



Varieties of Grain Crops 2006

Crop Production Areas



The cropland of Saskatchewan has been divided into four areas based roughly on agro-climatic conditions. Crop yields can vary from area to area. In choosing a variety, producers will want to consider the yield data in combination with marketing and agronomic factors.

Area 1: Drought is a definite hazard and high winds are common. Sawfly outbreaks often occur in this area. Cereal rust may be a problem in the southeastern section.

Area 2: Drought and sawfly may be problems in the western and central sections of the area. Cereal rust may be a problem in the southern section.

Area 3: Drought is not as likely to be a problem in this area, particularly in the east. Cereal rust may occur in the eastern portion. The frost-free period can be fairly short in the northern section.

Area 4: Rainfall is usually adequate for crop production. However, early fall frosts and wet harvest conditions are frequent problems.

Note About Dividing Lines:

The dividing lines do not represent distinct changes over a short distance. The change from one area to another is gradual.

Table of Contents

Cereal Crops	
Wheat	4
Winter Wheat	6
Rye	6
Triticale	6
Malting Barley	7
Feed and Food Barley	9
Oat	10
Malting Barley Article	11
Other Crops	
Buckwheat, Caraway, Fenugreek, Canary Seed, Coriander, Safflower	12
Seed Facts	13
Pulse Crops	
Lentil	14
Field Pea	15
Chickpea	16
Dry Bean	17
Faba Bean	17
Oilseed Crops	
Flax	18
Mustard	19
Sunflower	19
Canola	20
Breeding Institutions and Seed Distributors	22

Symbols Used in 2006 Seed Guide:

- § Variety may not be described in 2007
- Insufficient test data to describe
- ☉ Plant Breeders' Rights at time of printing
- ⊙ Applied for PBR protection at time of printing

Abbreviations used:

Relative maturity: VE = Very Early, E = Early, M = Medium, L = Late, VL = Very Late

Resistance: VG = Very Good, G = Good, F = Fair, P = Poor, VP = Very Poor, n/a = not applicable

Seed size: S = Small, M = Medium, L = Large

The information contained herein is provided by the Saskatchewan Advisory Council on Grain Crops. To reproduce this information in whole or in part, permission must be obtained from the council. Please contact Blaine Recksiedler, secretary, at: (306) 787-4664.

Testing Varieties In Saskatchewan

By Saskatchewan Agriculture and Food

Regional testing of crop varieties is conducted to provide producers with information on the agronomic performance of varieties under different agro-climatic conditions. Saskatchewan producers will continue to have the opportunity to evaluate the newest grain crop varieties and their suitability for production in different regions of the province.

Saskatchewan Agriculture and Food (SAF) provides \$100,000 toward a testing program that is based on industry-government partnership. An entry fee system is used in which variety owners or companies with the distribution rights to a particular variety pay a portion of the cost of having the variety tested.

A long-term database is developed providing comparisons to a commonly grown check variety. The data includes information on yield, various agronomic factors and certain market related traits.

The Saskatchewan Variety Performance Group (SVPG) administers the program. SVPG is composed of representatives from individual organizations with an interest in providing variety testing information.

SeCan Association administers the funds for SVPG. Crop coordinators manage the data and provide expertise for their respective crops.

The results of the testing are reviewed by the Saskatchewan Advisory Council on Grain Crops (SACGC), which also updates disease and other agronomic information and approves the data prior to inclusion in this publication.

The SAF grant also provides support to the Saskatchewan Pulse Growers (SPG) and the Canola Council of Canada (CCC), who carry out testing programs for their crops. CCC and its partners test on a prairie-wide basis using short-, mid- and long-season zones that have been used for many years in the co-op testing system for canola. SPG funds a testing program for pulse crops in

Saskatchewan. Canola and pulse information are included in this publication.

Relative yield of varieties

Trials are conducted using uniform protocols and standard check varieties. Data are collected from as many sites as are available and statistically analyzed.

Results in this publication are aggregated over a number of years and on a zone basis.

Grain yield is a function of genetic and non-genetic factors. Variety trials are designed to measure the yield differences that are due to genetic causes. It is important to minimize variability due to non-genetic factors such as moisture, temperature, transpiration, weeds, diseases and other

pests. Experimental design uses replication (repeated plantings of the varieties) and randomization (the position of the varieties within the test is assigned by chance) to estimate the precision with which the genetic factors can be measured.

Relative yield is the yield of one variety expressed as a percentage of the check variety. Yields obtained in these trials are not identical to those obtained in commercial production. However, the relative ranking of these varieties compared to the check variety, obtained over a number of years at several locations, would remain the same regardless of whether the grain yield was measured in small plots or large-scale fields. Relative yield is the best estimate of expected yield advantage in the areas indicated.

Relative Maturity

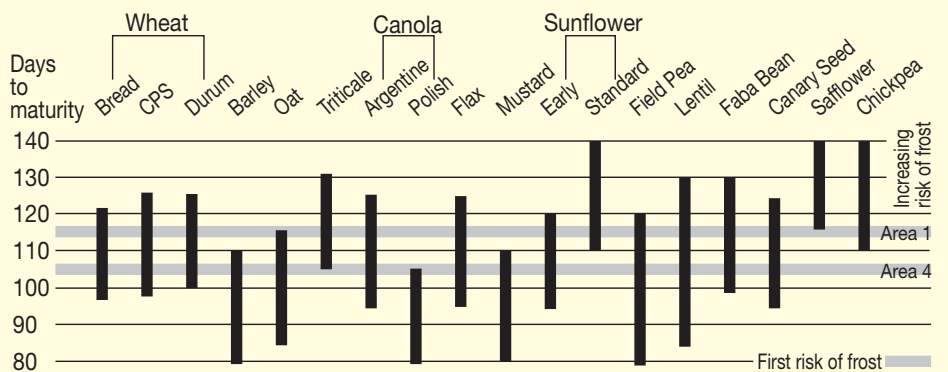
Ratings

Maturity is measured from seeding to swathing ripeness. The actual number of days to reach maturity depends on local climatic conditions and to some extent on management practices. Some of the tables in this booklet express the relative maturity in days while others use a five category scale: VE, E, M, L, and VL (very early, early, medium, late, very late). The limits for each category can vary from crop to crop. In barley, for example, AC Metcalfe would be medium with L and E varieties plus or minus 1-2 days, and VL and VE varieties beyond this range.

Comparisons

The relative maturity of varieties of different crops is important when making plans for seeding. The table below compares the relative maturity ranges for crops grown in Saskatchewan. Within each crop there are early and late maturing varieties. Whether a crop matures before the first killing frost depends on seeding date, management practices and environment factors. Not all crops have a wide area of adaptation. It is noted that climatic conditions can cause a wide variability in crop maturity.

Relative maturity ranges for spring crop grown in Saskatchewan



Plant Disease Resistance

Resistance to the most important diseases in Western Canada is assessed in most crops before the variety is registered. The methods used to assess resistance in each crop are different. In some cases, spores of the pathogen are applied to plants in the greenhouse or in the field. In other cases, assessment is based on naturally occurring infection in the field. Each variety is rated on a five-point scale of very poor (VP), poor (P), fair (F), good (G), very good (VG). New varieties are not tested side-by-side with all existing varieties. Because of variation in disease levels from year to year, each new variety is assigned a rating relative to a few existing varieties that serve as disease level standards or checks.

Varieties differ in resistance because of differences in their genetic make-up and/or

differences in the genetic make-up of the pathogen that causes the disease. However, the genetic make-up of a pathogen can change over time, and overcome the resistance in a variety. In such cases, a variety with good resistance can quickly display poor resistance to a particular disease. Unfortunately, because not all varieties are tested side-by-side every year, the ratings of older varieties may be less reliable.

A number of factors can affect the level of disease symptoms observed at a given location in a given year. Environmental conditions such as moisture and temperature, the genetic make-up of both the variety and the pathogen, and the amount of the pathogen present can all affect the level of disease. Although a variety with fair resistance can show disease symptoms under favourable conditions, a susceptible variety

would have much more disease under the same conditions.

For example, ascochyta blight of chickpea is a very aggressive fungal disease. It can completely kill susceptible varieties within two weeks of symptoms first appearing. Chickpea varieties grown commercially in Saskatchewan to date have ascochyta blight ratings from very poor to fair. This resistance weakens as plant development nears the flowering stage. Cool, moist environmental conditions favour the disease, and if these conditions persist early in the growing season, the disease symptoms can occur much earlier than the flowering stage. This is especially true on chickpea grown outside the Brown Soil Zone (the area of best adaptation) or on heavy textured soils such as clays and clay loams.

In these conditions, varieties with ascochyta blight resistance ratings of very poor to poor do not show good resistance to ascochyta and can be defoliated, with girdled branches and dead plants. If conditions turn warm and dry, the diseased plants can regrow from auxiliary nodes, often producing flowers and pods. However, these late pods and seeds will most likely be frozen in the first fall frost and have no commercial value.

What are Plant Breeders' Rights?

Plant Breeders' Rights provides a way to assure that companies and institutions that invest in plant breeding are able to keep reasonable control of their varieties and secure fair compensation for their efforts. This encourages additional investment in crop variety development for Canadian farmers.

Plant Breeders' Rights for crop variety developers are comparable in many ways to patent protection in other areas. When a plant breeder develops a new variety for use in Canada they may apply under the Plant Breeders' Rights Act to obtain certain controls over the multiplication and sale of the seed of that variety. Sale, trade or any other transfer of the seed for propagation purposes is prohibited by law without:

- 1) the written permission of the breeder or their agent, and;
- 2) payment of a royalty to the breeder or their agent.

Under PBR, farmers are allowed to save seed of the variety for their own use, on their own farms.

Varieties protected by Plant Breeders' Rights are identified with the above logo.

Further information on Plant Breeders' Rights can be obtained from the Plant Breeders' Rights Office, tel. (613) 225-2342, fax (613) 228-6629.



