Ldg.	Smuts
	Yield as % of Cascade					days	lb/bu	g/1000		
MILLING										
AC Assiniboia ♻	98	95	94	92	92	1	38	41	G	R
AC Juniper	98	114	101	101	99	-1	41	39	VG	I
AC Morgan	107	115	114	104	106	2	40	41	VG	R
AC Rebel †	102	102	99	96	99	3	40	35	G	R
Calibre	108	109	88	100*	100	1	43	39	F	S
CDC Boyer	97	110	99	98	97	1	39	42	G	S
CDC Dancer ♻	83	106	105	93	97	-2	41	37	G	R
CDC Orrin ♻	XX	XX	112	104	105	2	41	42	G	R
CDC Pacer	106	108	104	102	103	1	40	40	F	I
CDC Sol-Fi ▲	XX	XX	79*	96*	77	0	41	40	F	R
CDC Weaver ▲	XX	XX	117*	106*	90	4	41	48	F	R
Derby	102	100	94	96	96	2	41	39	G	S
Furlong ♻	XX	XX	100	101	91	2	40	49	G	R
Kaufmann ♻	79*	93	85	85	92*	5	40	44	G	R
Leggett ▲	XX	102	89	101	91	4	41	41	G	R
Pinnacle ♻	106	117*	106	89	101	5	40	38	F	R
Ronald ♻	89*	98*	91	92	94	2	41	37	VG	R
SW Betania ▲	XX	XX	111*	107*	94	-1	42	43	G	R
FEED										
Cascade	100	100	100	100	100	0	39	37	G	S
AC Mustang	109	111	109	112	108	1	42	38	G	I
Lu	XX	XX	103	108	96	-3	41	40	G	R
SW EXACTOR ♻	101	121	102	93	103	2	39	37	VG	I
Waldern	105*	105*	119*	109*	109	1	40	48	G	S
FORAGE										
CDC Baler	XX	87*	110	99	100	4	40	44	XX	S
Murphy ♻	XX	93*	74	95	94	2	39	39	XX	S
HULLESS										
AC Belmont	81	77	72	71	80	4	42	30	G	R
AC Gwen	55*	78*	73	66	78	5	44	38	VG	R
Boudrias ♻	78*	XX	90*	75*	88	4	41	34	VG	R
Bullion ▲	64	75*	67	68	71	0	50	31	VG	S
Lee Williams	XX	XX	92*	87	78	5	40	35	G	R

REMARKS: Oat yields for hulless varieties are expressed on "as harvested" basis. Hull removal reduces weight of hulless oats by 5-10% and of completely hulled oats by 20-25%. Use higher seeding rate for large seeded varieties. AC Assiniboia and AC Rebel have tan hulls.

See page 17 for symbols used.

OATS (new yield class table)

Variety	Test Yield Category				Comp. Mat.	Te. Wt.	Kn. Wt.	Resistance to: Ldg.	Smuts
	Low	Med	High	V. High	Yield as % of Test Mean	days	lb/bu	g/1000		
MILLING									
AC Assiniboia ♻	104	96	95	93	1	38	41	G	R
AC Juniper	107	103	106	107	-1	41	39	VG	I
AC Morgan	110	112	112	114	2	40	41	VG	R
AC Rebel †	105	102	102	101	3	40	35	G	R
Calibre	XX	107	103	110*	1	43	39	F	S
CDC Boyer	103	102	102	102	1	39	42	G	S
CDC Dancer ♻	102	102	102	103	-2	41	37	G	R
CDC Orrin ♻	109	109	107	101	2	41	42	G	R
CDC Pacer	109	106	108	109	1	40	40	F	I
CDC Sol-Fi ▲	XX	86	84	XX	0	41	40	F	R
CDC Weaver ▲	XX	107	101	XX	4	41	48	F	R
Derby	100	103	99	102	2	41	39	G	S
Furlong ♻	100*	100	97	XX	2	40	49	G	R
Kaufmann ♻	95	99	97	93	1	42	44	G	R
Leggett ▲	98*	95	97	XX	5	40	44	G	R
Pinnacle ♻	105	105	109	107	5	40	38	F	R
Ronald ♻	99	93	99	101	2	41	37	VG	R
SW Betania ▲	XX	107	104	XX	-1	42	43	G	R
FEED									
Cascade	104	105	104	103	0	39	37	G	S
AC Mustang	120	113	112	115	1	42	38	G	I
Lu	104	100	101	107	-3	41	40	G	R
SW EXACTOR ♻	99	109	109	111	2	39	37	VG	I
Waldern	XX	108	112	118*	1	40	48	G	S
FORAGE									
CDC Baler	106	107	95	103	4	40	44	XX	S
Murphy ♻	92*	95	95	XX	2	39	39	XX	S
HULLESS									
AC Belmont	81	80	81	75	4	42	30	G	R
AC Gwen	66	85	84	80	5	44	38	VG	R
Boudrias ♻	87	98	91	85	4	41	34	VG	R
Bullion ▲	72	71	73	80	0	50	31	VG	S
Lee Williams	81	84*	81	87*	5	40	35	G	R

