

Varieties of Cereal and Oilseed Crops for Alberta – 2000

Explanatory

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

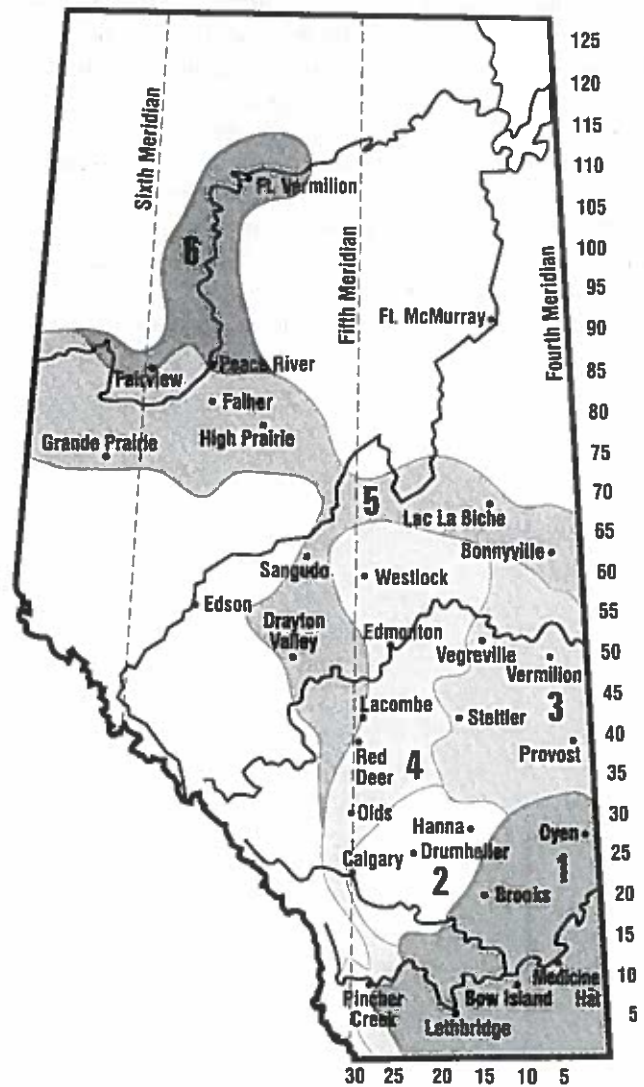
This publication provides information on individual varieties and indicates cereal and oilseed production areas within the province. Important agronomic characteristics are given in tabular form for varieties of wheat, oats, barley, flax, canola, triticale and rye. The production areas, based primarily upon precipitation and length of growing season, are indicated on the map. With this information, farmers can choose varieties that may be best suited to their own particular farming programs. The varieties are tested under medium management conditions and may change their response if tested under very high or very low management.

Plant Breeder's Rights

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

Yields

The tables show relative yields for six production areas. Although every effort is made to ensure accuracy, small percentage differences in yield are usually meaningless. In Area 1, irrigated yields expressed as a per cent of dryland yields are C.W. wheat 185, barley 160, oats 180, flax 210, canola 125. In Area 2, irrigated yields expressed as a per cent of dryland yields are C.W. wheat 130, barley 125, oats 120, flax 145, canola 120. For



further information on irrigated on variety response, see *Irrigated Crop Recommendations for Alberta*, Agdex 100/32-1.

Maturity

The relative classifications refer specifically to the crop being considered. For example, an early-maturing wheat variety could require more days to reach maturity than a late-maturing variety of barley. In Areas 2, 3 and 5 of Alberta, the following may be used as a guide for estimating maturity in actual days from seeding to harvest when the crops are seeded on fallow land:

Katepwa wheat – 111 days, Park wheat – 105, Grizzly oat – 108, Jasper oat – 105, Leduc barley – 99, Harrington barley – 98, AC Albright barley – 90, McGregor flax – 130, Flanders flax – 120, Legacy canola – 105 and Reward canola – 90 days.

Note: These days to maturity do not match the days to maturity shown in the charts because they are the average of only three of the six provincial zones. In Area 6, the longer daylight hours usually reduce the number of days to maturity required. Area 4 has the longest requirement in the province for days to maturity with Harrington 101, Katepwa 113 and Legacy 108. In southern Alberta, Katepwa can be expected to mature in 100 to 105 days, and other crops are similarly earlier maturing. Comparisons among varieties within crops, however, tend to remain fairly uniform regardless of where the crops are grown.

Disease and seed treatment

- Treat rye and flax seed to control seedling blight. Treat cereal seed to control smuts. Treat canola seed to control flea beetles, seedling blight and the seedborne phase of virulent blackleg.
- Treated seed must not be fed to livestock, poultry or wildlife or be sold for feed. Refer to label for the maximum period for storing treated seed.
- Currently, Fusarium Head Blight, caused by *Fusarium graminearum*, is a minor problem in Alberta. However, this pathogen has been appearing with greater frequency and intensity in Eastern Saskatchewan and trace levels of *F. graminearum* have been found in Alberta, especially since the mid 1990's. Disease reaction data for barley is limited. Under severe epidemics, all cereal varieties will suffer damage.