Progress through Research

Wheat

Main characteristics of varieties

Variety	Years Tested	Area 1 & 2	Area 3 & 4	Irrigation	Relative Maturity in days	Protein	Lodging	Shattering	Sprouting	Stem Rust	Leaf Rust	-----Resistance to:-----					
												Loose Smut	Bunt	Leaf Spot	Fusarium Head Blight	Head Awredness	
Bread Wheat																	
Yield as % of AC Barrie																	
AC Barrie 🍷	11	100	100	100	100	14.7	G	G	G	G	P	G	G	P	F	N	
AC Abbey 🍷	8	96	95	98	-1	-0.8	F	G	P	G	P	F	G	P	P	Y	
CDC Alsask 🌸	2	105	104	--	-1	+0.2	F	G	F	F	VG	G	G	P	P	N	
CDC Bounty	5	104	106	--	-1	-0.1	F	G	F	G	F	G	F	P	F	N	
AC Cadillac 🍷	7	102	102	98	-1	-0.2	F	G	F	G	G	VG	VG	P	F	N	
AC Cora §	8	97	94	92	-2	-0.3	F	G	F	G	VG	G	G	P	F	N	
AC Domain §	6	95	92	89	-2	+0.1	G	G	VG	G	F	VG	F	VP	P	N	
AC Eatonia	7	93	88	--	0	+0.2	P	G	VG	F	P	F	G	P	--	N	
AC Elsa 🍷	7	104	104	97	-1	-0.1	G	G	F	G	G	G	G	F	P	N	
CDC Go	3	102	103	--	-1	-0.1	G	G	P	G	F	P	G	VP	F	Y	
Harvest 🍷	5	100	105	--	-1	-0.5	VG	G	VG	G	G	G	G	P	VP	N	
CDC Imagine 🍷	4	98	102	--	0	-0.2	G	G	F	F	F	G	G	P	VP	N	
Infinity 🌸	3	108	108	--	-1	0	G	G	G	G	G	G	G	F	VP	N	
AC Intrepid 🍷	5	101	104	102	-3	-0.3	G	G	P	G	G	F	G	P	P	N	
Journey 🍷	5	98	99	--	+2	+0.4	VG	G	F	G	F	F	G	F	F	N	
Katepwa	9	96	94	89	-2	-0.5	F	G	F	G	P	G	G	P	F	N	
Laura §	8	102	98	82	+1	-0.4	F	G	F	G	G	F	P	P	P	Y	
Lillian 🍷	4	105	100	--	0	0	F	G	G	G	VG	F	G	P	VP	N	
Lovitt 🍷	4	103	102	--	-1	0.0	G	G	VG	G	G	G	F	--	P	N	
McKenzie	5	106	102	109	-1	-0.5	F	G	G	G	VG	VP	VG	P	F	Y	
CDC Osler	3	101	105	--	-1	-0.3	G	G	F	G	G	G	F	--	VP	N	
Peace	2	99	103	--	-1	-0.1	G	G	P	G	G	G	VG	--	VP	N	
Prodigy	5	103	104	--	+1	+0.4	G	F	G	G	G	F	VG	P	VP	Y	
Somerset 🌸	3	104	103	--	-1	-0.1	G	G	F	G	G	G	F	P	F	N	
AC Splendor	9	91	94	89	-4	+0.4	F	G	F	G	G	F	G	VP	P	N	
Superb 🍷	5	107	109	--	+3	-0.4	G	G	G	G	P	F	G	VP	P	Y	
CDC Teal	7	101	100	99	-2	-0.1	G	G	P	G	G	G	F	P	VP	N	
5500HR 🍷	5	99	100	--	+1	-0.5	F	G	F	F	G	P	G	P	F	N	
5600HR 🍷	5	100	100	--	+2	-0.5	G	G	F	F	VG	G	G	P	P	N	
5601HR 🍷	4	95	97	--	+2	-0.1	G	G	F	G	G	P	G	P	F	N	
5602HR 🍷	3	100	99	--	+1	+0.3	G	G	F	G	VG	G	G	P	G	Y	
Canada Prairie Spring - Red Seeded 🍷																	
AC Crystal 🍷	11	118	115	110	+3	-1.2	VG	G	P	G	P	P	VG	F	VP	Y	
AC Foremost	5	121	118	109	+2	--	VG	G	F	G	P	P	VG	P	VP	Y	
AC Taber	5	120	118	116	+4	--	VG	G	P	G	F	P	VG	F	VP	Y	
5700PR 🍷	5	115	120	115	+2	-1.3	VG	G	P	G	F	P	VG	P	VP	Y	
5701PR 🍷	4	108	110	105	+2	-0.6	G	G	P	G	VG	P	F	F	VP	Y	
Canada Prairie Spring - White Seeded 🍷																	
AC Karma §	8	120	119	110	+2	--	G	G	P	G	P	P	VG	P	P	Y	
AC Vista 🍷	9	122	122	113	+1	-1.5	G	G	F	G	P	P	VG	P	VP	Y	
Hard White Wheat																	
Kanata 🍷	5	91	93	--	-2	0.0	G	G	G	F	G	F	P	P	F	N	
Snowbird 🍷	5	99	102	--	+2	-0.6	G	G	G	G	VG	G	F	P	P	N	
Canada Western Extra Strong 🍷																	
Amazon § 🍷	5	103	106	--	+2	-1.1	F	G	P	G	G	VG	F	F	P	N	
Burnside	3	90	93	--	+2	-0.3	F	G	P	G	G	VG	F	P	P	N	
AC Corinne	5	101	104	--	+3	-1.1	F	G	P	G	G	VG	F	P	P	N	
AC Glenavon	5	102	104	--	+2	-1.1	F	G	P	G	G	VG	F	P	P	N	
Glenlea §	8	104	109	--	+2	-1.4	F	G	P	G	F	VG	F	P	P	N	
CDC Rama	4	107	107	--	+2	-0.2	F	G	P	G	G	VG	G	P	F	Y	
CDC Walrus	3	102	101	--	+2	-0.3	F	G	F	G	G	VG	F	P	P	N	
Durum Wheat																	
Yield as % of Kyle																	
Kyle	9	100	100	100	103	13.9	P	VG	F	VG	VG	P	VG	P	VP	Y	
AC Avonlea 🍷	9	106	109	100	-1	+0.1	F	VG	F	VG	VG	P	VG	F	VP	Y	
Commander 🌸	3	120	105	--	-1	-0.3	G	VG	F	VG	VG	P	VG	P	VP	Y	
AC Morse 🍷	8	103	109	111	0	-0.1	G	VG	F	VG	VG	VP	VG	VP	VP	Y	
Napoleon 🌸	7	105	109	--	-1	-0.4	F	VG	F	VG	VG	P	VG	F	VP	Y	
AC Navigator 🍷	8	106	98	--	0	-0.3	G	VG	F	VG	VG	VP	VG	VP	VP	Y	
Strongfield 🍷	4	114	112	--	0	+0.3	F	VG	F	VG	VG	VP	G	F	VP	Y	

🍷 Includes direct and indirect comparisons with AC Barrie

Additional Information

Spike awnedness is a trait being reported for the first time. Grain yield and relative time to maturity of all varieties of common wheat are compared to **AC Barrie**. The grain yield and relative time to maturity of all durum varieties are rated relative to **Kyle**.

Most of the varieties have been rated for their relative resistance to pre-harvest sprouting. Varieties with high test weight retain grade better under adverse harvest weather than those with low test weight. During wet harvest weather, grades drop more rapidly due to sprouting in swathed than in standing crops.

Several new races of leaf rust capable of overcoming leaf rust resistance gene Lr 16 have multiplied rapidly. If varieties rated poor or very poor for leaf rust are sown in southeastern Saskatchewan, early seeding may minimize risk of crop losses.

Durum wheat varieties are generally more susceptible than CWRS varieties to Fusarium Head Blight, and CPS varieties are intermediate.

All varieties have moderately good resistance to common root rot.

Seed of varieties rated poor and very poor for bunt and loose smut should be treated. Please refer to the *Seed Facts* section of this booklet or *Guide to Crop Protection 2006*.

Canada Western Red Spring Wheat
Seed of the new varieties **CDC Alsask**, **CDC Go**, **Infinity**, **CDC Osler**, **Peace**, and **Somerset** will not be available in 2006.

Limited quantities of seed of the new varieties **5601HR** and **5602HR** will be available in 2006.

AC Abbey, **AC Eatonia**, and **Lillian** have a solid stem and some resistance to the wheat stem sawfly. **AC Abbey** has semidwarf stature. **AC Cadillac** and **CDC Bounty** have large seed size and an exceptionally heavy test weight. **CDC Imagine** is tolerant to the CLEARFIELD® herbicide ADRENALIN. **McKenzie** may express a purplish stem under some conditions. **Prodigy** has an exceptionally heavy test weight. **Superb** has very large seed size and slightly shorter stature than **AC Barrie**.

Canada Prairie Spring Wheat

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**.

Canada Western Extra Strong

Seed of the new varieties **Burnside** and **CDC Walrus** will not be available in 2006. Limited quantities of seed of **CDC Rama** will be available in 2006.

Canada Western Amber Durum

Limited quantities of seed of the variety **Commander** will be available in 2006. All durum varieties are susceptible to two new races of loose smut.

All newer durum varieties have shorter stronger straw than **Kyle**. **Kyle** and **AC Morse** have lower pigment content in the grain than other varieties. **AC Morse** and **Napoleon** have lower test weight than **Kyle**.

Commander and **AC Navigator** have extra strong gluten properties and semidwarf stature. They may be grown only under contract with the Canadian Wheat Board and Saskatchewan Wheat Pool.

Soft White Spring Wheat

AC Reed and **AC Phil** are moderately resistant to shattering, powdery mildew, and common root rot, moderately susceptible to leaf and stem rust, and susceptible to common bunt. **AC Nanda** has improved resistance to common bunt, powdery mildew, and black point. It yields slightly less than **AC Reed** and **AC Phil** and is about four days later maturing. **Bhishaj** and **AC Andrew** have higher grain yield and mature about two days later than **AC Reed** and **AC Phil**. Soft-white spring wheat varieties are susceptible to pre-harvest sprouting.

The Saskatchewan Advisory Council on Grain Crops (SACGC) and the Saskatchewan Variety Performance Group (SVPG) coordinate, supervise and review the collection, analysis and reporting of information in this booklet.

Membership consists of representatives from:

- Saskatchewan Agriculture and Food
- Seed Companies
- Sask. Irrigation Development Centre
- Sask. Seed Growers' Association
- Agriculture and Agri-Food Canada
- Crop Development Centre
- Producer Associations
- Sask. Association of Rural Municipalities

SACGC and SVPG gratefully acknowledge the contributions of all individuals and organizations involved in the generation and publication of this information.

Winter Wheat

Main characteristics of varieties

Variety	Years Tested	---Yield as % of CDC Clair---			-----Resistance to:-----					
		Area 1 & 2	Area 3 & 4	Irrigation	Lodging	Winter Damage	Stem Rust	Leaf Rust	Bunt	
CDC Clair	15	100	100	100	G	VG	P	P	P	
AC Bellatrix	7	99	96	N/A	G	P	VP	P	G	
CDC Buteo	8	97	98	110	G	VG	G	G	P	
CDC Falcon	11	98	94	117	VG	F	VG	G	P	
CDC Harrier	12	102	100	110	G	G	G	P	P	
CDC Kestrel	15	101	101	103	G	VG	P	P	P	
McClintock 🌾	8	97	98	111	G	P	VG	VG	P	
CDC Osprey	15	100	99	93	G	VG	P	P	P	
Radiant 🌾	2	N/A	86	N/A	G	G	P	P	F	
CDC Raptor	9	99	100	113	VG	VG	VG	G	P	

Rye

Main characteristics of varieties

Variety	Years Tested	---Yield as % of Prima---			-----Resistance to:-----				
		Area 1 & 2	Area 3	Relative Maturity	Winter Damage	Shattering	Lodging	Stem Smut	
Prima	16	100	100	M	VG	F	F	G	
AC Rifle	16	98	90	M	VG	VG	VG	G	
AC Remington	5	109	97	M	VG	VG	G	--	
RT193	3	120	104	M	VG	VG	VG	--	

Triticale

Main characteristics of varieties

Variety	Years Tested	--Yield as % of AC Certa--			-----Resistance to:-----					
		Area 1 & 2	Area 3	Test Weight kg/hl	Relative Maturity	Lodging	Stem Rust	Leaf Rust	Bunt	Root Rot
AC Certa	14	100	100	74	M	G	VG	VG	VG	G
AC Alta	13	105	100	68	L	G	VG	VG	VG	F
AC Copia	13	100	97	72	M	G	VG	VG	VG	F
Pronghorn	13	100	102	68	E	G	VG	VG	VG	F
Sandro	10	105	102	73	E	G	VG	VG	VG	G
AC Ultima	10	105	102	70	E	G	VG	VG	VG	F

Additional Information:

Triticale matures 1-2 days later than **AC Crystal** CPS wheat, therefore it should be planted as early as possible. The seeding rate for triticale should be at least 30 percent more than that of CWRS wheat to obtain the same number of plants per square foot.

Susceptibility to fusarium head blight is at least as great in triticale as in wheat.

AC Ultima has improved Hagberg Falling Number.

Winter triticale has winter hardiness equal to that of winter wheat.

Pika and **Bobcat** are the only available cultivars of winter triticale.

Bobcat is awnleted with shorter and stronger straw.

Malting Barley

Main characteristics of varieties

Category ☼ & Variety	Years Tested	2 or 6 Row	Rough or Smooth Awns	--Yield as % of AC Metcalfe--				-----Resistance to:-----									
				Area 1	Area 2	Area 3	Area 4	Relative Maturity*	Straw ‡	Lodging	Net Blotch	Scald	Loose Smut	Other Smuts	Root Rot	Stem Rust	Fusarium Head Blight
Malting acceptance: Recommended																	
AC Metcalfe ☼	12	2	R	100	100	100	100	M	N	G	F	P	VG	F	F	G	F
CDC Copeland ☼	8	2	R	109	107	107	107	M	N	G	F	P	P	F	F	F	F
Harrington	11	2	R	99	92	89	88	M	N	F	VP	P	P	P	F	P	G
CDC Kendall ☼	11	2	R	99	103	102	102	M	N	G	F	P	P	P	F	F	F
Merit ☼	9	2	R	104	112	109	112	L	N	F	F	P	P	G	F	G	F
Stein	11	2	R	102	100	101	99	M	N	F	F	P	P	G	P	G	F
CDC Battleford ☼	6	6	S	109	108	106	112	M	N	G	G	P	VP	G	F	G	P
Excel	10	6	S	101	103	104	104	M	N	VG	F	P	P	G	G	G	VP
Legacy ☼	6	6	S	108	103	99	107	M	N	G	F	P	P	F	G	G	P
Robust	8	6	S	86	98	98	95	M	N	G	F	P	P	F	G	G	VP
Tradition ☼	5	6	S	97	113	105	--	M	N	VG	F	P	P	VG	G	G	VP
Malting acceptance: Under Test																	
Calder ☼	6	2	R	--	104	108	106	M	N	F	G	P	VG	VG	F	G	F
Newdale ☼	6	2	R	116	111	114	111	M	N	G	F	P	P	F	F	G	F
CDC Select ☼	7	2	R	104	103	103	103	M	N	G	F	P	F	F	F	F	P
CDC Clyde ☼	4	6	S	--	107	106	--	M	N	VG	F	P	P	F	G	G	VP
CDC Laurence ☼	3	6	S	--	114	108	--	M	N	G	F	P	P	G	F	G	P
CDC Springside ☼	4	6	S	92	109	101	--	M	N	F	F	P	P	VG	F	G	VP
CDC Tisdale ☼	6	6	S	106	106	99	105	M	N	G	G	P	P	G	F	G	P
Other: **																	
AC Bountiful §	11	2	R	101	103	105	103	M	N	G	G	P	VG	VG	F	G	F
CDC Stratus §	11	2	R	100	104	105	104	M	N	G	F	P	F	F	F	G	F
B1602 §	11	6	R	88	100	98	99	M	N	G	F	P	P	G	VG	G	VP
CDC Sisler §	10	6	S	98	99	104	104	M	N	F	P	P	P	P	F	G	F
CDC Yorkton § ☼	8	6	S	98	100	105	113	M	N	G	G	P	P	G	F	G	P

☼ These categories are established annually by the Canadian Malting Barley Technical Centre (CMBTC). Call 204-984-4399 for more information.