REMARKS: Oat yields for hulless varieties are expressed on "as harvested" basis. Hull removal reduces weight of hulless oats by 5-10% and of completely hulled oats by 20-25%. Use higher seeding rate for large seeded varieties. AC Assiniboia and AC Rebel have tan hulls.

Where test yield categories based on small plot data for hulled oats would be as follows:
Low = <90 bu/ac; Medium = 90 to 135 bu/ac; High = 135 to 180 bu/ac; and Very High = >180 bu/ac.
Yield per cents are based on test means for all varieties in the trial.

See page 17 for symbols used.

Symbols used:

† Denotes variety may not be described in 2007.

NS Denotes variety generally not suited for area.

XX Denotes insufficient test data to describe.

Ⓟ Denotes variety protected by Plant Breeder's Rights.

▲ Denotes protection under Plant Breeder's Rights has been applied for.

* Numerical yield data followed by a star (e.g. 101*) denotes limited data.

Abbreviations used:

Awn Type: R = Rough, S = Smooth, SS = Semi-smooth

Comp. Mat. = Comparative maturity in (+ or -) days from the check variety.

Comp Prot. = Comparative protein in (+ or -) per cent from the check variety.

Te. Wt. = Test Weight (lb/bu) pounds per bushel. Multiply lb/bu by 1.25 to get kilograms per hectoliter.

Kn. Wt. = Kernel weight (grams/1,000 kernels).

Ht. cm = Height in centimeters.

Seed Size: S = Small , M = Medium, M-L = Medium Large, L = Large.

Ldg. = Lodging; Shat. = Shattering: EX = Excellent, VG = Very Good, G = Good, F = Fair, P = Poor, VP = Very Poor.

Com. Rt. Rot = Common root rot; FL & Cov. Smut = False loose & covered smuts; Net Blt. = Net blotch: R = Resistant, I = Intermediate, S = Susceptible.

Sprout Toler. = Sprouting Tolerance: P = Poor, F = Fair, G = Good, Ex = Excellent.

Leaf Spot: VG = Very Good, G = Good, F = Fair, P = Poor, VP = Very Poor.

Toler. FHB = Fusarium Head Blight Tolerance: G = Good, F = Fair, P = Poor, VP = Very Poor, F+ = somewhat better than fair.

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University of Alberta

Prairie Canola variety trial (PCVT)

The PCVT system replaces provincial canola variety testing programs and will help standardize protocols across provinces and improve trial consistency and quality.

The canola seed industry, Alberta Agriculture, Food and Rural Development, Saskatchewan Agriculture, Food and Rural Revitalization, Manitoba Agriculture and Food (in-kind contribution), provincial canola commissions and the Canola Council of Canada each contributed to PCVT in 2005.

