



Alberta

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VARIETIES OF CEREAL AND OILSEED CROPS FOR ALBERTA – 1979

Prepared by the Alberta Cereal and Oilseed Advisory Committee
of the Alberta Agricultural Co-ordinating Committee.

EXPLANATORY

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, rapeseed, mustard 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.

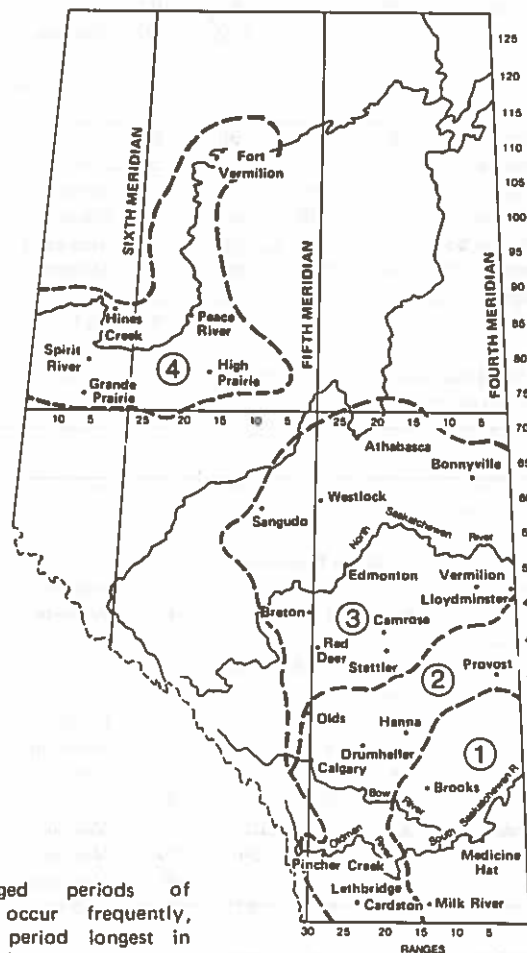
MATURITY

The tables show relative yields for four production areas. Relative maturity is shown as early, medium-early, medium-late and late. The 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 central and northern 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: Neepawa wheat – 120 days, Park – 116, Grizzly oats – 114, Random – 107, Galt barley – 105, Olli – 92, Redwood 65 Flax – 130, Noralta – 117, Midas rapeseed – 115, and Torch 95 days. In southern Alberta, Neepawa can be expected to mature in 100 to 105 days and other crops are similarly earlier maturing. The comparisons among varieties within crops, however, tend to remain fairly uniform regardless of where the crops are grown.

DISEASE, SEED TREATMENT, GOOD SEED

- Seed of rye and flax should be treated to control seedling blight and rapeseed to control the seed borne phase of blackleg.
- Cereal smuts can be controlled with seed treatment fungicides. See Alberta Agriculture publication *Seed Treatment of Cereal and Oilseed Crops – 1979 (FS100/632)*.
- Treated seed must not be fed to livestock or poultry or sold for feed. Refer to label for maximum period for storing treated seed. Storage period for fungicide-insecticide combination product is shorter. Refer to label. Small quantities of excess seed can be buried or burned! Do not expose to wildlife!
- Costs of crop production are becoming extremely high – land use, machinery, fertilizers, chemicals, labor, etc. In relation to this total, the cost of GOOD SEED, a most important production factor, is very small.
- The only way to be absolutely sure of obtaining a particular variety is by use of PEDIGREE SEED.
- Certified seed may be purchased in bulk from authorized suppliers.



AREAS

- ① Prolonged periods of drought occur frequently, frost-free period longest in Alta., high velocity winds common, sawfly outbreaks occur.
- ② Drought periods occur frequently generally not as prolonged as in ①, frost-free period relatively long, high velocity winds common in southern half, stem rust may occur, sawfly infestations may occur in southern half.
- ③ Rainfall usually adequate for cereal & oilseed crops, frost hazard in western & northern portions, stem rust may occur in eastern portion.
- ④ Rainfall generally adequate for cereal & oilseed crops, frost-free period may be shorter than in ③ but longer days usually bring about more rapid growth.

Tear out and retain for future reference

The Alberta Cereal and Oilseed Advisory Committee coordinates the findings of the various research institutions in Alberta and in this publication describes those varieties that are suited for

production in Alberta. The Committee is comprised of representatives from the University of Alberta, Agriculture Canada, and Alberta Agriculture.

For more detailed information consult your district agriculturist.