* Relative maturity: The relative maturity of the check, AC Metcalfe, is M (on average, 91 days from seeding to swathing ripeness)

‡ N=normal, SD=semi-dwarf

** Although not on the CMBTC list, a malting barley market may exist for these varieties.

Lines Under Evaluation of Malting and Brewing Quality

Small scale tests are a good measure of malting potential but are not sufficient to determine the commercial acceptability of malting varieties. Final acceptance is given only after two years of successful plant scale evaluation. Several carload lots of barley are malted and subsequently brewed. The beer is then given the ultimate test - a taste panel. This process will normally take a minimum of three years. A crop grown in 2006 will be malted in January-February, 2007. It will be brewed in May-June, 2007, aged and tasted in October-November 2007.

Additional Information:

Growers are reminded that the malting and brewing industry is cautious about using new varieties.

Growers are cautioned that most malting varieties, especially two rows, are susceptible to sprouting.



Recommended Malting Barley Varieties 2006-07

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

Recommended Two-Row Barley Varieties

VARIETY	DOMESTIC	EXPORT	MARKET DEMAND
AC Metcalfe ₄	Established	Established	Stable, High Demand
CDC Kendall _{1,5}	Established	Growing	Increasing Demand
CDC Copeland ₄	Established	Growing	Increasing Demand
Harrington ₄	Established	Established	Stable, Demand
Stein ₁	Limited	Limited	Low Demand
Merit _{1,2,3,5}	Established	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

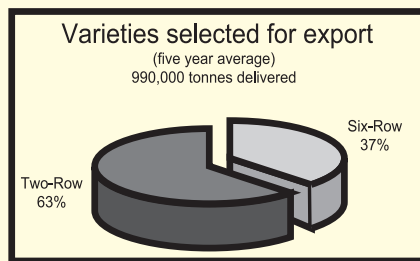
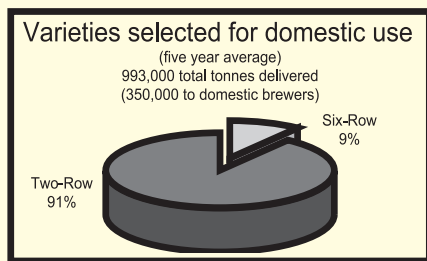
VARIETY	DOMESTIC	EXPORT	MARKET DEMAND
Legacy _{1,2,3,5}	Growing	Growing	Increasing Demand
Excel	Established	Established	Declining Demand
Tradition _{1,2,3}	Limited	Growing	Increasing Demand
Robust	No Market	Limited	Declining Demand
CDC Battleford ₄	Limited	No Market	Increasing Demand

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

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).



CMBTC Members: A.C. Toepfer Canada, Agricore United, Busch Agricultural Resources-Canada, Canadian Wheat Board, Canadian Grain Commission, Canadian International Grains Institute, Cargill AgHorizons, James Richardson International, Parrish & Heimbecker, FarmPure Seeds, the Public Plant Breeders, Saskatchewan Wheat Pool Inc., Rahr Malting Canada, SeCan.

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

Feed and Food Barley

Main characteristics of varieties

Category and Variety	Years Tested	2 or 6 Row	Rough or Smooth Awns	--Yield as % of AC Metcalfe--					-----Resistance to:-----									
				Area 1	Area 2	Area 3	Area 4	Relative Maturity*	Straw ‡	Lodging	Net Blotch	Scald	Loose Smut	Other Smuts	Root Rot	Stem Rust	Fusarium Head Blight	
Feed																		
CDC Bold	7	2	R	113	110	111	113	L	SD	G	P	F	P	VG	G	G	VP	
Conlon	1	2	R	--	95	85	--	M	N	G	F	P	P	F	G	G	G	
CDC Cowboy	1	2	R	--	103	--	--	L	N	F	G	P	P	VG	F	G	G	
CDC Dolly	11	2	R	103	103	104	102	M	N	G	P	G	P	G	F	G	F	
CDC Fleet §	11	2	R	88	89	89	89	VE	N	VG	F	F	P	VP	P	G	F	
CDC Helgason	7	2	R	107	104	105	102	M	N	G	G	P	VG	G	F	F	P	
McLeod	3	2	R	--	110	119	--	M	N	G	P	P	P	VG	F	P	VP	
Niobe	6	2	R	--	100	104	108	M	N	F	F	P	P	G	P	G	P	
Ponoka	4	2	R	--	112	127	--	L	N	G	F	G	VG	VG	F	P	F	
Rivers	5	2	R	105	105	111	102	M	N	G	VG	P	VG	VG	G	G	F	
CDC Trey	5	2	R	--	105	109	113	M	N	VG	VG	P	P	VG	F	G	F	
Xena	7	2	R	112	112	114	113	M	N	G	F	P	P	VG	F	G	F	
CDC Earl	10	6	R	99	111	110	120	L	SD	VG	G	F	P	G	G	G	VP	
AC Harper	11	6	S	104	104	106	101	M	N	G	F	G	P	F	F	F	VP	
Kasota §	8	6	S	97	106	109	108	E	SD	G	F	G	P	G	P	G	VP	
Lacey	4	6	S	108	99	98	--	M	N	G	F	P	P	G	G	G	VP	
AC Lacombe	11	6	S	98	110	110	102	M	N	G	F	F	P	VG	F	G	VP	
Mahigan §	8	6	S	106	112	114	115	E	SD	VG	F	G	P	G	P	G	VP	
Manny	4	6	S	--	114	111	--	M	N	F	F	VG	P	VG	P	P	VP	
Niska	6	6	S	105	120	123	129	L	SD	F	P	P	P	G	P	G	VP	
AC Rosser	11	6	S	112	116	115	115	M	N	G	F	VP	P	VG	G	G	VP	
Trochu	6	6	S	104	105	107	117	M	N	F	P	F	P	G	G	G	P	
Vivar	6	6	R	114	117	112	131	L	SD	G	F	P	F	G	F	G	VP	
Hulless																		
CDC Freedom	9	2	R	89	91	90	89	M	N	G	F	P	--	G	P	G	G	
CDC Gainer	10	2	R	84	87	88	89	M	N	F	F	F	P	F	F	G	F	
HB 805	5	2	R	95	96	97	93	L	N	F	F	P	F	G	F	F	F	
CDC McGwire	8	2	R	96	99	99	99	M	N	G	VG	F	P	G	G	F	F	
AC Bacon	9	6	R	89	95	95	98	M	N	G	P	F	P	F	F	G	G	
Peregrine	7	6	R	68	70	75	75	M	SD	VG	F	F	P	P	G	G	VP	

* Relative maturity: The relative maturity of the check, AC Metcalfe, is M (on average, 91 days from seeding to swathing ripeness)

‡ : N=normal, SD=semi-dwarf

Forage Barley

Dillon, **AC Ranger** and **Westford** are six-row forage varieties.

CDC Cowboy is a two-row forage variety.

Hulless

In hulless varieties the hull is left in the field, therefore, comparable yields are 9-12 percent lower. Hulless seed is more susceptible to damage than hulled seed, so handling should be minimized.

Hulless Waxy

CDC Alamo, **CDC Candle**, **CDC Fibar**, **HB803**, **Merlin** and **CDC Rattan** are waxy starch varieties for specialty markets.

For further information contact Agricore United.

Irrigation

Disease resistance, straw strength and maturity are more critical when barley is grown under irrigation. Growers should select early, strong-strawed, disease resistant varieties and should consider semi-dwarf varieties.

Feed and Food Barley (cont'd)

General Comments

Of the current two-row varieties, new varieties such as **Rivers**, **CDC Trey** and **CDC McGwire** have good field resistance to all races of net blotch. Therefore, growers who must plant barley on barley stubble should select the above mentioned varieties.

Most of the available varieties are susceptible to one or more types of smut. Therefore, seed should be treated on a regular basis.

Harvesting grain over 16 percent moisture and then using aeration bins for drying can lead to sprouting and embryo death. Seed with reduced germination is undesirable for seeding or malting.

Two-row barley varieties are generally more resistant to shattering than six-row varieties.

Oat

Main characteristics of varieties

Variety	Years Tested	--Yield as % of Calibre--			Test Weight (g/0.5L)	% Hulless	% Plump	Relative Maturity*	Lodging	-----Resistance to:-----		
		Area 1 & 2	Area 3 & 4	Stem Rust						Leaf Rust	Smut	
Calibre	15	100	100	250	22.9	44	M	G	VP	VP	P	
AC Assiniboia 🍀	11	97	95	240	22.9	74	M	VG	F	F	VG	
SW Betania 🍀	3	107	110	250	21.4	76	L	G	VP	F	VG	
CDC Boyer	11	102	100	236	22.6	81	E	G	F	F	P	
CDC Dancer 🍀	7	101	101	257	19.2	80	M	G	F	F	VG	
Derby	13	101	103	251	22.2	74	M	G	VP	VP	P	
Furlong 🍀	6	102	107	250	20.4	87	L	G	F	F	G	
Kaufmann § 🍀	7	98	96	250	22.1	85	L	F	F	F	VG	
Leggett 🍀	4	106	112	261	21.4	81	L	G	F	VG	VG	
Lu	4	102	107	252	24.4	54	VE	G	VP	VP	G	
AC Morgan	9	107	110	242	24.2	63	L	VG	VP	VP	F	
CDC Orrin 🍀	6	107	111	257	22.5	81	L	G	VP	VP	VG	
CDC Pacer §	9	106	106	245	23.7	71	M	G	VP	VP	F	
Pinnacle 🍀	8	114	110	245	23.1	80	VL	G	F	F	VG	
Ronald 🍀	7	97	100	253	21.8	62	L	VG	F	F	VG	
CDC Sol-Fi 🍀	3	93	95	241	23.0	52	M	F	VP	VP	G	
Triple Crown 🍀	10	102	107	238	24.7	67	L	VG	VP	P	P	
CDC Weaver 🍀	4	107	115	249	18.6	82	L	G	F	F	VG	

* Maturity Rating M = 96 days

Additional Information:

Leaf rust races capable of attacking most varieties except **Leggett** are increasing in southeast Saskatchewan. Early seeding will reduce the likelihood of severe infection.

AC Assiniboia and **Furlong** have brown hulls.

Forage Oat

CDC Baler, **CDC Bell**, and **Murphy** are annual forage oat varieties available for forage production in Saskatchewan.

Hulless Oat

Boudrias, **Bullion**, **AC Gwen**, and **Lee Williams** are hulless varieties available for production in Saskatchewan. The hull is part of normal oat yield, thus hulless types yield less. They are difficult to handle and should be stored at less than 12% moisture.

Malting Barley

Producers who sow malting barley varieties are generally hoping to capture the malt premium. In addition to the many quality factors that determine suitability for malt, such as high germination, seed vigour, plump kernels, etc., low to moderate protein levels are also desired. The desired protein range is generally between 10.5% and 13%. Protein levels outside this range can cause problems in the malting and brewing process. High protein levels, for example, will reduce the amount of fermentable material (malt extract), and can cause brewing issues such as cloudiness in the beer. In general, low protein is better than high protein, and marketers are willing to pay for it.

For the 2005-06 crop year, producers can receive protein related price premiums for designated two-row malting barley (see table below). Producers should be aware that not all grain handling companies are participating in the program. Please contact your local elevator, malting company or the Canadian Wheat Board (1-800-275-4292, www.cwb.ca) for more details. The protein premium will be based on a protein test of the delivered sample, subject to third party verification, and payment will be made within 30 days of delivery.

Protein Payment Schedule on Two-Row Malting Barley for 2005-06

Protein Level (%)	Price adjustment (\$/tonne)
12.6	0
12.5	0.60
12.4	0.90
12.3	1.20
12.2	1.50
12.1	1.80
12.0	2.10
11.9	2.40
11.8	2.70
11.7	3.00
11.6	3.30
11.5	3.60
11.4	3.90
11.3	4.20
11.2	4.50
11.1	4.80
11.0	5.10
10.9 and below	5.40

General Recommendations for Malting Barley Production

Fertility

A well balanced fertility program is important for producing good yields and acceptable quality. Provided other factors are not limiting, protein

and yield are mostly determined by the amount of precipitation and available nitrogen. Given the same amount of available nitrogen, high levels of precipitation will lower protein, while drier conditions will result in higher protein.

The dilemma for producers is to balance the nitrogen requirement that will maximize yield, while maintaining low protein levels. Protein content and yield will increase with increased rates of nitrogen; however, protein increases at a slower rate. In determining target yield, producers should rely on soil test recommendations that take into consideration soil moisture levels and average growing season precipitation for their region.

Timing of Seeding

Another consideration that can affect protein is the timing of seeding. Early seeding is generally recommended for a number of reasons. Early seeded crops tend to mature before soil moisture levels become depleted. This will assist the plant to develop plump and uniform kernels. The other advantage of early seeding is that the harvest can generally occur during dry conditions, avoiding cool wet falls that increase the likelihood of weathering and pre-harvest sprouting.

Variety Selection

Selecting a variety for its agronomic performance and marketing potential is the first step in producing a marketable malt barley crop. The Canadian Malting Barley Technical Centre provides a list of recommended malting barley varieties (see VR8). Additionally, producers should contact grain and malting companies to explore market potential for the various varieties.

Seed

The seed lot should be true to variety, have high germination with strong vigour, and be free of disease and weed seeds. Using Certified Seed, and possibly treating the seed if sowing into cool soils, will get the crop off to a good start.