W H E A T

Variety	Irr.	Area(See Map)						Comp		Te.	Kn.	Resistance to:				Tolerance					
		1&2	1	2	3	4	5	6	Mat.			Prot.	Wt.	Wt.	Ldg.	Shat.	Loose		Com.	Sprout	FHB
																	Rt.	Rot			
		Yield as % of Katepwa						Eligible for C.W. Red Spring Wheat Grades													
Katepwa	100	100	100	100	100	100	100	106	14.1	61	33	G	G	R	R	I	F	F			
AC Abbey ▲	109*	102*	103*	104*	NS	NS	NS	-2	-0.6	62	34	G	G	I	R	I	P	P			
AC Barrie △	101	101	103	107	100	97	115	3	0.6	62	36	G	G	R	R	I	G	F			
AC Cadillac △	94	100	101	102	96	90	106	0	0.8	64	38	G	G	R	R	I	F	F*			
AC Cora	98	101	102	106	102	103	100	1	0.3	61	35	G	G	R	R	I	F	F			
AC Domain †	95	96	98	96	96	93	91	-1	0.9	62	36	G	G	R	R	I	EX	P			
AC Eatonia △	89	94	98	97	NS	NS	NS	3	0.5	62	34	F	G	I	R	I	G	XX			
AC Elsa △	93	105	109	107	102	103	110	2	0.3	61	34	G	G	R	I	I	F	P			
AC Intrepid ▲	103	103	106	108	107	106	107	-1	0.1	62	38	G	G	I	R	I	P	P			
AC Majestic ▲	93	98	100	103	101	103	100	3	0.3	61	35	G	G	I	R	I	F	F			
AC Michael	99	98	98	102	99	100	102	1	0.0	61	33	G	G	R	R	I	F	XX			
AC Splendor	96	94	95	101	97	95	97	-2	1.0	61	37	G	G	S	I	I	F	P			
CDC Teal	104	105	105	100	102	102	103	-1	0.4	60	34	G	G	I	I	I	P	VP			
Columbus †	95	101	94	103	101	105	102	4	0.2	61	34	G	G	I	R	I	EX	P			
Invader △ †	96	99	98	103	104	99	100	3	0.6	60	38	G	F	I	I	I	F	P			
Laura †	99	103	102	102	102	103	105	3	0.0	60	33	G	G	I	S	I	F	XX			
Leader †	90	99	92	96	NS	NS	NS	1	XX	61	31	G	G	I	R	S	F	XX			
McKenzie ▲	116	106	104	113	103	102	101	-1	-0.4	63	33	G	G	S	R	I	EX	F			
Park †	NS	NS	99	95	99	96	94	-3	XX	61	32	F	G	R	I	I	G	XX			
Prodigy ▲	97*	106*	105*	111*	101*	103*	102*	2	0.9	64	34	G	G	I	R	I	F	P			
Roblin	100	93	97	97	97	95	97	-3	0.7	60	35	G	G	R	S	I	F	VP			

Remarks: AC ABBEY, AC EATONIA and LEADER – adapted to sawfly areas only. MCKENZIE, AC SPLENDOR, LAURA and ROBLIN – require a systemic fungicide seed treatment. ALIKAT AND 5600 HR – insufficient data to describe, seed supply limited in 2000. C.W. Red Spring Wheat grown under irrigation tends to have lower grades. ALIKAT – special adaptation to acid soils.

Variety	Yield as % of AC Taber						ELIGIBLE FOR CANADA PRAIRIE SPRING WHEAT GRADES											
	1&2	1	2	3	4	5	6	Mat.	Prot.	Wt.	Wt.	Ldg.	Shat.	Loose		Com.	Sprout	FHB
														Rt.	Rot			
	Yield as % of AC Taber						RED SEEDED											
AC Taber	100	100	100	100	100	100	100	112		60	41	G	G	S	R	I	P	VP
AC Crystal △	102	97	98	99	101	98	97	-1		61	42	G	G	I	R	S	P	VP
AC Foremost	101	98	93	98	105	97	98	-3		60	42	EX	G	R	R	I	F	VP
Cutler	82	85	88	78	92	88	77	-10		60	39	G	G	S	S	I	F	VP
Oslo †	84	86	84	79	103	90	77	-7		58	37	EX	G	S	I	I	F	VP
	Yield as % of AC Taber						WHITE SEEDED											
AC Karma △	100	96	97	103	106	100	98	-1		60	39	G	G	I	R	I	P	P
AC Vista △	98	94	99	96	95	99	98	-2		61	43	G	G	I	R	I	F	VP

Remarks: AC CRYSTAL, AC TABER, CUTLER and OSLO require a systemic fungicide treatment. OSLO and CUTLER – less drought tolerant than other CPS wheats. AC VISTA has superior sprouting resistance to other white seeded CPS wheats. AC TABER yields 20 % higher than KATEPWA.

Variety	Yield as % of Katepwa (CWRS Wheat)						ELIGIBLE FOR C.W. EXTRA STRONG GRADES											
	1&2	1	2	3	4	5	6	Mat.	Prot.	Wt.	Wt.	Ldg.	Shat.	Loose		Com.	Sprout	FHB
														Rt.	Rot			
AC Corinne	86*	118*	107*	109*	106*	103*	108*	3		61	44	G	G	R	I	I	G	P*
Amazon ▲	91*	121*	107*	112*	105*	103*	103*	2		62	44	G	G	R	I	I	P	F*
Bluesky	101	111	108	106	110	108	102	1		61	45	F	G	R	I	R	P	XX
Glenlea	90	115	114	106	109	111	96	3		61	43	G	G	R	I	R	F	P
Laser	112	107	111	100	114	108	101	-1		60	40	EX	G	R	I	I	F	VP
Wildcat †	97	100	112	96	111	105	90	0		59	40	F	G	R	S	I	F	XX

Remarks: BLUESKY, LASER and WILDCAT – are comparable in maturity to KATEPWA. AC CORINNE, AMAZON, AC GLENAVON and GLENLEA – should only be grown in Areas 1, 2 and 3 due to late maturity. LASER and WILDCAT – require a systemic fungicide seed treatment. AC CORINNE, AC GLENAVON and AMAZON – seed supply limited in 2000.