Trials were conducted by seed companies, government researchers and independent contractors in three growing zones across the prairies: short season, mid-season and long season. Two replicated tests were conducted at each site to group together varieties with similar maturity and to ensure that valid statistical comparisons could be made between varieties.

The yield and maturity results are summarized by three major maturity zones – **short** (roughly corresponds to Alberta agro-climatic Areas 4, 5 and 6), **mid** (Areas 2 and 3) and **long** (Area 1). The *Canola Digest* will print location-specific results in December, and the data will be posted on the Canola Council website.

Yield columns show variety yields relative to the yield of the check (46A65). **The zone yields, maturity, height and lodging data are one-year data (2005) only.** The average bu/acre yield of 46A65 for each zone is also shown in parentheses.

Variety trials are carefully conducted in a replicated design, so small percentage differences in yield are usually meaningless. **Check the LSD (Least Significant Difference) of the test. If the yield difference between two varieties is less than the LSD, the yields are not considered different.** The table includes information on height, resistance to lodging, blackleg resistance, varietal type (open-pollinated, hybrid, synthetic) and herbicide tolerance.

Canola quality *Brassica juncea* is a new class of canola that is adapted to the Brown and Dark Brown soil zones (Areas 1 and 2). This canola quality juncea has very good blackleg resistance and exhibits better heat and drought tolerance than Argentine or Polish canola. It has shattering resistance similar to Polish canola and is well suited to straight combining. All production is currently contracted. There is no Alberta performance data for the five varieties currently registered.

2005 PRAIRIE CANOLA VARIETY TRIAL

Variety	Type	Organization	Speciality Oil	Maturity Zone Short	Maturity Zone Mid	Maturity Zone Long	Maturity Zone Average	2005 Yield Short 10 St. Yr	2005 Yield Mid 13 St. Yr	2005 Yield Long 3 St. Yr	2005 Yield 2005 Average	Past Yield Av. 2004	Past Yield Av. 2003	Height	Lodging Rating	Blackleg Rating
				+/- days compared to 46A65				% of 46A65				% of 46A65		+/- inches	+ = "Better"	
46A65	OP	CHECK		0 (119)	0 (104)	0 (98)	0	100 (67)	100 (58)	100 (48)	100	100	100	0 (42.5)	0	R
CLEARFIELD																
Nex 824 CL	OP	Dow AgroSciences	✓		2	5	3		91	94	91	95		0	0	R
Nex 828 CL	OP	Dow AgroSciences	✓		2	2	2		97	90	96			4	1	R
Nex 830 CL	OP	Dow AgroSciences	✓		3	4	3		101	97	100	100		2	0	R
292CL ♳	OP	Monsanto Canada Inc.		1	1	-1	1	105	101	115	104			-1	0	R
71-20 CL	HYB	Monsanto Canada Inc.		-6	-2	-4	-4	102	105	105	104			0	0	R
45H72	HYB	Pioneer Hi-Bred		-2	0	-1	-1	109	114	111	112	112		3	0	R
46H70	HYB	Pioneer Hi-Bred		1	0	0	0	103	103	108	104	103		2	0	R
Manor s	OP	FarmPure Seeds		3	2	1	2	102	104	105	103	104		-1	0	MS
SP 442 CL	HYB	Sask Wheat Pool Inc.			-2		-2		99		99	95		0	0	MR
SP Deliver CL s	OP	Sask Wheat Pool Inc.		-1	-1		-1	89	89		89	87		-3	0	MR
LIBERTY LINK																
5020	HYB	Bayer CropScience		-5	-1	-4	-3	127	126	123	126	124	125	0	0	R
5030	HYB	Bayer CropScience		1	0	-2	0	127	131	130	129	128	126	5	1	R
5070	HYB	Bayer CropScience		1	0	0	0	124	130	131	128	128		4	0	R
ROUNDUP READY																
624RR	HYB	Brett-Young Seeds		1	0	-1	0	107	102	97	103			2	1	R
829RR	OP	Brett-Young Seeds		-2	-1	-2	-2	96	99	101	98			-2	0	R
1818	OP	Canterra Seeds Ltd.			0	0	0		107	122	110			-4	0	R
1839V ▲	OP	Canterra Seeds Ltd.		-7			-7	97			97			-7	1	MR
1841	OP	Canterra Seeds Ltd.			1	-1	0		114	120	115	110	113	2	1	R
1851H	HYB	Canterra Seeds Ltd.			-2		-2		111		111	101		-1	0	MR
1871RR	OP	Canterra Seeds Ltd.			1	1	1		107	103	106			2	0	MR
1896	HYB	Canterra Seeds Ltd.		-7	-3		-5	101	100		101			-2	0	R
IMC209RR	OP	Cargill Specialty Canola Oils	✓		2	2	2		98	93	97	89		1	0	MR
v1030	HYB	Cargill Specialty Canola Oils	✓	-4	-2	-1	-2	113	108	113	110			1	0	MR
v1031	HYB	Cargill Specialty Canola Oils	✓	-2	-1	-2	-1	113	109	100	110	106		2	0	MR
71-25 RR	HYB	Monsanto Canada Inc.		-4	-2		-3	106	105		106			0	0	R
71-45 RR	HYB	Monsanto Canada Inc.		-5	-3	-4	-4	116	110	108	112			-1	0	MR
71-85 RR	HYB	Monsanto Canada Inc.				-1	-1			109	109			2	0	R