Field Selection

Select relatively uniform fields to obtain even maturity. If patchiness does occur, these areas should be harvested separately. Use proper crop rotations to lessen disease pressures and avoid volunteer seed issues.

Seeding Rate and Depth

Depending on the region, the target plant density should be 20 to 25 plants per sq. foot

(215 – 270 plants per sq. metre). Producers must account for the rate of germination and seedling mortality. Since malting barley generally has a high test weight with plump kernels, the seeder should be calibrated accordingly. The seeding rate calculator on the Alberta Agriculture, Food and Rural Development website provides an easy method to determine your seeding rate. (www.agric.gov.ab.ca/app19/calc/crop/seedcalculator.jsp?crop=BARLEY)

Seeding depth should be approximately 1.5 – 1.75 inches (3.8 – 4.5 cm). Although having the seed in contact with moist soil is important, placing the seed below 2 inches (5 cm) is not recommended. Deep seeding can result in weak plants, reduced emergence and vulnerability to root and seedling diseases.

Disease Control

Fields should be monitored for leaf diseases. If economically warranted, registered fungicides will help minimize yield loss and maintain kernel plumpness. The timing of fungicide application is critical – follow the label carefully.

Harvesting and Handling

Both straight combining and swathing can be used to produce marketable malting barley. Swathing should be delayed until the moisture content is below 30%. At this stage, the barley kernel is difficult to dent with your thumbnail. Six-row barley is more susceptible to shattering than two-row varieties. Most malting varieties, especially two-rows, are susceptible to sprouting.

Combining can begin at 16% moisture if aeration is available. Producers should not use heat when aerating malting barley, as it can cause the loss of germination. If the moisture content falls below 13.5%, peeling during combining and handling is more likely. Therefore, producers should adjust the combine (cylinder/rotor speed and concave clearance) and handling equipment so that peeling and breakage is minimized. Maltsters prefer kernels with a small piece of the awn intact. Storage conditions should maintain low moisture levels until delivery. Handling should be minimized to reduce peeling and broken kernels.

With a little luck from the weather, these recommendations will help produce high quality malting barley.

OTHER CROPS

Canary Seed

The seed of annual canarygrass, more commonly called canary seed, is used as food for caged and wild birds. Five varieties are registered in Canada. **Elias, Keet** and **Cantate** are similar in yield, but **Keet** and **Cantate** are earlier maturing and more resistant to lodging. Seeds and plants of **CDC Maria** and **CDC Togo** do not have the small sharp hairs that cause irritation when canary seed is threshed and handled. **CDC Maria** and **CDC Togo** have higher test weights compared to pubescent cultivars. **CDC Togo** is higher yielding than **CDC Maria** and has heavier seed. Canary seed plants have a dense, shallow root system and growing the crop on sandy soils is therefore not recommended. Canary seed may be grown successfully on stubble, providing adequate moisture is available for rapid germination and emergence. The maturity requirements are similar to wheat.

Planting should occur at the same optimum date as spring wheat. Early seeding may lower yields in some cases. The recommended seeding rate is 34 kg/ha (30 lb/ac) (germination greater than 85 per cent). Plant the seed 3.5 to 5 cm deep into a firm seedbed. Fertilizer requirements are similar to those for cereal crops.

Canary seed is subject to damage by English grain aphid and bird cherry-oat aphid. Aphid populations build up rapidly on leaves, stems and head of the plant in August and may require an insecticide application to prevent yield loss. Information from the United States indicates that infestations of 10 to 20 aphids on 50 per cent of the stems prior to soft dough stage may cause enough damage to warrant insecticide application. The aphids often hide in the dense head of the canary seed plant. Damage may occur at populations below these levels.

Canary seed leaf mottle is a foliar disease that can cause yield losses. Leaf mottle is caused by a fungus, *Septoria triseti*, that only affects canary seed. The disease is inconspicuous at early stages because there is little visual contrast between healthy and

diseased leaf area. Stubble borne inoculum is the source of infection, thus crop rotation is key in limiting the severity of leaf mottle.

Canary seed should not be seeded on land that was treated with trifluralin or ethalfluralin the previous year. Canary seed is resistant to shattering. It may be straight-combined or swathed when fully mature.

For more information on canary seed, consult the SAF publication, *Canary Seed in Saskatchewan*.

Safflower

Safflower is an annual oilseed or birdseed crop which can be grown successfully in the Brown soil zone. Safflower must be sown early (late April).

Saffire matures in about 120 days. Seed should be planted shallow but into a firm, moist seedbed at about 30 kg/ha (27 lbs/ac). **Saffire** has moderate resistance to Sclerotinia head rot and Alternaria leaf spot. Contract production is advised.

AC Sunset has the earliness of **Saffire** combined with higher oil content and resistance to Sclerotinia head rot.

Buckwheat

Buckwheat is sensitive to high temperatures and dry weather conditions in the blossom stage which can reduce seed set and yields. New self-pollinated varieties are being released. Buckwheat is very susceptible to frost at all stages of growth. Delayed seeding is advisable to avoid spring frost.

Caraway

Caraway is a biennial spice crop, producing seed in the second year and sometimes in the third year. Seedlings are small, slow in developing and compete poorly with weeds. The crop is usually swathed because of its indeterminate growth habit and seed shattering. For more information, consult the SAF publication, *Caraway in Saskatchewan*.

Fenugreek

Fenugreek is a leguminous spice crop adapted to dryland conditions in the Dark Brown and Brown soil zones. The crop should be seeded early to avoid yield and quality loss from fall frost. Contract production is advisable, as markets are limited. For more information, consult the SAF publication, *Fenugreek in Saskatchewan*.

Coriander

Coriander is an annual spice crop. Seedlings are small, slow to develop, and compete poorly with weeds. The large seeded type is earlier maturing than the small seeded type. **CDC Major** is a large-seeded coriander variety and **CDC Minor** is a small-seeded variety. The crop is usually straight-cut to avoid wind damage in swaths. For more information, consult the SAF publication, *Coriander in Saskatchewan*.

SEED FACTS

Pedigreed Seed

Use certified seed regularly. This assures that the seed has high genetic purity, high germination and is relatively free from weeds and other crop seeds.

Reuse of Hybrid Variety Seed

Seed grown from a hybrid variety (regardless of crop or variety) should not be reused since a 20 to 25% yield reduction can occur in the next generation. This reduction is due to loss of hybrid vigour and possible occurrence of male-sterile plants. Lack of uniformity for maturity and quality traits will also occur.

Seed Cleaning

Seed should be cleaned carefully to remove weed seeds, trash, small or broken kernels, ergot and sclerotia. Not all seed-cleaning plants are equipped to clean grain to seed standards.

Seed Treatment

Various fungicides have been registered for the control of seedling diseases caused by soil- and seed-borne pathogens.

Use of seed from cereal crops infected with *Fusarium* may result in poor emergence. Such seed should be treated with a registered fungicide before planting. Use of infected seed may introduce *Fusarium* diseases into unaffected areas.

Smuts that attack wheat, barley, oat and rye can be controlled by seed treatment. If seed from a crop in which bunt or smut was observed must be used for seed, seed treatment should be considered. If the presence of smut is uncertain, varieties rated VERY POOR should be treated every year, those rated POOR every second year and those rated FAIR every third year.

Only systemic fungicides will control true loose smut of barley and wheat, and stem smut of rye. Pathogens causing the other types of smut (covered, false loose, oat smut and bunt) are carried on the outside of the seed and can be controlled by non-systemic seed treatments.

The virulent form of blackleg of canola is widespread in Saskatchewan. Seed treatment with a recommended fungicide can reduce the level of disease. Use of canola seed commercially coated with an appropriate seed treatment is a convenient alternative to on-farm seed treatment.

Wireworms, which attack all grain crops, and flea beetles, which attack canola and mustard, can be controlled by seed treatment with insecticides.

Read the label carefully before using any seed treatment or insecticide. Information on their use and recommended rates is found in the *Guide to Crop Protection 2006*. Carryover stocks of treated seed should be tested for germination before using. Treated seed must not be delivered to an elevator or used for feed.

Seed-borne diseases of pulses

Pulse growers should use seed that has been tested for seed-borne diseases such as ascochyta, anthracnose and botrytis. Tolerances for seed infection vary with the pulse crop, the disease, weather conditions of the region and the availability of a seed treatment. If infection of the crop from sources other than seed is likely, using seed with low infection levels becomes less important.

In regions with frequent rainfall and high humidity, tolerances will be lower. Thus, for ascochyta blight of lentil, use of seed with up to 5% seed infection is acceptable in the Brown and Dark Brown Soil Zones, but 0% is desirable in the Black Soil Zone. A seed treatment for ascochyta-infected lentil seed is available and is recommended if seed infection levels approach 5%. In pea, up to 10% seed infection with ascochyta is acceptable. In chickpea, 0% ascochyta seed infection is recommended because of the high rate of transmission of the disease from the seed to the emerging seedlings and its highly destructive nature.

Ergot

Ergot attacks all varieties of rye, triticale, wheat and barley, as well as most common grass species. Oat is rarely attacked and all broadleaf species are immune. Grain containing 0.1% ergot is considered poisonous and should not be used for food. Details of this disease are found in *Ergot of Grains and Grasses* (AAFC Publ. 1438).

Seed Inoculation

Legume crops obtain much of their nitrogen (N) requirement by forming a symbiotic association with soil bacteria called Rhizobium. These bacteria colonize the roots to form structures called nodules where they fix nitrogen for the legume plant. To enhance nitrogen fixation, the legume crop seed should be inoculated.

Use the proper strain of bacteria specific to that crop. For further details, consult the *Pulse Production Manual* (Saskatchewan Pulse Growers).

Damp and Frozen Seed

Seed which is stored damp or tough may be low in germination. Grain which will be used for seed should be dried, if necessary, soon after harvest. The drying temperature should be below 37C for batch driers and 43C for recirculating and continuous driers. Frozen grain should always be tested for germination by a seed-testing laboratory before planting. Such grain will frequently produce a high percentage of abnormal seedlings.

Production Notes

All wheat classes, including durum and triticale, are susceptible to wheat midge. Farmers in infested areas should be prepared to spray fields with recommended insecticides if necessary. Refer to the SAF publication *Orange Wheat Blossom Midge*. Residue of infected crops may harbour disease pathogens. Seeding into stubble of the same crop kind will increase disease risk, particularly in higher rainfall areas. Maintain a diverse crop rotation.

Pulse Crops

2005 Regional Variety Trials

In 2005, Saskatchewan Pulse Growers provided a one-year grant of approximately \$101,000 to fill an urgent need for pulse crop regional variety testing in Saskatchewan.

The Crop Development Centre (CDC) collaborated with researchers already onsite at several locations (such as the Agri-ARM sites) in order to make best use of project dollars. The project collected data on varieties from the CDC program as well as Cebeco, Svalof Weibull, Agriculture & Agri-Food Canada (AAFC) and other breeding programs. This project augments data from Co-op Tests.

Methodology

Field pea, lentil, chickpea, and dry bean variety trials were conducted at 8-14 locations per crop in their target areas of adaptation in Saskatchewan. The number of entries per trial was 26 for pea, 24 for lentil, 24 for chickpea, and 18 for dry bean. Trials were set up and managed by the pulse crop breeding program at the CDC.

Lentil

Main characteristics of varieties

Market Class	Variety	Years Tested*	---Yield as % of Laird---		Height (cm)	Days to Flower	Maturity Rating	-----Resistance to:-----			Seed Wt. (g/1000)
			Area 1 & 2	Area 3 & 4				Ascochyta Blight	Anthraxnose Race 1	Cotyledon Colour	
Large green	Laird	11	100	100	41	53	VL	VP	VP	yellow	67
	CDC Glamis	10	110	108	39	54	VL	G	VP	yellow	60
	CDC Grandora	9	107	109	40	53	VL	G	VP	yellow	69
	CDC Plato	7	129	120	38	52	ML	G	P	yellow	62
	CDC Sovereign	9	119	111	40	52	L	G	P	yellow	66
	CDC Sedley	8	115	110	39	51	M	F	VP	yellow	68
Medium green	CDC Meteor	5	142	132	34	50	M	G	VP	yellow	51
	CDC Richlea	10	130	115	35	50	M	VP	VP	yellow	51
	CDC Vantage	10	128	120	33	49	M	G	VP	yellow	52
Small green	CDC Milestone	11	134	127	31	49	E	G	VP	yellow	37
	CDC Viceroy	6	137	146	34	49	E	G	G	yellow	33
	Eston	10	113	111	30	48	E	VP	VP	yellow	33
French green	CDC LeMay	6	122	115	35	48	E	F	VP	yellow	32
Small red	CDC Blaze	7	113	108	30	47	E	G	P	red	34
	CDC Redberry	5	136	143	34	50	E	G	G	red	42
	CDC Redcap §	8	119	117	30	49	E	G	F	red	35
	CDC Rouleau	5	135	142	33	52	M	G	G	red	37
	Crimson	7	112	112	29	49	E	VP	VP	red	35
Extra small red	CDC Robin	8	118	113	30	49	E	G	G	red	30
	CDC Rosetown	5	129	134	31	52	E	G	G	red	31

* Co-op and Regional Trials in Saskatchewan since 1995. Direct comparisons to Laird

Additional Information:

Indianhead (Beluga) lentil is a black-seeded variety for specialty markets and green manure use. **CDC Matador** is a brown-seeded variety with yellow cotyledons. **Redchief** is a large red lentil with green seed coat.