COMPARISON OF VARIETIES

Symbols used in Tables: *Variety may not be described in 1980
 ---Denotes variety not generally suited to area

BARLEY												
Variety	Areas (See Map)				Relative Maturity	No. of Rows	Awn Type	Resistance to:				
	Yields as % of Galt in areas							Lodging	Shattering	Loose Smut	False Loose & Covered Smut	Common Root Rot
	1	2	3	4								
ELIGIBLE FOR FEED GRADES ONLY												
Galt	100	100	100	100	Medium	6	Semi-smooth	Good	Good	Poor	Good	Poor
Klondike	92	98	105	100	Medium	6	Smooth	Good	Good	Fair	Fair	Fair
Melvin	97	100	104	100	Medium	6	Smooth	Good	Good	Poor	Fair	Poor
Summit	90	91	96	94	Late	2	Rough	Good	Good	Poor	Fair	Fair
Windsor	87	95	100	100	Medium	6	Rough	Fair	Fair	Poor	Fair	Poor
ELIGIBLE FOR C.W. GRADES												
Betzes	87	90	90	90	Medium	2	Rough	Fair	Good	Poor	Poor	Fair
Bonanza	---	95	97	98	Medium	6	Smooth	Good	Fair	Fair	Fair	Fair
Conquest	---	89	89	88	Medium	6	Smooth	Good	Fair	Fair	Fair	Fair
Fairfield	90	96	95	95	Medium	2	Rough	Good	Good	Fair	Fair	Fair
Gateway 63	---	79	80	87	Med-early	6	Smooth	Fair	Fair	Poor	Fair	Poor
Hector	103	100	93	90	Medium	2	Rough	Fair	Good	Fair	Fair	Fair
Klages	---	90	96	98	Late	2	Rough	Good	Good	Poor	Fair	Fair
Olli	---	---	74	86	Early	6	Rough	Poor	Poor	Fair	Fair	Poor

REMARKS: GALT — performance variable in Areas 3 and 4. HECTOR — drought tolerant, yields less than Galt under irrigation, may not be selected by maltsters. WINDSOR — scald resistant. FAIRFIELD — may not be selected by maltsters.

WHEAT										
Variety	Areas (See Map)				Relative Maturity	Resistance to:				Common Root Rot
	Yield as % of Neepawa					Lodging	Shattering	Loose Smut	Bunt	
	1	2	3	4						
ELIGIBLE FOR C. W. RED SPRING WHEAT GRADES										
Canuck	97	97	---	---	Med-late	Fair	Fair	Good	Fair	Fair
Chester	97	97	---	---	Med-late	Good	Good	Fair	Good	Fair
Chinook	90	90	---	---	Medium	Fair	Poor	Poor	Fair	Poor
Manitou	95	95	96	97	Med-late	Good	Good	Good	Fair	Fair
Neepawa	100	100	100	100	Medium	Good	Good	Good	Fair	Fair
Park	---	90	94	96	Med-early	Good	Good	Good	Fair	Fair
Sinton	95	95	---	98	Med-late	Good	Poor	Fair	Fair	Fair
Thatcher	95	95	97	95	Medium	Good	Good	Good	Fair	Fair

REMARKS: CANUCK and CHESTER — better resistance to sawflies than Chinook. CHINOOK — retains good bushel weight under dry conditions. MANITOU — late maturing in Areas 3 and 4. NEEPAWA — widely adapted. PARK — easier to thresh, bleaches less than Thatcher, subject to head discoloration. SINTON — bearded. THATCHER — widely-adapted, kernels bleach.

WHEAT (Continued)

Variety	Areas (See Map)				Relative Maturity	Resistance to:				Common Root Rot
	1	2	3	4		Lodging	Shattering	Loose Smut	Bunt	
Yield as % of Neepawa					ELIGIBLE FOR CANADA UTILITY WHEAT GRADES ONLY					
Glenlea	107	107	109	---	Late	Good	Good	Good	Fair	Fair
Pitic 62	119	119	---	---	Very Late	Fair	Fair	Poor	Poor	Fair

REMARKS: PITIC 62 — yield is very variable depending on season. Yields well under irrigation.

Variety	Yield as % of Wascana				Relative Maturity	Resistance to:				Common Root Rot
	1	2	3	4		Lodging	Shattering	Loose Smut	Bunt	
Yield as % of Wascana					ELIGIBLE FOR C. W. AMBER DURUM WHEAT GRADES					
Coulter	97	97	---	---	Medium	Good	Good	Good	Good	Fair
Hercules	85	85	---	---	Medium	Good	Good	Good	Fair	Poor
Macoun	92	92	---	---	Med-late	Good	Good	Good	Good	Poor
Wakooma	97	97	---	---	Med-late	Good	Good	Good	Good	Fair
Wascana	100	100	---	---	Med-late	Good	Good	Good	Good	Poor

REMARKS: HERCULES — suitable for Areas 1 and 2. MACOUN, WAKOOMA, WASCANA — with the exception of Hercules, durums should be grown only in Area 1 and the south-eastern portion of Area 2 because of late maturity. Wascana and Wakooma equal to Hercules in quality and Macoun slightly superior.