2005 PRAIRIE CANOLA VARIETY TRIAL (continued)

Variety	Type	Organization	Speciality Oil	Maturity Zone Short	Maturity Zone Mid	Maturity Zone Long	Maturity Zone Average	2005 Yield Short 10 St. Yr	2005 Yield Mid 13 St. Yr	2005 Yield Long 3 St. Yr	2005 Yield Average	Past Yield Av. 2004	Past Yield Av. 2003	Height	Lodging Rating	Blackleg Rating
				+/- days compared to 46A65				% of 46A65				% of 46A65		+/- inches	+ = "Better"	
46A65	OP	CHECK		0 (119)	0 (104)	0 (98)	0	100 (67)	100 (58)	100 (48)	100	100	100	0 (42.5)	0	R
ROUNDUP READY (continued)																
43A56 ♳	OP	Pioneer Hi-Bred		-10	-6	-6	-7	98	89	81	91	94	96	-2	0	MR
45H21	HYB	Pioneer Hi-Bred		-4	-1	-2	-2	115	117	116	116	116	119	1	0	R
45H24	HYB	Pioneer Hi-Bred		-2	-1	-2	-1	120	112	115	115	116		2	0	R
45H25	HYB	Pioneer Hi-Bred		-4	-2	-3	-3	117	110	113	113			3	0	R
46H23	HYB	Pioneer Hi-Bred		0	0	0	0	106	101	105	104	109	111	0	0	R
9451	SYN	PROVEN SEED		-3	-1		-2	106	103		104	102		1	0	MR
9550	OP	PROVEN SEED		-3	-1	-1	-2	101	98	101	100	103	102	0	0	R
Reaper ▲	OP	FarmPure Seeds		3	1	1	2	96	98	115	99			1	0	R
SW GladiatoRR	SYN	FarmPure Seeds		-2	-1	-3	-2	102	102	96	101	101	109	0	0	MR
SP 451 RR	HYB	Sask Wheat Pool Inc.			-2	-3	-3		103	106	104	109		-1	0	MR
SP Banner ♳	OP	Sask Wheat Pool Inc.		0	-1	-2	-1	104	96	88	98	101	102	0	0	R
SP Craven ♳	OP	Sask Wheat Pool Inc.	✓		0		0		78		78	83	86	-4	-1	R
SP Desirable RR	SYN	Sask Wheat Pool Inc.		-2	-3	-3	-3	114	107	107	110	107		0	0	R
Fortune RR	OP	Secan		-2	-1		-2	97	94		95	93	96	0	0	R
821RR	HYB	Svalof Weibull		0	-1	-1	-1	109	102	110	106			2	0	MR
SW 3950	HYB	Svalof Weibull		-3	-1	-3	-2	108	111	101	108			1	0	MR
SW 6802	SYN	Svalof Weibull		-5	-3		-4	103	105		104	105		0	0	MR
Average LSD (5%)								12	15	17	14	14	12			