Seed supplies are very limited for **CDC Meteor** and **CDC Rosetown**. Seed supply may be somewhat limited for **CDC Plato**, **CDC Viceroy**, **CDC Rouleau** and **CDC Redberry**.

Field Pea

Main characteristics of varieties

Variety	----Yield as % of Alfetta----					-----Resistance to:-----										Seed Weight g/1000
	Years Tested*	1,2 & South 3	North 3 & 4	Irrigation	Leaf Type♥	Relative Maturity	Vine Length (cm)	Mycosphaerella Blight	Powdery Mildew	Seed Coat Breakage	Lodging	Bleaching	Seed Coat Dimpling♣	Green Seed Coat◆		
Yellow																
Alfetta ☺	9	100	100	100	SL	M	60	P	P	F	F	n/a	F	G	290	
Carneval ☺	7	89	85	107	SL	M	75	F	P	F	G	n/a			230	
CDC Bronco	6	118	111	107	SL	M	75	F	VG	G	G	n/a	G	G	230	
CDC Golden	6	117	109	112	SL	M	85	F	VG	G	G	n/a	G	G	230	
CDC Handel	5	112	99	112	SL	L	75	P	VG	G	F	n/a	G	F	220	
CDC Mozart	9	114	107	111	SL	M	70	F	VG	G	F	n/a	G	F	220	
CDC Minuet	5	109	108	--	SL	M	70	F	VG	F	F	n/a	G	F	190	
Cutlass	6	114	109	105	SL	M	75	F	VG	F	G	n/a	F	G	220	
Delta ☺	4	101	98	--	SL	E	70	P	P	G	F	n/a			250	
DS Admiral ☺	5	101	110	96	SL	E	80	F	VG	G	G	n/a	G	G	240	
DS Stalwarth	4	97	95	103	SL	M	80	P	VG	G	F	n/a	G	G	240	
Eclipse ☺	7	110	107	108	SL	M	80	F	VG	G	G	n/a	F	G	250	
Miser ☺	5	108	113	91	SL	M	80	F	VG	G	F	n/a	G	G	190	
SW Carousel ☺	4	108	113	112	SL	E	85	F	VG	F	G	n/a	G	G	250	
SW Circus ☺	4	104	116	108	SL	E	75	F	P	F	G	n/a	F	G	220	
SW Capri ☺	4	102	108	--	SL	E	75	F	P	F	G	n/a	F	G	210	
SW Marquee ☺	3	114	103	119	SL	M	80	F	VG	G	G	n/a	G	G	220	
SW Midas ☺	4	109	97	109	SL	E	80	F	VG	G	G	n/a	G	G	220	
SW Prize	4	100	97	--	SL	E	80	F	P	G	G	n/a	G	G	240	
SW Salute ☺	5	111	109	85	SL	E	75	P	VG	F	F	n/a	F	F	220	
SWING ☺	5	95	99	--	SL	E	75	F	P	VG	G	n/a	G	G	250	
Topeka ☺	6	112	103	88	SL	E	65	F	VG	G	F	n/a	G	G	260	
Tudor ☺	4	106	99	109	SL	M	80	P	VG	F	G	n/a	G	F	270	
Green																
Bluebird ☺	3	98	99	94	SL	E	65	F	VG	G	F	F	F	n/a	250	
Camry ☺	4	111	96	102	SL	M	65	F	VG	F	G	F	G	n/a	260	
CDC Montero	6	99	95	91	SL	M	80	F	VG	G	F	F	F	n/a	230	
CDC Sage	4	106	94	96	SL	M	80	F	VG	G	G	G	F	n/a	220	
CDC Striker	6	100	108	104	SL	M	80	F	P	VG	G	G	G	n/a	230	
Cooper ☺	4	117	103	112	SL	L	80	F	VG	F	G	G	G	n/a	270	
Cruiser	4	91	87	--	SL	M	75	F	P	VG	F	G	G	n/a	200	
Madoc ☺	6	96	99	104	SL	E	70	P	P	F	F	F	F	n/a	250	
Majoret ☺	5	79	75	95	SL	M	60	P	P	G	G	F		n/a	250	
Millenium ☺	5	103	97	--	SL	E	65	P	P	F	F	F	F	n/a	260	
Nessie ☺	4	101	105	97	SL	E	70	F	P	F	G	F	F	n/a	270	
Nitouche ☺	9	94	97	96	SL	M	75	F	P	G	G	G	F	n/a	250	
Scuba ☺	4	82	87	--	SL	E	80	P	P	F	F	F	F	n/a	230	
Stratus ☺	7	114	106	105	SL	M	70	F	VG	G	F	F	G	n/a	270	
SW Parade ☺	5	99	91	102	SL	M	70	F	VG	G	F	F	G	n/a	220	
Toledo	4	87	95	--	SL	M	70	P	P	G	G	F	F	n/a	280	
Venture	4	97	88	--	SL	E	75	P	P	G	F	F	F	n/a	220	
Vortex	5	103	106	98	SL	E	75	P	P	F	F	G	F	n/a	190	
Maple																
CDC Acer	3	109	100	--	SL	L	60	F	VG	G	F	n/a	G	F	170	
Courier ☺	4	98	92	79	SL	M	75	F	P	F	P	n/a	G	F	210	
Whero	3	60	57	--	N	L	110	P	P	G	P	n/a		n/a	210	
Silage																
CDC Sonata	4	111	100	--	N	L	85	F	VG	F	F	n/a	F	F	220	
Trapper	7	74	73	--	N	L	95	P	P	F	P	n/a			140	
Victoria	7	80	77	--	N	M	85	P	P	F	P	n/a			190	
40-10	2	91	100	--	N	L	100	P	P	F	P	n/a	G		170	

* Co-op and regional trials in Saskatchewan

♥ N=normal leaf type; SL=semi-leafless

♣ Seed coat dimpling: VG=0-5%; G=6-20%; F=21-50%

◆ Green seed coats: Good = 0-10%; Fair = 11-25%

Relative ratings for disease, seed coat breakage, lodging, bleaching (for green seed varieties), seed coat dimpling, and green seed coats (for yellow seed varieties): VG=very good; G=good; F=fair; P=poor; VP=very poor

Additional Information:

For additional information, consult the Pulse Production Manual published by the Saskatchewan Pulse Growers.

Chickpea

Characteristics of Kabuli and Desi varieties

KABULI Variety	Years Tested	----Yield as % of Sanford----		Leaf Type**	Ascochyta Blight	Height (cm)	Days to Flower	Maturity	Seed Wt. (g/1000)
		Area 1*	Area 2*						
Sanford	9	100	100	U	VP	50	57	VL	415
Amit (B-90) ♦	8	141	142	F	F	50	55	L	265
CDC ChiChi	5	117	117	F	P	45	53	L	385
CDC Chico	7	136	147	F	P	45	51	M	265
CDC Diva	4	104	117	U	VP	45	52	L	490
CDC Frontier	5	164	160	F	F	45	55	L	375
CDC Xena	9	117	127	U	VP	45	52	L	470
CDC Yuma	7	113	116	F	P	50	53	VL	410
Dwelley	3	86	88	U	VP	45	57	VL	490
Evans	4	90	98	U	VP	50	53	VL	430

DESI Variety	Years Tested	---Yield as % of Myles---			Leaf Type**	Ascochyta Blight	Height (cm)	Days to Flower	Maturity	Seed Wt. (g/1000)	Seed Shape♦	Seed Coat Colour♥
		Area 1*	Area 2*	Area 3*								
Myles	9	100	100	F	F	40	50	M	200	A	T	
CDC Anna	8	108	113	F	F	40	52	L	210	P	T	
CDC Cabri	7	111	114	F	F	45	48	M	295	P	T	
CDC Desiray	7	97	108	F	F	35	49	M	210	P	LT	
CDC Nika	6	97	104	F	F	40	50	L	320	P	T	

* Area 1: brown soil zone; Area 2: dark brown soil zone

** Leaf type: F=fern; U=unifoliate

♦ Seed shape: P=plump; A=angular

♥ Seed coat color: T=tan; LT=light tan

Additional Information:

Chickpea is best adapted to stubble production in the Brown and Dark Brown soil zones. Chickpea is a deep-rooted crop which is efficient in water uptake. Planting on clay soils, regardless of soil zone, increases the risk of prolonged vegetative growth and failure to mature on time. This risk can be reduced by planting on sandier, drought prone soils. Chickpea will tolerate light frosts in the spring. Desi varieties can be seeded in late April or early May. Kabuli varieties should be planted between early to mid May into a warm seedbed, preferably at least 10°C average soil temperature at depth of seeding.

Ascochyta blight can completely destroy a chickpea crop. Varieties listed in the recommendation tables differ in their resistance from “Very Poor” to “Poor” to “Fair”; none are rated as “Good”. Fern-leaf varieties tend to develop less ascochyta blight than unifoliate-leaf varieties. Susceptibility to the disease increases at the flowering and early podding stage. Field scouting for disease symptoms

should begin in early June and continue throughout the growing season. Scouting should concentrate on areas where the risk of early infection is higher, e.g. fields adjacent to previous chickpea crops, where plant densities are higher, and in higher moisture areas. Scouting field margins is not sufficient. Fungicide application(s) are often necessary to protect crops. Disease risk is greater under conditions of frequent showers and/or heavy dew, and for varieties rated as Poor or Very Poor. Ascochyta blight is seed-borne and stubble-borne, therefore, growers should use seed with ascochyta blight levels as close to 0% as possible, and plant chickpea in the same field no more than once in four years.

Chickpea requires planting equipment with a seed-feeding mechanism capable of handling large seeds. Chickpea seeds are highly susceptible to damage and should be handled gently at all times. Seed treatment with a metalaxyl-based product for seed rot diseases is strongly recommended for kabuli varieties, and may be required for desi varieties if con-

ditions favour seed rotting diseases. Seed treatment with Crown or Apron Maxx RTA is strongly recommended for both desi and kabuli varieties to reduce the severity of seed-borne ascochyta blight. Plant chickpea seeds approximately 6 cm deep. Seeding rates vary with seed size; target 3-4 plants per sq. foot. Desi varieties are generally earlier maturing and higher yielding compared to the currently available kabuli varieties. The chickpea crop has stiff stems and can be swathed or straight cut at maturity. Thresh kabuli varieties gently to avoid seed splitting. All kabuli chickpea varieties listed have normal (“ram’s head”) seed shape, with the exception of Amit (B90) which has a round seed shape.

Certified Seed of **CDC Frontier, CDC Yuma, CDC Xena, CDC Chico, CDC Diva, CDC Desiray, CDC Anna, and CDC Nika** will be available in 2006. For more details on production consult the *Pulse Production Manual* on the Saskatchewan Pulse Growers website: www.saskpulse.com.

Dry Bean

Main characteristics varieties

Variety	Type	Years Tested*	-----Yield as % of CDC Pintium-----			Days to Flower	Maturity Rating	Pod Clearance♣	Seed Wt. (g/1000)	Growth Habit‡
			Irrigation	Area 2	Area 3					
CDC Pintium	pinto	9	100	100	100	50	E	80	350	I
CDC Camino	pinto	6	97	86	76	52	L	81	323	I
CDC Minto	pinto	7	90	102	98	51	M	62	410	III
CDC Pinnacle	pinto	6	102	103	98	53	L	67	352	III
Othello	pinto	6	96	96	89	52	L	51	323	III
Envoy	navy	5	73	76	92	53	M	73	184	I
CDC Whitecap	navy	6	88	95	95	56	M	75	194	II
Cruiser	navy	4	71	83	108	54	L	69	164	II
AC Polaris	great northern	6	95	84	97	52	L	70	310	III
CDC Polar Bear	great northern	5	95	87	77	52	L	65	339	III
US 1140	great northern	6	88	87	81	51	L	53	289	III
Viva	pink	4	94	102	80	51	L	50	242	III
AC Redbond	small red	6	95	102	97	51	M	65	290	II
AC Black Diamond	black	5	102	95	94	54	M	70	250	II
CDC Espresso	black	9	65	79	74	47	M	87	191	I
CDC Jet	black	6	70	97	107	58	L	80	175	II
CDC Nighthawk	black	5	62	61	67	58	L	77	165	II

* Co-op and regional trials grown in narrow rows. Direct comparisons to CDC Pintium since 1996

♣ Pod clearance: percentage of pods that completely clear the cutterbar at time of swathing

‡ Growth habit: I=determinate bush; II=indeterminate bush; III=indeterminate vine

Faba Bean

Main characteristics varieties

Variety	Years Tested	-----Yield % of Outlook-----		Maturity in Days	Seed Weight (g/1000)
		(Northeast) Dryland	(South Central) Irrigated		
Outlook	15	100	100	109	360
Aladin	15	104	110	112	400
CDC Blitz	6	101	105	109	410
CDC Fatima	8	100	104	105	520
Cresta	3	92	101	105	630
Orion	6	95	94	103	350
Scirocco	3	96	110	107	550

Additional Information:

Faba bean should be seeded early (late April to early May). It is best adapted to irrigated areas in the Dark Brown soil zone and the portion of the Black soil zone with the longest growing season.