AMBER DURUM WHEAT

Variety	Irr. 1&2	Area(See Map)						Comp Mat. Prot.	Te. Wt.	Kn. Wt.	Resistance to:						
		1	2	3	4	5	6				Loose		Com.		Tolerance		
											Ldg.	Shat.	Smut	Bunt	Rt. Rot	Sprout	FHB
Yield as % of Kyle										ELIGIBLE FOR C.W. AMBER DURUM WHEAT GRADES							
Kyle	100	100	100	100	NS	NS	NS	108	61	43	P	G	S	R	I	F	VP
AC Avonlea ◊	109	102	99	110	NS	NS	NS	-0	62	45	F	G	S	R	I	F	VP
AC Melita	108	98	88	100	NS	NS	NS	2	62	46	F	G	S	R	I	F	VP
AC Morse ▲	107	99	93	101	NS	NS	NS	0	62	44	G	G	S	R	I	F	VP
AC Navigator ◊	104*	105*	95*	113*	NS	NS	NS	0	63	45	G	G	S	R	S	F	XX
AC Pathfinder ◊	105*	106*	94	108*	NS	NS	NS	0	63	43	F	G	S	R	I	F	XX
Medora †	106	99	97	97	NS	NS	NS	0	63	43	F	G	I	R	I	F	VP
Plenty	107	105	106	114	NS	NS	NS	-1	62	43	F	G	S	R	I	F	VP
Sceptre	104	100	102	98	NS	NS	NS	0	62	41	G	G	S	R	I	P	VP
Wakooma †	97	95	99	100	NS	NS	NS	0	61	41	P	G	I	R	I	F	XX

Remarks: Durum Wheats should only be grown in Areas 1 and 2 and the southeastern portion of area 3 due to late maturity. Outside these areas, durumms are extremely late maturing and subject to quality loss. KYLE – yields about 12 % higher than KATEPWA in areas of best adaptation. SCEPTRE – lowest incidence of kernel smudge. AC NAVIGATOR AND AC PATHFINDER – grown under contract, stronger gluten.

Variety	Irr. 1&2	Area(See Map)						Comp Mat. Prot.	Te. Wt.	Kn. Wt.	Resistance to:						
		1	2	3	4	5	6				Loose		Com.		Tolerance		
											Ldg.	Shat.	Smut	Bunt	Rt. Rot	Sprout	FHB
Yield as % of AC Reed										ELIGIBLE FOR C.W. SOFT WHITE SPRING WHEAT GRADES							
AC Reed	100	NS	NS	NS	NS	NS	NS	105	61	35	EX	G	S	S	S	P	
AC Nanda	101	NS	NS	NS	NS	NS	NS	2	63	37	EX	G	R	R	S	P	
AC Phil	99	NS	NS	NS	NS	NS	NS	0	62	35	EX	G	S	S	S	P	
Fielder †	98	NS	NS	NS	NS	NS	NS	3	62	36	G	F	S	S	S	P	

Remarks: Current C.W.S.W.S.W. varieties are semi-dwarf and require a systemic fungicide seed treatment. AC NANDA, AC PHIL and AC REED – are resistant to stripe rust. AC NANDA and AC PHIL – have improved resistance to black point. AC REED – yields about 20 % higher than KATEPWA under irrigation.

WINTER WHEAT

Variety	Irr. 1&2	Area (See Map)						Comp Mat. Prot.	Te. Wt.	Kn. Wt.	Resistance to:						
		1	2	3	4	5	6				Loose		Com.		Tolerance		
											Ldg.	Shat.	Smut	Bunt	Rt. Rot	FHB	
Yield as % of Norstar										ELIGIBLE FOR C.W. RED WINTER WHEAT GRADES							
Norstar †	100	100	XX	XX	100	XX	XX	0	64	32	P	G	S	S	S	VP	
AC Bellatrix	XX	XX	XX	XX	117	XX	XX	-1	63	35	G	G	XX	R	XX	XX	
AC Readymade	103	110	XX	NS	NS	NS	NS	0	63	34	G	F	S	I	S	XX	
CDC Clair	XX	116	XX	XX	117	XX	XX	0	63	34	F	G	S	S	S	VP	
CDC Falcon	XX	XX	XX	XX	112	XX	XX	-2	62	31	VG	G	XX	S	XX	XX	
CDC Harrier	XX	XX	XX	XX	125	XX	XX	0	62	31	G	G	XX	S	XX	VP	
CDC Kestrel	124	117	XX	XX	119	XX	XX	-1	62	34	F	G	S	S	S	VP	
CDC Osprey	XX	111	XX	XX	111	XX	XX	0	63	34	G	F	S	S	S	VP	

Remarks: NORSTAR – most winter hardy, CDC CLAIR, CDC KESTREL and CDC OSPREY – equal in winter hardiness, AC READYMADE – least winter hardy. Winter survival is best in southern Alberta. AC READYMADE – has high protein; resistant to piebald. Winter wheats should be treated with a systemic fungicide seed treatment. AC TEMPEST – insufficient data to describe. Winter wheats are susceptible to Russian wheat aphids. CDC FALCON – limited seed available in 2000.

SPRING TRITICALE

Variety	Irr. 1&2	Area (See Map)						Comp Mat. Prot.	Te. Wt.	Kn. Wt.	Resistance to:				
		1	2	3	4	5	6				Loose		Com.		
											Ldg.	Shat.	Smut	Bunt	Rt. Rot
Yield as % of Wapiti										ELIGIBLE FOR C.W. RED WINTER WHEAT GRADES					
Wapiti †	100	100	100	100	100	NS	NS	116	53	44	G	G	R	R	I
AC Alta	103	98	101	106	106	NS	NS	3	54	48	G	G	R	R	S
AC Certa	98	99	92	102	104	NS	NS	-1	58	42	G	G	R	R	I
AC Copia	93	98	98	102	98	NS	NS	1	55	45	G	G	R	R	I
Pronghorn	99	102	100	107	114	NS	NS	-2	55	42	G	G	R	R	I

Remarks: All varieties are late maturing compared to CWRS wheats (approximately 10 days) and should not be grown for grain production in Areas 5 and 6. PRONGHORN – is earlier maturing than other spring triticale varieties. AC ULTIMA and SANDRO – insufficient data to describe. AC ULTIMA – no seed available in 2000. WAPITI – yields about 30 % greater than KATEPWA in areas of adaptation. Large seeded varieties should have an increased seeding rate.