Variety	Yield as % of Sundance				Relative Maturity	Resistance to:				Common Root Rot
	1	2	3	4		Lodging	Shattering	Loose Smut	Bunt	
Yield as % of Sundance					ELIGIBLE FOR ALBERTA RED WINTER WHEAT GRADES					
Norstar	---	102	---	---	Early	Fair	Good	---	Poor	Fair
Sundance	---	100	---	---	Early	Fair	Good	Poor	Poor	Fair
Winalta	---	90	---	---	Early	Good	Good	Poor	Poor	Fair

REMARKS: — Varieties listed in descending order of winter hardiness. Winter survival is best in southwestern Alberta.

OATS

Variety	Yield as % of Harmon in areas				Relative Maturity	Resistance to:			Remarks
	1	2	3	4		Lodging	Shattering	Smuts	
Athabasca	90	100	102	109	Early	Good	Fair	Poor	Plump kernels, seed stocks limited
Cavell	100	104	100	108	Early	Good	Good	Poor	
Fraser	108	101	102	105	Late	Good	Fair	Fair	Plump kernels
Gemini	100	102	101	110	Med-late	Good	Good	Fair	Plump kernels
Grizzly	108	105	106	113	Late	Fair	Good	Poor	Plump kernels
Harmon	100	100	100	100	Med-late	Good	Good	Fair	Kernels similar to Rodney
Random	102	108	101	112	Med-early	Good	Good	Poor	Short straw, long large kernels, resistant to grey speck. Black lemma, awns sometimes adhere.
Rodney	100	98	94	98	Med-late	Good	Fair	Fair	Large kernels, de-hulls readily
Sioux	110	104	97	101	Med-early	Good	Good	Fair	
Terra	68	68	76	85	Early	Good	Good	Poor	Hulless
Victory	105	99	98	102	Late	Poor	Good	Poor	

Footnote: Foothill — forage variety licensed in 1978.

SPRING RYE

Variety	1	2	3	4	REMARKS
Prolific*	100	100	100	100	GAZELLE is superior in performance to PROLIFIC for lodging resistance, kernel appearance, bushel weight and starch content. Both varieties have maturity similar to Neepawa wheat.
Gazelle	123	131	121	138	

FALL RYE

Variety	Yield as % of Cougar in areas			Relative Maturity	Winter Hardiness	Seed Size	Straw Strength	Stem Smut
	1&2	3	4					
Antelope	77	83	83	Early	Good	Small	Good	Fair
Cougar	100	100	100	Medium	Fair	Medium	Good	Poor
Frontier	91	98	92	Early	Good	Medium	Good	Fair
Kodiak	105	108	107	Medium	Good	Large	Good	Fair
Puma	101	96	105	Medium	Good	Medium	Good	Fair

REMARKS: COUGAR — Shortest straw. Rye should be treated with a systemic fungicide in areas where stem smut is a problem.

FLAX

Variety	Yield as % of Noralta in areas		Relative Maturity	Seed Size	Rust Resistance	REMARKS
	1&2	3&4				
Culbert	90	92	Medium	Medium	Good	
Dufferin	110	---	Late	Medium	Good	Suitable in long season areas.
Linott	101	95	Med-early	Small	Good	Use where rust attacks Noralta.
Noralta	100	100	Med-early	Small	Fair	Suitable in all areas. Resistant to lodging.
Raja	80	82	Med-early	Large	Good	Responds well to delayed seeding in the south. Is earliest variety.
Redwood 65	105	---	Late	Medium	Fair	Suitable in long season areas.

RAPSEED***

Variety	Yield as % of Torch in areas			Relative Maturity	Straw Length	Erucic Acid	Gluco- sinolate	REMARKS
	1&2	3	4					
POLISH TYPE** (B. campestris)								
Candle	85	100	90	Early	Medium	Low	Low	Mixed yellow and brown seed.
Torch*	100	100	100	Early	Medium	Low	High	
ARGENTINE TYPE** (B. napus)								
Altex	110	120	---	Med-late	Long	Low	Low	← Earliest and shortest strawed type. Seed stocks limited.
Midas*	110	110	---	Med-late	Long	Low	High	
Regent	120	105	---	Med-late	Long	Low	Low	
Tower	110	110	---	Med-late	Long	Low	Low	

Footnote — Market for high glucosinolate rapeseed will be limited.

** Polish type 2-3 weeks earlier than Argentine type. Argentine types shatter more readily than Polish when ripe, require early seeding in Area 3, are resistant to white rust (stag head).

MUSTARD***

Variety	Relative Yield in areas		Type	Relative Maturity	Seed Size	Seed Color	REMARKS
	1&2	3					
Blaze	100	---	Brown	Med-late	Small	Brown	
Domo	110	---	Oriental	Med-late	Small	Yellow	
Lethbridge 22A	100	---	Oriental	Med-late	Small	Yellow	Best adapted to Brown and Dark Brown soil zones.
Gisilba	80	---	Yellow	Med-early	Large	Yellow	
Sabre	80	---	Yellow	Med-early	Large	Yellow	

*** Mixtures of rapeseed and mustard are inseparable and unacceptable.

Additional copies of this publication are available from district extension offices and the Publications Office, Alberta Agriculture, 9718 - 107 Street, Edmonton T5K 2C8.