Seed supplies of **CDC Blitz**, **Scirocco** and **Cresta** are limited.

Faba bean is a legume and thus is able to fix nitrogen from the air, provided the seed is inoculated with the proper bacteria prior to planting.

Oilseed Crops

Flax

Main characteristics varieties

Variety	Years Tested	-----Yield % of CDC Bethune*-----			Relative Maturity♣	Seed Size	Resistance to Lodging
		Area 1 & 2	Area 3 & 4	Irrigation			
CDC Bethune ☞	10	100	100	100	L	M	G
CDC Arras	10	95	92	92	M	L	F
AC Carnduff	8	86	89	91	M	M	G
Flanders	10	90	87	91	L	S	G
Hanley ☞	4	90	90	93	M	M	G
Lightning ☞	6	92	92	93	L	M	G
Macbeth ☞	4	91	93	94	L	M	G
CDC Mons	4	99	96	93	L	S	G
CDC Normandy	6	91	93	89	M	M	F
Prairie Blue ☞	4	99	92	97	L	S	VG
CDC Sorrel ☼	4	102	106	--	L	L	G
Taurus ☞	6	94	99	94	M	M	G
CDC Valour	6	91	86	84	E	M	G
Vimy	10	94	90	85	M	L	P
AC Watson ☞	6	88	93	92	M	M	G
Solin							
CDC Gold ☼	4	78	79	76	E	L	G
2047 ☞	4	86	89	86	M	M	G
2090 ☼	4	91	98	90	M	L	G
2149 ☼	4	88	97	--	M	M	G

* Data from Regional and Co-op trials

♣ Relative maturity: The relative maturity of the check, **CDC Bethune**, is L (on average 101 days from seeding to swathing ripeness)

Additional Information:

All varieties are resistant to rust and moderately resistant to fusarium wilt.

No seed of **CDC Sorrel** and **2149** will be available in 2006.

Solin is defined as a type of flax with less than 5% linolenic acid in its oil and having a yellow seed coat. Solin varieties produce food quality oil and, as such, cannot be sold in traditional flax markets. They are available only for contract production.

Frozen flax should be analyzed by a feed testing laboratory to determine that it is free of prussic acid before using it as a livestock feed.

Mustard

Main characteristics of varieties*

Variety	Yield % of AC Pennant	Plant Height (cm)	Mucilage ‡ cS ml/g Seed	Protein % Seed	Fixed Oil % Seed	Seed Weight (g/1000)
Yellow						
AC Pennant	100	92	31.9	35.4	29.4	5.57
AC Base	101	95	30.6	32.3	29.3	5.81
Ace	100	98	37.6	36.1	29.1	5.46
Tilney	98	93	36.8	35.9	29.3	5.70
Viscount	94	97	40.2	36.3	29.1	5.15
Andante	100	98	40.6	36.4	28.2	5.99

Variety	Yield % of Cutlass	Plant Height (cm)	Volatile Oil mg/g Seed	Protein % Seed	Fixed Oil % Seed	Seed Weight (g/1000)
Oriental						
Cutlass	100	108	10.1	29.6	41.6	2.75
Forge	97	120	10.6	30.2	39.0	2.54
AC Vulcan	100	109	11.3	30.4	41.2	2.85

Variety	Yield % of Commercial Brown	Plant Height (cm)	Volatile Oil mg/g Seed	Protein % Seed	Fixed Oil % Seed	Seed Weight (g/1000)
Brown						
Commercial Brown	100	106	8.54	29.0	38.6	2.61
Duchess	102	109	8.58	28.9	38.7	2.71

* All varieties are tested at all locations from Areas 1, 2 and 3 (1999 - 2004 Co-operative Mustard Test)

Yellow mustard 32 station-years (s/y) for yield, 24 s/y for seed quality; Brown and Oriental mustard 33 s/y for yield, 22 s/y seed quality

‡ Mucilage in centi Stoke per ml/1g seed (a measure of viscosity)

♣ Volatile Oil as allyl isothiocyanate

Sunflower (Oilseed)

Main characteristics of varieties

Variety	Years Tested	Yield % of 63A70	Average Maturity	Oil %*
63A70	7	100	122	48.2
63M02**	4	97	120	49.1

* Dry Basis

** Mid oleic NuSun

Sunflower (Oilseed) EMSS

Main characteristics of varieties

Variety	Years Tested	Yield (kg/ha) (8 yr. avg.)	Average Maturity	Oil %*
63A21	8	2096	114	47.0

* Dry Basis

Additional Information:

Three types of mustard are grown in western Canada: Yellow (*Sinapis alba*) Brown and Oriental (both *Brassica juncea*). Mustard is typically grown under contract, where the contractor specifies the variety to be grown to meet industry specifications for product quality. Mustard varieties mature in 88-90 days with yellow mustard maturing two days earlier than Oriental or Brown. All mustard varieties have good resistance to blackleg disease.

The yellow mustard varieties **AC Base**, **Ace** and **Andante** have similar yield to **AC Pennant**, while **Tilney** and **Viscount** are lower yielding. **AC Pennant** has shorter straw (92 cm) while newer varieties are slightly taller (95-98 cm). The protein contents of **Andante**, **Viscount**, **Tilney** and **Ace** are 0.5%-1.0% higher than **AC Pennant** and **AC Base**. High protein content is of importance for yellow mustard flour as an ingredient in meat products. A unique feature of yellow mustard is a high mucilage content. Mucilage is valued by the mustard industry as a stabilizer in prepared food products.

Brown mustard is grown primarily for use in the Dijon mustard market. There is one registered variety, **Duchess**, which is similar in overall performance to Commercial or Common Brown. Both varieties are highly susceptible to white rust disease.

Three varieties of oriental mustard are available for production. **AC Vulcan** has a higher seed weight and similar fixed oil content, higher protein content, slightly higher allyl content and brighter yellow seed than the standard, **Cutlass**. **Forge**, has lower yield, smaller seed, lower fixed oil content and matures 2 days later than **Cutlass**. **Cutlass** and **AC Vulcan** are resistant to white rust disease while **Forge** is susceptible. **Forge** is the tallest variety. There are no significant differences in green seed count among all varieties.

Additional Information:

Sunflower requires 105-125 days to mature, depending on the cultivar and the growing season. Oilseed sunflower has been grown in the Dark Brown and Black soil zones in southeastern Saskatchewan.

The earlier maturing, short stature (EMSS) varieties are adapted to production in most areas of Saskatchewan.

The Saskatchewan Sunflower Committee has been conducting trials in Saskatchewan for the purpose of registration and demonstration since 1983. Varieties that have been tested in official Saskatchewan Sunflower Committee trials for three years, continue to be tested and are registered for production in Canada, are placed on the list.

The Committee has been testing NuSun, a sunflower with a fatty acid profile desired by major frying companies. There will be additional acres of oilseed sunflower required to address the increased birdseed market.

Canola

Main characteristics of varieties

Current Name	Organization	Varietal Kind	Herbicide	Low Lin	-----Maturity-----			-----Yield-----			Maturity all zones +/- days	Height all zones +/- inches	Lodging all zones Rating +/- "better"	Blackleg Rating	
					Short season +/- days	Mid season +/- days	Long season +/- days	Short season 10 ST.YR*	Mid season 13 ST.YR*	Long season 3 ST.YR*					Overall Average
B. napus as compared to 46A65															
46A65	Pioneer Hi-Bred	O	CO		0.0	0.0	0.0	100	100	100	100	0.0	0	0	R
Nex 824CL	Dow AgroSciences	O	CF	•		2.4	5.0		91	94	91	2.9	-0	-0	R
Nex 828CL	Dow AgroSciences	O	CF	•		1.7	2.3		97	90	96	1.8	4	1	R
Nex 830CL	Dow AgroSciences	O	CF	•		3.0	3.6		101	97	100	3.1	2	-0	R
292CL	Monsanto Canada Inc.	O	CF		0.6	0.9	-0.9	105	101	115	104	0.6	-1	0	R
71-20 CL	Monsanto Canada Inc.	H	CF		-6.4	-2.1	-3.5	102	105	105	104	-3.8	-0	-0	R
45H72	Pioneer Hi-Bred	H	CF		-2.3	-0.4	-1.1	109	114	111	112	-1.2	3	-0	R
46H70	Pioneer Hi-Bred	H	CF		0.8	0.3	0.4	103	103	108	104	0.4	2	0	R
Manor	FarmPure Seeds	O	CF		2.7	2.0	1.0	102	104	105	103	2.1	-1	-0	MS
SP 442 CL	Sask Wheat Pool Inc.	H	CF			-2.3			99		99	-2.3	0	-0	MR
SP Deliver CL	Sask Wheat Pool Inc.	O	CF		-1.5	-1.4		89	89		89	-1.4	-3	0	MR
5020	Bayer CropScience	H	LL		-4.7	-1.3	-4.3	128	126	124	126	-2.8	-0	0	R
5030	Bayer CropScience	H	LL		0.8	-0.3	-1.5	127	131	130	129	-0.0	5	1	R
5070	Bayer CropScience	H	LL		1.0	-0.2	-0.4	124	130	131	128	0.2	4	0	R
423_02	Brett-Young Seeds	O	RR		1.6	0.4	0.4	96	93	97	94	0.8	-1	0	R
624 RR	Brett-Young Seeds	H	RR		0.6	-0.4	-1.2	107	102	97	103	-0.2	2	1	R
829 RR	Brett-Young Seeds	O	RR		-1.9	-1.4	-2.0	96	99	101	98	-1.7	-2	-0	R
904_02	Brett-Young Seeds	O	RR		-0.4	-0.6	-2.9	99	99	97	99	-0.7	-1	-0	MR
1818	Canterra Seeds Ltd.	O	RR			-0.5	-0.2		107	122	110	-0.4	-5	0	R
1839V	Canterra Seeds Ltd.	O	RR		-7.2			98			97	-7.2	-7	1	MR
1841	Canterra Seeds Ltd.	H	RR			0.6	-0.8		114	120	115	0.3	2	1	R
1851H	Canterra Seeds Ltd.	H	RR			-1.7			111		111	-1.7	-1	0	MR
1896	Canterra Seeds Ltd.	H	RR		-6.7	-3.2		101	100		101	-4.6	-2	-0	R
CC504-03	Canterra Seeds Ltd.	O	RR			0.7	0.6		107	103	106	0.7	2	-0	MR
IMC209RR	Cargill Specialty Canola Oils	O	RR	•		1.8	1.8		98	93	97	1.8	1	0	MR
v1030	Cargill Specialty Canola Oils	H	RR	•	-4.3	-1.8	-1.0	113	108	113	110	-2.5	1	-0	MR
v1031	Cargill Specialty Canola Oils	H	RR	•	-2.2	-0.7	-1.9	113	109	101	110	-1.3	2	-0	MR
71-25 RR	Monsanto Canada Inc.	H	RR		-4.4	-2.1		106	105		106	-3.0	0	0	R
71-45 RR	Monsanto Canada Inc.	H	RR		-4.7	-3.3	-4.0	116	110	108	112	-3.8	-1	-0	MR
71-85 RR	Monsanto Canada Inc.	H	RR			-0.5			109	109	109	-0.5	2	-0	R
43A56	Pioneer Hi-Bred	O	RR		-10.1	-5.6	-5.8	98	89	81	92	-7.3	-2	-0	MR
45H21	Pioneer Hi-Bred	H	RR		-4.2	-1.3	-1.9	115	117	116	116	-2.4	1	0	R
45H24	Pioneer Hi-Bred	H	RR		-1.9	-0.8	-1.7	120	112	115	115	-1.3	2	0	R
45H25	Pioneer Hi-Bred	H	RR		-3.5	-2.0	-2.8	117	110	114	113	-2.6	3	0	R
46H23	Pioneer Hi-Bred	H	RR		0.4	0.2	-0.2	106	101	105	104	0.2	0	-0	R
9451	PROVEN SEED	S	RR		-2.9	-1.0		106	103		104	-1.8	1	-0	MR
9550	PROVEN SEED	O	RR		-2.6	-1.3	-0.9	101	98	101	100	-1.7	0	-0	R
Reaper	FarmPure Seeds	O	RR		2.5	1.2	1.0	97	98	115	99	1.6	1	0	R
SW GladiatorRR	FarmPure Seeds	S	RR		-2.3	-0.8	-3.0	102	102	96	101	-1.6	-0	0	MR
NR01-5660	Sask Wheat Pool Inc.	O	RR		0.5	0.2		91	92		92	0.3	-1	0	R
SP 451 RR	Sask Wheat Pool Inc.	H	RR			-2.3	-3.3		103	106	104	-2.5	-1	-0	MR
SP Banner	Sask Wheat Pool Inc.	O	RR		-0.2	-0.8	-1.9	104	97	88	98	-0.7	0	0	R
SP Craven	Sask Wheat Pool Inc.	O	RR	•		-0.4			78		78	-0.4	-4	-1	R
SP Desirable RR	Sask Wheat Pool Inc.	S	RR		-2.2	-2.6	-3.4	114	107	107	110	-2.6	0	0	R
FortuneRR	Secan	O	RR		-2.4	-1.2		97	94		95	-1.7	-0	0	R
821RR	Svalof Weibull	H	RR		-0.3	-1.0	-1.3	109	102	110	106	-0.8	2	0	MR
SW 3950	Svalof Weibull	H	RR		-3.2	-1.4	-2.6	108	111	101	108	-2.2	1	0	MR
SW 6802	Svalof Weibull	S	RR		-5.1	-2.8		103	105		104	-3.7	-0	-0	MR
SW G5246 RR	Svalof Weibull	O	RR		-1.2	-0.7	-1.6	108	108	112	109	-1.0	1	-0	MR