BARLEY

Yield as % of Harrington

Resistance to:

Variety	Irr. 1&2	Area (See Map)					No. of Row	Awn Type	Comp Mat	Te. Wt.	Kn. Wt.	Hi. cm	Ldg.	Shat.	Loose Smut	Fl & Com.		Net Blt.	Tolerance FHB
		1	2	3	4	5										6	Rot		
Bridge †	109	105	106	105	109	101	98	R	2	53	46	75	G	F	S	I	I	S	XX
CDC Dolly	106	102	108	115	110	109	97	R	1	53	47	76	G	F	S	R	I	S	XX
CDC Fleet	99	87	94	96	99	89	95	R	-2	53	44	84	G	G	S	S	S	I	P
CDC Guardian †	100	101	106	104	105	101	99	R	1	50	43	79	F	F	S	R	I	S	XX
Seebe	93	98	101	107	108	106	106	R	4	52	47	87	VG	G	S	R	S	R	XX
AC Albright †	93	83	100	100	104	93	97	R	-6	50	33	84	P	F	S	S	S	S	XX
AC Harper Δ	112	107	102	118	123	105	115	S	1	48	39	84	VG	F	I	I	I	I	P
AC Lacombe Δ	115	108	117	120	126	110	115	S	0	48	41	85	VG	F	R	S	I	I	VP
AC Rosser Δ	114	117	107	118	121	112	122	S	1	49	40	86	F	P	S	I	I	I	VP
Brier †	118	108	117	122	125	111	110	S	0	48	39	83	F	F	S	I	I	I	XX
Bronco †	102	95	104	110	116	103	116	S	0	51	40	93	G	F	S	I	I	S	P
Duel †	114	97	114	117	128	102	105	S	-1	48	37	90	G	F	S	I	I	S	XX
Leduc †	113	104	111	113	117	102	104	R	-1	48	42	80	F	G	I	R	I	I	XX
Stander Δ †	109	110	105	114	120	102	117	S	1	51	40	84	VG	F	I	I	S	S	P

ELIGIBLE FOR GENERAL PURPOSE GRADES ONLY

SEMI-DWARF

CDC Earl †	114	102	115	111	118	103	107	R	0	47	36	72	EX	G	S	R	I	S	P
Duke †	111	97	114	110	116	99	102	R	2	48	38	74	EX	F	S	I	I	S	XX
Kasota Δ	113	103	112	113	118	111	101	R	-4	50	34	73	EX	G	S	R	I	R	XX
Mahigan Δ	115	103	110	114	122	107	106	S	-3	50	34	77	EX	G	S	R	I	R	XX
Stetson †	107	96	101	104	116	95	89	S	1	49	39	59	EX	G	S	R	I	I	XX
Tukwa †	119	102	104	121	116	107	109	S	-2	50	35	76	VG	G	S	R	I	I	XX

HULLLESS

CDC Dawn	95	95	99	97	90	90	94	R	2	58	38	83	F	G	S	S	I	S	F
CDC Freedom ▲	94*	90*	90*	93*	103*	86*	97*	R	0	59	40	91	G	G	S	R	I	S	XX
CDC Gainer	98	93	90	97	100	85	98	R	0	61	39	89	F	G	S	I	I	S	F
Phoenix Δ †	93	87	87	88	86	82	89	R	-1	58	36	83	F	G	S	I	I	S	XX
Tercel Δ	93	90	92	93	99	85	95	R	0	59	41	88	G	G	S	I	I	S	XX
AC Bacon	96*	98*	104*	114*	111*	91*	98*	S	1	56	37	89	G	F	S	R	I	I	XX
AC Hawkeye Δ	93	92	101	102	103	93	95	S	2	58	39	104	F	F	S	I	I	I	F
Falcon Δ	98	82	98	90	99	89	89	S	-1	58	34	68	EX	F	S	R	I	I	VP
Jaeger ▲	94	86	95	84	99	89	93	R	3	58	33	76	EX	G	S	S	I	I	XX

BARLEY

Variety	Irr. 1&2	Yield as % of Harrington						No. of Row	Awn Type	Comp Mat	Te. Wt.	Kn. Wt.	Ht. cm	Ldg.	Shat.	Loose Smut	Fl& Cov.		Com. Rt.	Scald	Net Bit.	Tolerance FHB
		1	2	3	4	5	6										Smut	Rot				
ELIGIBLE FOR MALTING GRADES																						
Harrington	100	100	100	100	100	100	2	R	98	51	42	78	F	F	S	S	I	S	S	S	P	
AC Bountiful (TR 243)	106	104	105	116	115	105	2	R	1	52	46	87	G	G	R	R	I	I	S	I	G	
AC Metcalfe Δ	103	99	101	109	109	107	2	R	1	52	44	84	G	G	R	R	I	I	S	I	G	
AC Oxbow †	100	96	99	98	104	98	2	R	0	52	44	83	VG	F	R	R	I	S	S	I	G	
B1215 †	102	104	104	105	109	98	2	R	2	52	41	75	VG	F	S	I	S	S	S	I	XX	
CDC Kendall Δ	104	97	100	102	104	99	2	R	-1	53	42	81	G	G	S	S	I	I	S	I	XX	
CDC Stratus	106	98	100	107	106	103	2	R	0	52	45	78	G	G	I	I	I	I	S	I	F	
CDC Unity (TR 139) ▲	107	103	104	111	111	109	2	R	2	51	45	88	G	G	S	I	I	I	S	I	XX	
Manley †	101	102	105	105	112	106	2	R	4	51	43	78	G	G	S	I	I	I	S	I	P	
Merit Δ	115*	104*	108*	119*	114*	111*	2	R	4	51	42	82	G	G	S	R	I	I	S	I	P	
Stein †	102	102	101	105	107	103	2	R	1	52	43	73	F	F	S	I	S	S	S	S	XX	
B1602	109	97	104	104	110	96	6	R	-1	50	37	86	G	F	S	I	R	S	S	S	XX	
CDC Sisler Δ	105*	104*	103*	110*	110*	102*	6	S	-1	50	35	97	G	F	S	S	I	R	S	S	G	
CDC Yorkton ▲	113*	108*	108*	114*	118*	106*	6	S	1	50	38	86	G	F	S	R	R	R	S	I	XX	
Foster Δ	110	107	106	106	117	98	6	R	0	50	40	88	G	F	S	XX	XX	XX	S	S	P	