46A65 days to maturity, height or bu/ac are in parathenses

Canadian Malting Barley Technical Centre (CMBTC) recommended malting barley varieties 2006-2007

These recommendations are based on the varieties expected to be selected by grain and malting companies for both domestic and export markets from the 2006 harvest. Seeding decisions should be based on agronomic considerations and feedback from your grain company representative, local elevator operators and malting companies. This list is published on behalf of the members of the CMBTC and other companies that have provided their input. Varieties not listed are not recommended. **The varieties are listed in descending order to the amount selected in 2005/2006.**

RECOMMENDED TWO-ROW BARLEY VARIETIES

Variety	Domestic	Export	Market Outlook
AC Metcalfe [4]	Established	Established	Stable, high demand
CDC Copeland [4]	Established	Growing	Increasing demand
CDC Kendall [1,5]	Established	Growing	Increasing demand
Harrington [4]	Established	Established	Stable demand
Merit [1,2,3,5]	Established	Limited	Low demand
Stein,	Limited	Limited	Low demand

Newdale (TR258), Calder (TR262), and CDC Select (TR153) are not yet being grown for the commercial market. Production is limited to quantities required for testing and market development.

RECOMMENDED SIX-ROW BARLEY VARIETIES

Variety	Domestic	Export	Market Outlook
CDC Battleford [4]	Limited	No market	Increasing demand
Excel	Established	Established	Declining demand
Legacy [1,2,3,5]	Growing	Growing	Increasing demand
Robust	No market	Limited	Declining demand
Tradition [1,2,3]	Limited	Growing	Increasing demand

CDC Tisdale (BT462), CDC Springside (BT478), CDC Clyde (BT490) and CDC Laurence (BT494) are not yet being grown for the commercial market. Production is limited to quantities required for testing and market development.

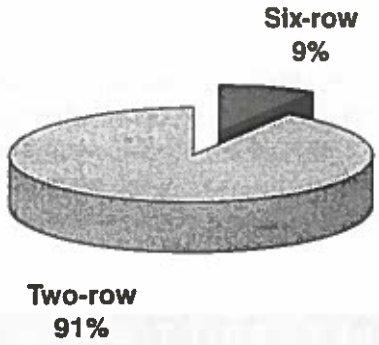
"Domestic" as used in this publication means barley selected for domestic processing into malt to supply domestic brewers as well as for malt destined for export. "Export" is that malting barley designated for markets outside of Canada, including the US, shipped as unmalted grain.

The CMBTC recommends the use of Certified seed to ensure varietal purity and to increase opportunity for selection. The following companies have Pedigreed seed distribution rights for those varieties that are footnoted:

- 1 – (Agricore United)
- 2 – (BARI-Canada)
- 3 – (FPS)
- 4 – (SeCan)
- 5 – (SWP)

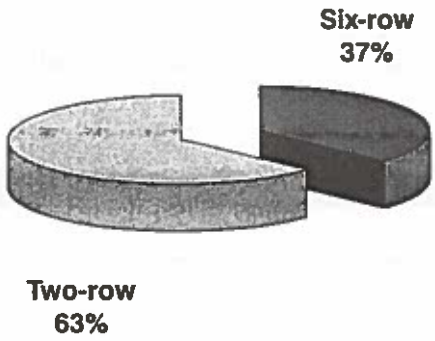
Varieties selected for domestic use (five-year average)

993,000 total tonnes delivered
(350,000 to domestic brewers)



Varieties selected for export (five-year average)

990,000 tonnes delivered



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Questions?

Call your selector, seed company, grain handling company, the Canadian Wheat Board, or contact the CMBTC at (204) 984-4399 (cmbtc@cmbtc.com).

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