B. rapa compared to AC Sunbeam (from 2005 Canola table)								7 ST.YR	3 ST.YR					
AC PARKLAND	AAFC	O	CO		2	4		96	82		2	2	0	n/a
AC SUNBEAM	AAFC	O	CO		0	0		100	100		0	0	0	n/a
ACS-C7	AAFC	S	CO		2	2		96	97		2	3	0	n/a
SW SPIRIT RIVER	Peace Pedigreed Seed	O	CO		5	5		97	73		5	2	0	n/a

* ST.YR = Station Year

♣ Varietal Kind: H=Hybrid, S=Synthetic, O=Open Pollinated

♣ Herbicide: CO=Conventional, CF=Clearfield, LL=Liberty, RR=Roundup Ready

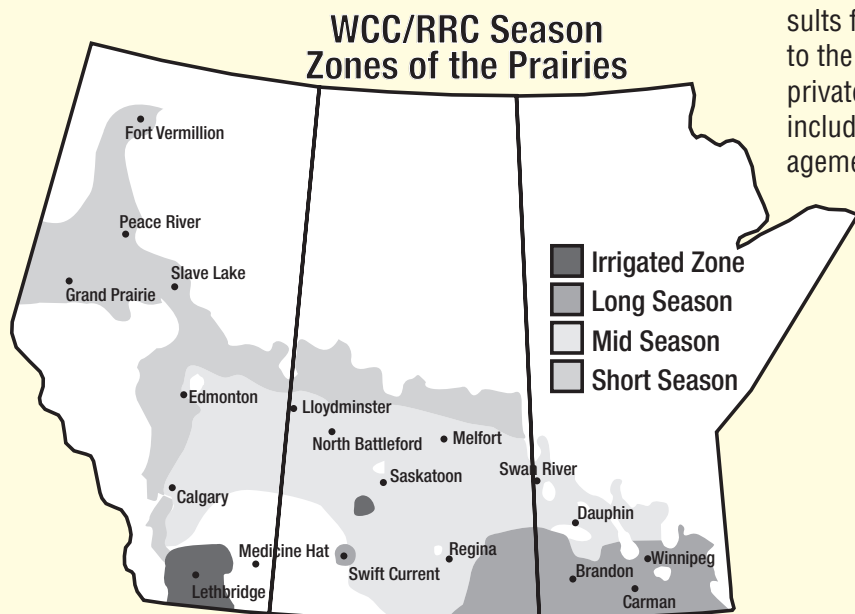
Additional Information

The Prairie Canola Variety Testing (PCVT) program entered its third year in 2005. The testing system unites the provincial variety testing programs to standardize protocol and improve trial consistency and quality. Now growers can look to a single source of information on how a canola variety performed in three different zones across western Canada. The canola seed industry, WCC/RRC, Alberta Agriculture, Food and Rural Development, Saskatchewan Agriculture and Food, Manitoba Agriculture Food and Rural Initiatives, Agriculture and Agri-Food Canada and the Canola Council of Canada contributed to the development and operation of the PCVT.

Trials were conducted by seed companies, government researchers and independent contractors in three growing zones across the prairies: short-, mid- and long-season zones (see map). Varietal characteristics appear in the table. **It is important to note that this table represents data collected in one year only (2005).** Site-specific data can be found in the Canola Digest or on the CCC website (<http://www.canola-council.org/pod>).

Interpreting PCVT information:

1. Use the map to identify your zone of adaptation. For site-specific data please refer to the *Canola Digest* or the Canola Council of Canada website. Don't limit your search to the areas closest to you. Comparing local results to other locations with similar growing conditions can also be valuable.
2. Zone tables show the actual yield of the Argentine check (46A65) or Polish check (AC Sunbeam) and other variety yields relative to the check. Although variety trials are carefully conducted, small percentage differences (e.g. <5%) in yield are usually insignificant.
3. The table includes information on maturity, resistance to lodging, blackleg resistance, varietal type (open-pollinated, hybrid, synthetic) and herbicide tolerance. Use this information in addition to yield to choose a variety.



Argentine Canola

Argentine varieties mature two weeks later than Polish varieties and are therefore better suited to the mid- and long-season growing areas of Saskatchewan. Blackleg disease, which is now widespread in Saskatchewan, can cause severe yield losses in varieties that are susceptible (S). Argentine varieties are susceptible to seed shattering when left standing at full maturity. Later maturing varieties tend to produce higher levels of green seed under wet and cool conditions at harvest, which can cause substantial grade reductions. The control of herbicide tolerant canola volunteers requires good agronomic practice such as proper crop and herbicide rotation.

Polish Canola

Polish varieties mature approximately two weeks earlier than Argentine varieties and are therefore less likely to produce green seed. Polish varieties are more heat and drought tolerant than Argentine varieties. They are also more shatter resistant than Argentine varieties and are therefore well suited to straight combining.

Brassica juncea Canola

Brassica juncea canola is a new class of canola that is adapted to the brown and dark brown soil zones. It has very good resistance to blackleg and exhibits better heat and drought tolerance than other canolas. Juncea canola has shattering resistance similar to Polish canola, and is therefore well suited to straight combining. All production is contracted. The first two varieties, Arid and Amulet, yield approximately 112% of AC Excel (Argentine) in their zone of adaptation. The variety Dahinda yields about 103% of Arid and Amulet. A new variety, Estlin, has excellent lodging resistance and yields 105% of Arid and Amulet. Limited seed will be available in 2006.

The Canola POD

The Canola POD, or Performance On-line Database (<http://www.canola-council.org/pod>), was developed by the Canola Council of Canada to allow farmers to explore canola performance trial results from a broad range of sources in their own area. In addition to the Prairie Canola Variety Trial results, POD provides access to private seed company performance trial information which often includes more detailed information, such as notes on site management.

Breeding Institutions and Seed Distributors of Varieties Listed in this Publication

Crop Kind, Class & Variety	Breeding Institution	Distributor	Crop Kind, Class & Variety	Breeding Institution	Distributor
Wheat			Winter Wheat		
Bread Wheat			AC Bellatrix	AAFC (Lethbridge)	FarmPure Seeds
5500HR	Agripro / Agricore United	Proven Seed	CDC Buteo	U of S - CDC	SeCan Members
5600HR	Agripro / Agricore United	Proven Seed	CDC Clair	U of S - CDC	SeCan Members
5601HR	Agripro / Agricore United	Proven Seed	CDC Falcon	U of S - CDC	SeCan Members
5602HR	Agripro / Agricore United	Proven Seed	CDC Harrier	U of S - CDC	SeCan Members
AC Abbey	AAFC (Swift Current)	Canterra Seeds	CDC Kestrel	U of S - CDC	Canterra Seeds
AC Barrie	AAFC (Swift Current)	SeCan Members	CDC Osprey	U of S - CDC	Canterra Seeds
CDC Bounty	U of S - CDC	Canterra Seeds	CDC Raptor	U of S - CDC	SeCan Members
AC Cadillac	AAFC (Swift Current)	FarmPure Seeds	McClintock	U of M (Winnipeg)	Canterra Seeds
AC Cora	AAFC (Winnipeg)	SeCan Members	Radiant	AAFC (Lethbridge)	Canterra Seeds
AC Domain	AAFC (Winnipeg)	SeCan Members			
AC Eatonia	AAFC (Swift Current)	Willms Seeds (AB)			
AC Elsa	AAFC (Swift Current)	SeCan Members	Winter Rye		
CDC Go	U of S - CDC	Public	Prima	AAFC (Swift Current)	SeCan Members
CDC Imagine	U of S - CDC	Sask. Wheat Pool Inc	AC Remington	AAFC (Swift Current)	Proven Seed
CDC Alsask	U of S - CDC	Sask. Wheat Pool Inc	AC Riffe	AAFC (Swift Current)	Proven Seed / Canterra
Infinity	AAFC (Swift Current)	Canterra Seeds	RT193	AAFC (Swift Current)	SeCan Members
AC Intrepid	AAFC (Swift Current)	Canterra Seeds			
Harvest	AAFC (Winnipeg)	FarmPure Seeds	Triticale		
Journey	Sask. Wheat Pool Inc.	Sask. Wheat Pool Inc	AC Alta	AAFC (Swift Current)	Progressive Seeds
Katepwa	AAFC (Winnipeg)	SeCan Members	AC Ultima	AAFC (Swift Current)	FarmPure Seeds
Laura	AAFC (Swift Current)	SeCan Members	AC Certa	AAFC (Swift Current)	Progressive Seeds
Lillian	AAFC (Swift Current)	SeCan Members	AC Copia	AAFC (Swift Current)	FarmPure Seeds
Lovitt	AAFC (Swift Current)	Canterra Seeds	Bobcat	AAFRD (Lacombe)	Progressive Seeds
McKenzie	Sask. Wheat Pool Inc.	Sask. Wheat Pool Inc	Pika	AAFRD (Lacombe)	Progressive Seeds
		Proven Seed	Pronghorn	AAFRD (Lacombe)	Progressive Seeds
		Public	Sandro	Swiss Fed Ag Res	SW Seed Canada Ltd
CDC Osler	U of S - CDC	Canterra Seeds			
Peace	AAFC (Winnipeg)	Sask. Wheat Pool Inc	Malting Barley		
Prodigy	Sask. Wheat Pool Inc.	Proven Seed	Two-Row		
		SeCan Members	AC Bountiful	AAFC (Brandon)	FarmPure Seeds
Somerset	AAFC (Winnipeg)	SeCan Members	Calder	AAFC (Brandon)	SeCan Members
AC Splendor	AAFC (Winnipeg)	SeCan Members	CDC Copeland	U of S - CDC	SeCan Members
Superb	AAFC (Winnipeg)	SeCan Members	Harrington	U of S - CDC	SeCan Members
CDC Teal	U of S - CDC	FarmPure Seeds	CDC Kendall	U of S - CDC	Sask. Wheat Pool Inc.
					Agricore United
Canada Prairie Spring Wheat			Merit	Bush Ag Res. Inc.	Sask. Wheat Pool Inc.
5700PR	Agripro / Agricore United	Proven Seed			Agricore United
5701PR	Agripro / Agricore United	Proven Seed			Sask. Wheat Pool Inc.
AC Crystal	AAFC (Swift Current)	SeCan Members	AC Metcalfe	AAFC (Brandon)	Agricore United
AC Foremost	AAFC (Swift Current)	SeCan Members	Newdale	AAFC (Brandon)	SeCan Members
AC Karma	AAFC (Swift Current)	SeCan Members	CDC Select	U of S - CDC	FarmPure Seeds
AC Taber	AAFC (Swift Current)	SeCan Members	Stein	U of S - CDC	Agricore United
AC Vista	AAFC (Swift Current)	FarmPure Seeds	CDC Stratus	U of S - CDC	Proven Seed
					FarmPure Seeds
Canada Western Extra Strong					
Amazon	University of Manitoba	Canterra Seeds	Six-Row		
Burnside	AAFC (Winnipeg)	Faurschou Farms Ltd.	B1602	Bush Ag Res. Inc.	Sask. Wheat Pool Inc.
AC Corinne	AAFC (Winnipeg)	FarmPure Seeds	CDC Battleford	U of S - CDC	SeCan Members
AC Glenavon	AAFC (Winnipeg)	SeCan Members	CDC Clyde	U of S - CDC	Agricore United / Proven Seed
Glenlea	University of Manitoba	Public	Excel	U of Minnesota	
CDC Rama	U of S - CDC	FarmPure Seeds	Legacy	Bush Ag Res. Inc.	Sask. Wheat Pool Inc.
CDC Walrus	U of S - CDC	Public			Agricore United
			Robust	U of Minnesota	FarmPure Seeds
Hard White Spring Wheat			CDC Sisler	U of S - CDC	Cargill Seed, Others
Kanata	AAFC (Winnipeg)	FarmPure Seeds	CDC Springside	U of S - CDC	Proven Seed
Snowbird	AAFC (Winnipeg)	FarmPure Seeds	CDC Tisdale	U of S - CDC	Proven Seed
			Tradition	Bush Ag Res. Inc.	FarmPure Seeds
Durum					Sask. Wheat Pool Inc.
AC Avonlea	AAFC (Swift Current)	FarmPure Seeds			Agricore United
Commander	AAFC (Swift Current)	Sask. Wheat Pool Inc.	CDC Yorkton	U of S - CDC	FarmPure Seeds
Kyle	AAFC (Swift Current)	SeCan Members	CDC Laurence	U of S - CDC	Canterra Seeds Ltd.
AC Morse	AAFC (Winnipeg)	SeCan Members			
AC Napoleon	AAFC (Winnipeg)	Canterra Seeds			
AC Navigator	AAFC (Swift Current)	Sask. Wheat Pool Inc.			
Strongfield	AAFC (Swift Current)	SeCan Members			
Soft White Spring Wheat					
AC Andrew	AAFC (Lethbridge)	SeCan Members			
Bhishaj	AAFC (Lethbridge)	Tony Crooymans			
AC Nanda	AAFC (Lethbridge)	FarmPure Seeds			
AC Phil	AAFC (Lethbridge)	SeCan Members			
AC Reed	AAFC (Lethbridge)	SeCan Members			