Remarks: Only systemic seed treatment will control loose smut. Alberta now has races of the scald pathogen that are capable of attacking several of the varieties previously 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. The maturities are stated in days plus or minus the difference from HARRINGTON. CDC FREEDOM, CDC UNITY, CDC YORKTON - no seed available in 2000. AC BOUNTIFUL, CDC GAINER and MERIT - seed supply limited in 2000. CDC KENDALL - formerly named CDC LAGER. BT 435, CDC BOLD, CDC COPELAND, CDC MCGWIRE, CDC THOMPSON, HB 803, NISKA, PEREGRINE and XENA - insufficient data to describe. For recommendations from the Barley Industry Group, see enclosed table

O A T S

Variety	Irr. 1&2	Yield as % of Cascade						Comp Mat	Te. Wt.	Kn. Wt.	Resistance to:		
		1	2	3	4	5	6				Ldg.	Shat.	Smuts
Cascade	100	100	100	100	100	100	100	100	38	34	G	G	S
AC Assiniboia ◊	XX	99	95	91	93	91	96	1	37	39	G	G	R
AC Juniper ◊	107	96	107	97	98	103	99	-1	39	36	VG	G	I
AC Medallion ◊	XX	103	103	98	98	97	96	3	38	37	F	XX	R
AC Mustang ▲	113	113	109	107	111	112	114	1	40	35	G	G	I
AC Preakness ◊	99	107	105	95	100	104	97	3	38	36	F	G	R
AC Rebel ▲	XX	106	100	98	99	100	100	3	38	33	G	XX	R
Calibre	99	107	102	98	95	102	98	1	40	36	F	G	S
CDC Boyer	100	98	106	97	99	100	99	0	38	39	G	G	S
CDC Pacer	XX	108	105	104	105	103	102	2	39	38	F	G	I
Derby	107	105	104	100	97	101	98	1	40	37	G	G	S
Foothill	91	97	86	93	89	94	89	1	38	31	F	G	S
Grizzly †	99	94	95	94	94	91	94	1	40	36	F	G	S
Jasper	107	96	98	95	94	95	94	-2	40	35	F	G	S
Triple Crown ◊	XX	110	104*	103	105	101	103	3	38	36	G	XX	I
Waldern	109	109	110	108	107	114	111	1	37	43	G	G	S
HULLESS													
AC Belmont ◊	77	78	68	73	73	77	79	4	41	27	G	G	R
AC Ernie	XX	73	58*	72	70	70	79	1	44	31	F	XX	R

Remarks: AC ASSINIBOIA, AC JUNIPER, AC MEDALLION, AC PREAKNESS, CALIBRE, CDC PACER, CDC BOYER, DERBY, JASPER and TRIPLE CROWN – milling varieties. AC JUNIPER and JASPER – high protein. FOOTHILL – forage variety. AC MUSTANG – dual purpose (silage/grain) oat, high hull content. ELVY – insufficient data to describe. Yield for hullless varieties are expressed on "as harvested" basis. Hull removal reduces weight of hullless oats by 5 - 10 % and of completely hulled oats by 20 - 25 %. Use higher seeding rate for large seeded varieties.

F L A X

Variety	Irr. 1&2	Yield as % of Norlin						Comp Mat	Seed Size	Rust Resistance
		1	2	3	4	5	6			
Norlin	100	100	100	100	100	100	100	114	M	R
AC Camduff ◊	120*	105	108	XX	102*	104	XX	0	M	R
AC Emerson	101*	101	103	XX	XX	94	XX	1	M-L	R
AC Watson ▲	111	100	99	XX	104*	98	XX	0	M	R
CDC Arras ▲	XX	109*	99*	XX	XX	96*	XX	2	M	R
CDC Bethune	XX	112*	112*	XX	XX	91*	XX	2	M	R
CDC Normandy	110	102	104	XX	102	103	XX	0	M	R
CDC Valor ▲	XX	93*	91*	XX	XX	82*	XX	-1	M	R
Flanders	101	116	114	113	98*	108	102*	1	S	R
McGregor	104	121	108	118	100	111	99	3	S	R
Vimy †	99	108	101	96	90	104	108	2	M-L	R
SOLIN										
Linola 947 ◊ †	86	109	112	77*	100*	103	XX	4	S	R
Linola 989 ◊	103	106	101	XX	106	96	XX	1	M	R

Remarks: LINOLA 947 and LINOLA 989 are edible oil flax varieties and are categorized as 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.

O T H E R C E R E A L C R O P S

SPRING RYE – GAZELLE - only available spring variety and has similar maturity to KATEPWA spring wheat.

WINTER TRITICALE – BOBCAT, PIKA and WINTRI - winter hardiness similar to the most winter hardy winter wheats with 10 - 15 % higher yield. BOBCAT – is the only beardless triticale available and seed supply is limited in fall 2000. Winter triticale is about three weeks earlier in maturity than spring triticale.

SPRING SPELTS – CDC BAVARIA is the only registered variety developed for production in Western Canada.

FALL RYE

Variety	Irr. 1&2	Yield as % of Kodiak Area(See Map)						Comp Mat	Ta. Wt.	Kn. Wt.	Straw Strength
		1	2	3	4	5	6				
Kodiak †	XX	100	100	XX	100	XX	XX	0	55	33	F
Prima	XX	107	97	XX	99	XX	XX	-1	57	32	F
Musketeer	XX	98	98	XX	98	XX	XX	-2	58	34	F
AC Rifle	XX	124	107	XX	91	XX	XX	1	56	29	EX
Dakota	XX	130	118	XX	110	XX	XX	2	55	34	F

Remarks: Varieties listed with the most winter hardy at the top. AC RIFLE and AC REMINGTON are semi-dwarf varieties. AC REMINGTON – insufficient data to describe. DAKOTA – seed supply limited in 2000.

CANOLA

Variety	Irr. 1&2	Area (See Map)						Comp Mat	Height cm	Straw Strength	Comp Oil (%) Content	Blackleg Tolerance	Variety Type	
		1	2	3	4	5	6							
Yield as % of Legacy														
ARGENTINE TYPE Brassica napus														
Legacy ◊ †		100	100	100	100	100	100	106	114	G	44.1	3	OP	
1134 CA ▲		107*	109*	101*	96	93	96	XX	-1	107	G	1.5	2	OP
1174 CA ▲		118*	120*	106*	114	110	108	XX	1	118	G	1.7	3	OP
1492 CA		119*	123*	112*	116	117	110	XX	2	119	VG	0.0	3	HYB
Synbrid 220 ▲		102	102	115	101	106	100	XX	2	119	G	1.5	2	SYN
Option 500 ▲		98	97*	104*	108*	101	96	XX	2	115	G	1.5	2	OP
44A89 ◊ †		102	100*	101*	112*	105	96	123*	-2	103	VG	0.7	1	OP
46A65 ◊ †		95	96	106*	112	109	96	XX	1	106	G	1.5	1	OP
AC Excel †		89	88	106	96	92	87	107	0	115	G	0.9	3	OP
Agassiz		103	108*	107*	102	106	107	XX	4	131	G	0.6	2	OP
Ascent		XX	109*	XX	120*	99	103*	XX	1	119	VG	1.0	4	OP
Battleford ◊		96	100*	96*	107	101	94	106	1	112	G	0.7	2	OP
Clavet ◊		95	98	101*	100	101	94	XX	0	106	G	0.4	2	OP
Defender		87	89	94	101	97	96	93	0	116	G	0.7	2	OP
Eagle ▲ †		98	92	109*	99	97	97	XX	0	105	VG	0.1	2	OP
Foremost		XX	126*	XX	105*	106	102*	XX	3	119	VG	0.0	2	OP
Hi-Q		XX	120*	XX	111*	106	108*	XX	1	118	EX	1.1	1	OP
HL 99 ▲ †		92	92	99	108	98	95	83*	1	102	EX	-0.2	3	HYB
Hudson ▲		94	92	104	103	99	95	120*	-1	107	VG	-0.2	2	OP
Hy-Perstar 100		XX	XX	XX	109*	115	109*	XX	2	121	VG	1.0	3	HYB
Hyola 401		101	116	108	115	111	108	111*	1	104	EX	0.3	4	HYB
Impact ◊ †		99	XX	104*	102	95	97*	105*	0	113	G	-0.3	3	OP
Impulse ◊		95	107	104	102	107	103	103*	2	116	VG	-0.2	1	OP
LG 3220 ◊ †		97	100	113*	105	97	95	87*	-1	109	VG	0.7	2	OP
LG 3311 ▲		108*	112*	XX	106*	106	101*	XX	1	106	VG	0.0	1	OP
LG 3333 ◊		100*	127*	104*	97	104	99	XX	-1	111	VG	0.8	2	OP
LG 3366 ▲		XX	119*	XX	107*	103	101*	XX	3	113	VG	0.1	1	OP
LG 3369 ◊ †		98*	110*	108*	101	98	90	XX	1	118	VG	2.5	2	OP
Magellan		XX	118*	XX	111*	99	103*	XX	2	119	VG	-1.0	3	OP
Magnum ◊ †		99	96	103	99	100	91	77*	1	114	G	0.3	2	OP
OAC Dynamite ◊ †		99	111	98	107	101	100	105*	1	108	VG	-0.1	1	OP
Q2 ▲		107*	125*	104*	108	109	108	XX	1	116	EX	0.8	1	OP
Quantum ◊		96	106	101	107	105	104	107*	0	116	EX	-0.1	1	OP
Sentry †		89	96	99*	96	85	89	XX	1	113	VG	-0.3	1	OP
Sprint ◊		85	89	79*	95	96	85	XX	-2	99	VG	-0.4	2	OP

Remarks: Polish varieties, on average, yield 20% less, are more susceptible to root maggot and root rot, and mature 2 - 3 weeks earlier than Argentine types. Argentine types shatter more readily than Polish when ripe and require early seeding. Argentine canola is risky in all zones if seeded late, especially in Areas 5 and 6 due to late maturity. Mixtures of canola and mustard seed are inseparable and unacceptable. Do not grow varieties that are susceptible to blackleg. Help prevent the spread of virulent blackleg to your farm; use only certified blackleg free and treated seed in a minimum 4-year rotation. Maturity information is based on field experience and estimates from data collected during the growing seasons and may vary considerably from year to year. Only use the herbicide that is registered for the herbicide tolerant canola variety in the proper soil zone and applied at the recommended rate. Liberty and Roundup herbicide tolerant varieties are transgenic cultivars.