Breeding Institutions and Seed Distributors of Varieties Listed in this Publication

Crop Kind, Class & Variety	Breeding Institution	Distributor	Crop Kind, Class & Variety	Breeding Institution	Distributor
Feed Barley			Oats (cont'd)		
Feed			Lu	AAFC (Lacombe)	SeCan Members
CDC Bold	U of S - CDC	Canterra Seeds Ltd.	Pinnacle	AAFC (Winnipeg)	FarmPure Seeds
Conlon	North Dakota State University	Seed Depot Corp.	Ronald	AAFC (Winnipeg)	SeCan Members
CDC Cowboy	U of S - CDC	SeCan Members	Triple Crown	SW Seed Ltd.	SW Seed Canada Ltd
CDC Dolly	U of S - CDC	SeCan Members			
CDC Earl	U of S - CDC	SeCan Members			
CDC Fleet	U of S - CDC	FarmPure Seeds			
AC Harper	AAFC (Lethbridge)	SeCan Members	Canary Seed		
CDC Helgason	U of S - CDC	SeCan Members	Cantate		
Kasota	AAFRD (Lacombe)	SeCan Members	Elias	U of Minnesota; U of S - CDC	Public
Lacey	U of Minnesota	SeCan Members	Keet	U of Minnesota; U of S - CDC	Public
AC Lacombe	AAFC (Lacombe)	SW Newfield Seeds	CDC Maria	U of S - CDC	C. Special Crops
Mahigan	AAFRD (Lacombe)	SeCan Members	CDC Togo	U of S - CDC	Canterra Seeds
Manny	AAFRD (Lacombe)	SeCan Members			
McLeod	Westbred, LLC	Agricore United	Safflower		
		Sask. Wheat Pool Inc.	Saffire	AAFC (Lethbridge)	Jerry Kubic (AB)
		SeCan Members	AC Sunset	AAFC (Lethbridge)	Proven Seed
		Canterra Seeds Ltd.			
Niska	AAFRD (Lacombe)	SeCan Members	Lentil		
Ponoka	AAFRD (Lacombe)	SeCan Members	CDC Blaze	U of S - CDC	Sask. Pulse Growers
AC Rosser	AAFC (Brandon)	SeCan Members	Crimson	USDA / Washington State U	Public
Rivers	AAFC (Brandon)	Canterra Seeds Ltd.	Eston	U of S - CDC	SeCan Members
CDC Trey	U of S - CDC	FarmPure Seeds	CDC Glamis	U of S - CDC	Sask. Pulse Growers
Trochu	AAFRD (Lacombe)	SeCan Members	CDC Grandora	U of S - CDC	Sask. Pulse Growers
Vivar	AAFRD (Lacombe)	SeCan Members	Laird	U of S - CDC	SeCan Members
Xena	Agricore / W. Plant Breeders	Agricore United	CDC LeMay	U of S - CDC	Sask. Pulse Growers
	Sask. Wheat Pool Inc.		CDC Meteor	U of S - CDC	Sask. Pulse Growers
			CDC Milestone	U of S - CDC	Sask. Pulse Growers
			CDC Plato	U of S - CDC	Sask. Pulse Growers
Hulless			CDC Redberry	U of S - CDC	Sask. Pulse Growers
AC Bacon	AAFC (Brandon)	SeCan Members	CDC Redcap	U of S - CDC	Sask. Pulse Growers
CDC Freedom	U of S - CDC	SeCan Members	CDC Richlea	U of S - CDC	SeCan Members
CDC Gainer	U of S - CDC	FarmPure Seeds	CDC Robin	U of S - CDC	Sask. Pulse Growers
HB 805	W. Plant Breeders	Agricore United	CDC Rosetown	U of S - CDC	Sask. Pulse Growers
CDC McGwire	U of S - CDC	SeCan Members	CDC Rouleau	U of S - CDC	Sask. Pulse Growers
Peregrine	AAFRD (Lacombe)	Progressive Seeds Ltd.	CDC Sedley	U of S - CDC	Sask. Pulse Growers
			CDC Sovereign	U of S - CDC	Sask. Pulse Growers
			CDC Vantage	U of S - CDC	Sask. Pulse Growers
			CDC Viceroy	U of S - CDC	Sask. Pulse Growers
Forage					
CDC Cowboy	U of S - CDC	SeCan Members	Field Pea		
Dillon	W. Plant Breeders	Agricore United	40-10	SWS, Germany	FarmPure Seeds Inc.
AC Ranger	AAFC (Brandon)	FarmPure Seeds	CDC Acer	U of S - CDC	Sask. Pulse Growers
Westford	W. Plant Breeders	Agricore United	DSAdmiral	Danisco Seeds	FarmPure Seeds Inc.
		Sask. Wheat Pool Inc.	Alfetta	Cebeco Zaden	FarmPure Seeds Inc.
			Bluebird	Cebeco Zaden	Bob Park - Lacombe, AB
Food Barley			CDC Bronco	U of S - CDC	Sask. Pulse Growers
CDC Alamo	U of S - CDC	Agricore United	CDC Golden	U of S - CDC	Sask. Pulse Growers
CDC Candle	U of S - CDC	Agricore United	Camry	Cebeco Zaden	FarmPure Seeds Inc.
CDC Fibar	U of S - CDC	Agricore United	SW Capri	SW Seed Ltd.	Canterra Seeds
HB803	W. Plant Breeders	Agricore United	Carneval	SW Seed Ltd.	Sask. Wheat Pool Inc.
Merlin	W. Plant Breeders	Agricore United	SW Circus	SW Seed Ltd.	SeCan Members
CDC Rattan	U of S - CDC	Agricore United	Cruiser	NZ Crop & Food	Canterra Seeds
			Cutlass	AAFRD / CDC	Sask. Pulse Growers
			Courier	NZ Crop & Food	Canterra Seeds
			Delta	Cebeco Zaden	FarmPure Seeds Inc.
			Eclipse	Cebeco Zaden	FarmPure Seeds Inc.
			CDC HANDEL	U of S - CDC	Sask. Pulse Growers
			Madoc	Terramax	
			MAJORET	SW Seed Ltd.	SW Seed Ltd.
			SW Marquee	SW Seed Ltd.	Sask. Wheat Pool Inc.
			SW Midas	SW Seed Ltd.	FarmPure Seeds Inc.
			Millenium	Mansholt	Terramax
			Miser	AAFC	FarmPure Seeds Inc.
			CDC Minuet	U of S - CDC	Sask. Pulse Growers
			CDC Montero	U of S - CDC	Sask. Pulse Growers
			CDC MOZART	U of S - CDC	Sask. Pulse Growers
			Nessie	SW Seed Ltd.	FarmPure Seeds Inc.
			NITOUCHE	DLF Trifolium (Denmark)	FarmPure Seeds Inc.
			CDC Sage	U of S - CDC	Sask. Pulse Growers
			SW Carousel	SW Seed Ltd.	SW Seed Ltd.
			SW Parade	SW Seed Ltd.	Sask. Wheat Pool Inc.

Breeding Institutions and Seed Distributors of Varieties Listed in this Publication

Crop Kind, Class & Variety	Breeding Institution	Distributor	Crop Kind, Class & Variety	Breeding Institution	Distributor
Field Pea (cont'd)			Flax (cont'd)		
SW Prize	SW Seed Ltd.	Nodricks Norsask Ltd.	Flanders	U of S - CDC	SeCan Members
SW Salute 🌱	SW Seed Ltd.	SW Seed Ltd.	Hanley 🌱	AAFC (Morden)	SeCan Members
Cooper	Cebeco Zaden	Canterra Seeds	Lightning 🌱	AAFC (Morden)	Canterra Seeds
Scuba 🌱	Advanta Seeds	FarmPure Seeds Inc.	Macbeth 🌱	AAFC (Morden)	Proven Seed
CDC Sonata	U of S - CDC	Sask. Pulse Growers	CDC Mons	U of S - CDC	FarmPure Seeds
DS Stalwarth	Danisco Seeds	Secan Members	CDC Normandy	U of S - CDC	SeCan Members
CDC Striker	U of S - CDC	Sask. Pulse Growers	Prairie Blue 🌱	AAFC (Morden)	SeCan Members
Stratus 🌱	Cebeco Zaden	Canterra Seeds	CDC Sorrel	U of S - CDC	SeCan Members
SWING 🌱	Cebeco Zaden	FarmPure Seeds Inc.	Taurus 🌱	Cebeco Zaden	FarmPure Seeds
TOLEDO	Cebeco Zaden	Canterra Seeds	CDC Valour	U of S - CDC	SeCan Members
Topeka 🌱	Cebeco Zaden	Canterra Seeds	Vimy	U of S - CDC	SeCan Members
Trapper	AAFC (Morden)	Public	AC Watson 🌱	AAFC (Morden)	Sask. Wheat Pool Inc.
Tudor	Cebeco Zaden	FarmPure Seeds Inc.	CDC Gold	U of S - CDC	Sask. Wheat Pool Inc.
Venture	Axel Toft	Johnson Seeds (MB)	2047 🌱	CSIRO / UGG	Proven Seed
Victoria	SW Seed Ltd.	SW Seed Canada Ltd.	2090	CSIRO / UGG	Proven Seed
Vortex	Globe Seeds (Netherlands)	Terramax	2149	CSIRO / UGG	Proven Seed
Whero	Challenge Seeds	SW Seed Ltd.			
Chickpea			Mustard		
Desi			Brown		
CDC Anna	U of S - CDC	Sask. Pulse Growers	commercial		Trade
CDC Gabri	U of S - CDC	Sask. Pulse Growers	Duchess	Proven Seed	Proven Seed
CDC Desiray	U of S - CDC	Sask. Pulse Growers	Oriental		
Myles	USDA / Washington State U	Public	Cutlass	AAFC (Saskatoon)	Trade
CDC Nika	U of S - CDC	Sask. Pulse Growers	Forge	Colman's of Norwich	Sask. Wheat Pool Inc.
			AC Vulcan	AAFC (Saskatoon)	Trade
Kabuli			Yellow		
Amit (B-90) 🌱		Proven Seed	AC Base	AAFC (Saskatoon)	Trade
CDC Chico	U of S - CDC	Sask. Pulse Growers	AC Pennant	AAFC (Saskatoon)	Trade
CDC ChiChi	U of S - CDC	Sask. Pulse Growers	Ace	John S. Hemingway	Proven Seed
CDC Diva	U of S - CDC	Sask. Pulse Growers	Andante		Trade
Dwellely	USDA / Washington State U	Public	Tilney	Colman's of Norwich	Proven Seed
Evans	USDA / Washington State U	Public	Viscount	Colman's of Norwich / UGG	Proven Seed
CDC Frontier	U of S - CDC	Sask. Pulse Growers			
Sanford	USDA / Washington State U	Public	Sunflower		
CDC Xena	U of S - CDC	Sask. Pulse Growers	63A21	Pioneer Hi-Bred	Pioneer Hi-Bred
CDC Yuma	U of S - CDC	Sask. Pulse Growers	63A70	Pioneer Hi-Bred	Pioneer Hi-Bred
			63M02	Pioneer Hi-Bred	Pioneer Hi-Bred
Dry Bean			Canola - see Canola table VR20		
AC Polaris					
AC Redbond					
CDC Camino	U of S - CDC	Sask. Pulse Growers			
Envoy					
Othello	USDA / ARS (Prosser, WA)	Public			
US 1140	USDA	Public			
CDC Espresso	U of S - CDC	Canterra Seeds			
CDC Jet	U of S - CDC	B&J Martens Seeds			
CDC Minto	U of S - CDC	Canterra Seeds			
CDC Nighthawk	U of S - CDC	FarmPure Seeds			
CDC Pintium	U of S - CDC	Sask. Pulse Growers			
CDC Polar Bear	U of S - CDC	Canterra Seeds			
Viva	Public				
CDC Whitecap	U of S - CDC	Canterra Seeds			
CDC Pinnacle	U of S - CDC	Sask. Pulse Growers			
Cruiser					
AC Black Diamond					
Faba Bean			Abbreviations used in this list		
Aladin	University of Manitoba	Public	AC	Prefix to variety names Agriculture Canada (Agriculture and Agri-Food Canada)	
CDC Blitz	U of S - CDC		AAFC	Agriculture and Agri-Food Canada	
Cresta	Saatbau Linz	Canterra Seeds	CDC	Crop Development Centre	
		Agriprogress Inc.	AAFRD	Alberta Agriculture Food and Rural Development, Lacombe, Alta.	
CDC Fatima	U of S - CDC	R.Legumex / Walker S.	U	University	
Orion	AAFC (Lacombe)	Roger Lee, Lyster Farm	U of S	University of Saskatchewan	
Outlook	U of S - CDC	SeCan Members	USDA	United States Department of Agriculture	
Scirocco	NPZ-Lembke	Agriprogress Inc.			
Flax					
CDC Arras	U of S - CDC	FarmPure Seeds			
CDC Bethune 🌱	U of S - CDC	SeCan Members			
AC Carnduff	AAFC (Morden)	SeCan Members			