Variety	Irr. 1&2	Area (See Map)						Comp Mat	Ht. cm	Straw Strength	Comp Oil (%) Content	Blackleg Tolerance	Variety Type	Herbicide
		1	2	3	4	5	6							
Yield as % of Legacy														
ARGENTINE TYPE Brassica napus														
HERBICIDE TOLERANT VARIETIES														
2631 LL	89*	102*	107*	88	95	84	XX	-2	108	G	1.6	3	OP	Liberty
3640 LL	XX	XX	XX	114*	108	119*	XX	0	99	G	0.8	3	HYB	Liberty
45A51 ▲	105*	124*	99*	109	104	100	XX	1	115	VG	1.8	3	OP	Roundup
45A71 ◊ †	92	96	91*	108	103	97	XX	1	109	G	0.2	3	OP	Smart
46A52 ▲	97*	121*	XX	113*	98	99*	XX	1	111	G	0.0	2	OP	Roundup
46A73 ▲ †	96*	115*	110*	104	102	96	XX	3	115	G	-0.3	2	OP	Smart
46A76 ▲	XX	123*	XX	106*	114	107*	XX	4	120	G	0.6	1	OP	Smart
Exceed ▲ †	100*	107*	102*	103	100	100	XX	1	111	G	2.0	3	OP	Liberty
Innovator ◊ †	77	82*	XX	87*	86	91	XX	-1	98	G	0.6	3	OP	Liberty
Invigor 2153 ◊	119	116*	110*	117	113	110	XX	-1	118	G	1.5	3	HYB	Liberty
Invigor 2273 ◊	121*	XX	XX	123*	109	117*	XX	1	127	G	1.6	2	HYB	Liberty
Invigor 2463	XX	139*	XX	123*	115	110*	XX	0	120	VG	1.0	3	HYB	Liberty
Invigor 2473	XX	135*	XX	117*	115	101*	XX	1	123	VG	-0.3	2	HYB	Liberty
LG 3235 ▲	98*	100*	XX	112*	99	97	XX	-1	108	VG	0.0	2	OP	Roundup
LG 3345 ▲	105	110	109	108	100	97	XX	0	109	VG	0.0	2	OP	Roundup
LG Dawn ▲	104*	103*	XX	114*	100	103*	XX	0	105	G	0.0	3	OP	Roundup
Quest ◊	93	102	98	110	102	97	96*	0	108	G	0.7	2	OP	Roundup
SW Arrow ▲	97*	111*	106*	101	101	104	XX	-1	109	G	-0.8	3	OP	Roundup
SW Rider	117*	124*	XX	117*	105	98*	XX	1	113	G	0.5	3	SYN	Roundup
SW Legion LL	XX	105*	XX	109*	96	97*	XX	-1	105	G	1.3	2	OP	Liberty

CANOLA

Variety	Irr. 1&2	Area (See Map)						Comp Mat	Ht. cm	Straw Strength	Comp Oil (%) Content	Blackleg Tolerance	White Rust Rating	Variety Type
		1	2	3	4	5	6							
Yield as % of Reward														
POLISH TYPE Brassica rapa														
Reward	100	100	100	100	100	100	100	94	95	F	43.4	4	1	OP
AC Sunbeam	97	98	93	105	102	103	93	-1	98	F	0.4	4	1	OP
Cash ▲ †	107	100	96	109	109	99	114	0	99	F	-0.8	4	1	SYN
Fairview	101	104	99	113	109	105	116	0	100	F	0.3	4	3	SYN
Foothills ▲	97*	91*	96*	102	105	98	92*	1	104	F	0.1	4	1	OP
Hysyn 110 †	107	103	103	116	106	105	121*	0	99	F	-1.6	4	1	SYN
Hysyn 111	106	104	103	115	111	107	122*	1	104	F	-1.2	4	3	SYN
Hysyn 120 CS	96	93	101	106*	95	101	117	1	106	F	0.7	4	2	SYN
Maverick ▲	102	93	96	103	104	95	114	0	100	F	0.3	4	1	OP
Norwester	99	95	101	112	102	104	120	1	107	F	-0.5	4	2	SYN
Shamrock	99*	91*	92	110	104	98	95	1	97	F	0.7	4	1	OP
Valleyview ▲	102	97	94	112	110	104	105	1	105	F	0.0	4	2	OP
Westwin ▲	106	99	100	110	105	106	114	0	96	F	0.2	4	1	SYN

Visit Alberta Agriculture on the web

<http://www.agric.gov.ab.ca/>

Symbols used: † Denotes variety may not be described in 2001; NS Denotes variety not generally suited for area; XX Denotes insufficient test data to describe; Δ 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: Comp Mat.=Comparative maturity in (+ or -) days from the check variety.

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

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

Kn. Wt.=Kernel weight (grams/1000 kernels).

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 shown as

R=Resistant, I=Intermediate, S=Susceptible.

Ht. cm=Height in centimetres.

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

Blackleg and White Rust Tolerance; 1=Tolerant, 2=Moderately tolerant, 3=Moderately susceptible, 4=Susceptible,

5=Highly susceptible.

FHB=Fusarium Head Blight Tolerance; G=Good, F=Fair, P=Poor, VP=Very Poor.

Variety Type - SYN=Synthetic, OP=Open Pollinated, HYB=Hybrid.

Crop Specialists - Cereal and Oilseeds

OFFICE	PHONE	FAX
Athabasca	675-2252	675-3827
Bonnyville	826-3388	826-6295
Brooks	362-1212	362-1237
Camrose	679-1210	679-1219
Claresholm	625-1445	625-2862
Coronation	578-3970	578-3122
Drumheller	823-1675	823-7910
Fahler	837-2211	837-8228
Fairview	835-2241	835-3233
Foremost	867-3606	867-2038
Fort Vermilion	927-3712	927-3838
Grande Prairie	538-5285	538-5288
Innisfail	227-6565	227-2670
Leduc	986-8985	986-1085
Lethbridge	381-5351	381-5765
Manning	836-3351	836-3529
Medicine Hat	529-3616	528-5213
Morinville	939-4351	939-2528
Oyen	664-3899	664-2549
Provost	753-6871	753-2933
Sedgwick	384-3737	384-2717
Stony Plain	963-6101	963-4709
Strathmore	934-3355	934-5653
Taber	223-7907	223-3396
Three Hills	443-8525	443-7101
Valleyview	524-3301	524-4585
Vegreville	632-5400	632-5495
Vulcan	485-2236	485-2947
Westlock	349-4465	349-5240
Wetaskiwin	361-1240	361-1381

Remarks: For further information, please contact a Cereal and Oilseed Specialist. You can reach any of our specialists toll free. Dial the RITEdirect number 310-0000 followed by the seven digit number for that specialist. Your call will be automatically connected. You can call any Alberta Agriculture, Food and Rural Development office from any location in Alberta through this Alberta Government RITE system.

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Recommended Malting Barley Varieties for 2000 from the Malting Barley Industry Group

Recommendations from the Malting Barley Industry Group are based on anticipated markets in 2000. These recommendations are one source of information used to decide whether to grow a variety of malting barley. Other important considerations are disease resistance and the suitability of the variety's agronomic characteristics in a farming area. Consult your provincial agriculture representative. Talk to your elevator manager about local market demand for particular varieties.

Definitions

Recommended – Varieties that have proven commercial market demand. Demand for some varieties may be limited.

Limited – Newer varieties that are still undergoing market development and commercial testing or older varieties with reduced commercial demand. Some acreage is required in both cases. Growers should only grow these varieties if they receive a commitment from a local elevator or a company with proprietary rights to those varieties or a maltster that is selecting this variety.

Not Recommended – Varieties that have no known commercial market demand for malting and brewing.

TWO-ROW VARIETIES

Variety	Industry Recommendation			Remarks
	Recommended	Limited	Not Recommended	
Harrington	X			widely accepted both domestically and for export
Stein	X			expanding export markets (UGG variety)
AC Metcalfe		X		growing market demand
CDC Kendall		X		growing market demand (Agricore & SWP variety)
CDC Stratus		X		growing market demand
Merit (TR970)		X		undergoing market development and testing
Manley		X		declining market demand
AC Oxbow		X		declining market demand
B1215		X		declining market demand (Agricore & SWP variety)

The varieties B1202, TR139 (CDC Unity), TR145, TR243 (AC Bountiful), TR150 (CDC Copeland) are not being grown for the commercial market. Limited quantities are being grown for market development and testing purposes.

SIX-ROW VARIETIES

Recommendations for white aleurone six-row malting barley varieties are based on demand from the USA

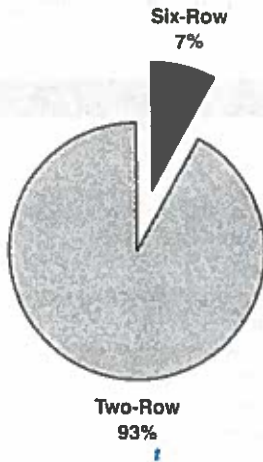
Variety	Industry Recommendation			Remarks
	Recommended	Limited	Not Recommended	
Excel	X			Established demand (UGG variety)
Robust	X			Widely accepted in the USA (Cargill variety)
B1602	X			Established demand (Agricore & SWP variety)
Foster		X		Limited USA demand (UGG variety)
CDC Sisler (BT433)		X		Growing market demand (UGG variety)
Stander			X	

The six-row varieties BT435 and BT459 (CDC Yorkton) are not being grown for the commercial market. Limited quantities are being grown for market development and testing purposes.

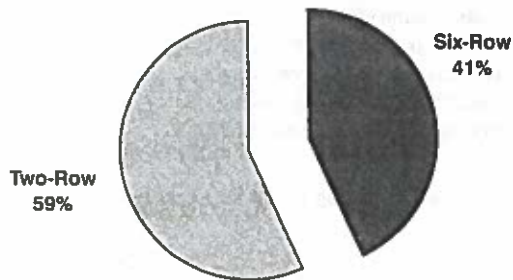
Canadian malting barley sales destinations, 1998-99

To further assist producers in making decisions on malting barley varieties for 2000, the following charts should be used in conjunction with the recommendation tables. These charts show which types of Canadian malting barley were being selected in 1998-99 for domestic versus export destinations.

Varieties selected for domestic use, 1998-99 (989,000 tonnes delivered)



Varieties selected for export, 1998-99 (958,000 tonnes delivered)



Malting Barley Industry Group

Members of the Malting Barley Industry Group include: Agricore, Brewing and Malting Barley Research Institute, Busch Agricultural Resources Inc., Canadian Grain Commission, Canada Malting Co. Limited, Canadian Wheat Board, Cargill Limited, ConAgra Grain, Canada; Dominion Malting Limited, James Richardson International, N.M. Paterson & Sons Limited, North East Terminal, Parrish & Heimbecker, Pioneer Grain Company Limited, Prairie Malt Limited, Saskatchewan Wheat Pool, South West Terminal, United Grain Growers Limited, Westcan Malting Limited, Western Barley Growers Association, XCAN Grain Pool Limited.

Questions?

Call your selector or handling company Or call the Canadian Wheat Board at: 1-800-ASK-4-CWB (1-800-275-4292)