



Agdex 100/32

February, 1981

VARIETIES OF CEREAL AND OILSEED CROPS FOR ALBERTA – 1981

Prepared by the 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, 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.

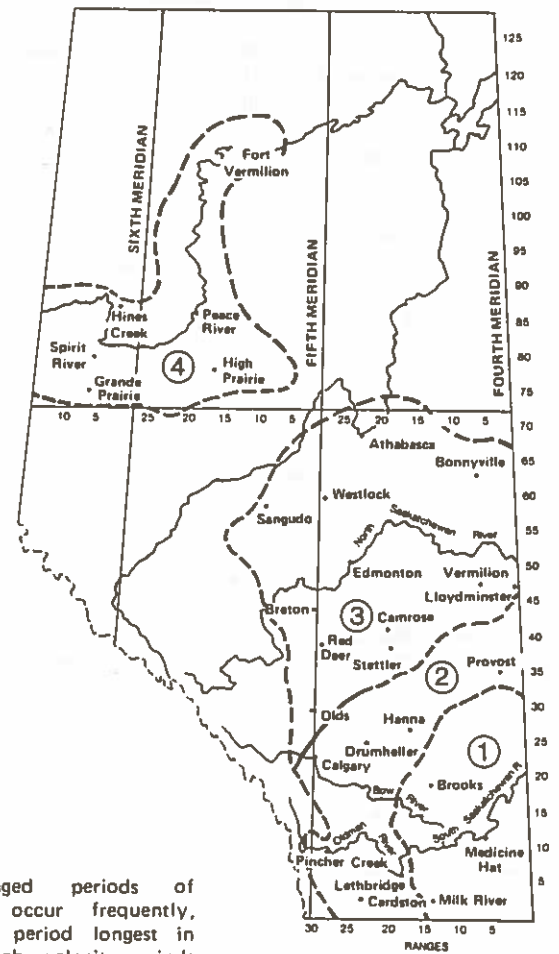
MATURITY

The tables show relative yields for four production areas. Relative maturity is shown as early, medium-early, medium, 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, Oli – 92, Redwood 65 Flax – 130, Noralta – 117, Regent rapeseed – 115, and Candle – 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 seedborne phase of black leg.
- Cereal smuts can be controlled with seed treatment fungicides. See Alberta Agriculture publication *Seed Treatment of Cereal and Oilseed Crops* (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 products are fairly short. Small quantities of excess seed can be buried or burned! Do not expose treated seed 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 the 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 1982
 --- Denotes variety not generally suited to area

WHEAT

Variety	Areas (See Map)					Relative Maturity	Resistance to:			Common Root Rot	
	Irr. 1&2	1	2	3	4		Lodging	Shattering	Loose Smut		Bunt
	Yield as % of Neepawa					ELIGIBLE FOR C.W. RED SPRING WHEAT GRADES					
Benito	90	90	100	91	96	Medium	Good	Good	Good	Fair	Fair
Canuck	93	91	91	---	---	Med-late	Fair	Fair	Good	Fair	Fair
Chester	90	93	98	---	---	Med-late	Good	Good	Fair	Good	Fair
Chinook	90	89	90	---	---	Medium	Fair	Poor	Poor	Fair	Poor
Manitou	95	94	94	94	94	Med-late	Good	Good	Good	Fair	Fair
Neepawa	100	100	100	100	100	Medium	Good	Good	Good	Fair	Fair
Park	---	---	91	90	93	Med-early	Good	Good	Good	Fair	Fair
Sinton	90	91	91	95	100	Med-late	Good	Poor	Fair	Fair	Fair
Thatcher	100	91	96	96	100	Medium	Good	Good	Good	Fair	Fair

REMARKS: BENITO — seed supplies limited. CANUCK and CHESTER — better resistance to sawflies than Chinook. CANUCK, CHESTER and CHINOOK — recommended for sawfly area only. MANITOU — late maturing in Areas 3 and 4. NEEPAWA — widely adapted. PARK — easier to thresh, bleaches less than Thatcher, subject to head discoloration with yield loss. SINTON — bearded. THATCHER — widely adapted, kernels bleach. C.W. Red Spring Wheat grown under irrigation tend to have lower grades.

	Yield as % of Neepawa					ELIGIBLE FOR CANADA UTILITY WHEAT GRADES ONLY					
Glenlea	93	102	111	---	---	Late	Good	Good	Good	Fair	Fair
Pitic 62*	114	127	---	---	---	Very Late	Fair	Fair	Poor	Poor	Fair

REMARKS: PITIC 62 — yield is very variable depending on season. Yields well under irrigation. Avoid binning and delivery mixed with Glenlea, as Pitic 62 is of poor milling quality and different flour quality type to Glenlea. As of August 1, 1981 Pitic 62 will be ineligible for utility wheat grades, and will be eligible only for grades no higher than Canada Feed Wheat.

	Yield as % of Wakooma					ELIGIBLE FOR C.W. AMBER DURUM WHEAT GRADES					
Coulter	98	95	99	---	---	Medium	Good	Good	Good	Good	Fair
Hercules	95	82	86	---	---	Medium	Good	Good	Good	Fair	Poor
Macoun	93	82	92	---	---	Med-late	Good	Good	Good	Good	Poor
Wakooma	100	100	100	---	---	Med-late	Good	Good	Good	Good	Fair
Wascana	98	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 southeastern portion of Area 2 because of late maturity. Coulter and Wakooma have superior quality for export.

	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	---	95	---	---	---	Early	Good	Good	Poor	Poor	Fair

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

BARLEY

Variety	Irr. 1&2	Areas (See Map) Yield as % of Galt				Relative Maturity	No. of Rows	Awn Type	Resistance to:				False Loose & Covered Smut	Common Root Rot
		1	2	3	4				Lodging	Shattering	Loose Smut			
ELIGIBLE FOR FEED GRADES ONLY														
Galt	100	100	100	100	100	Medium	6	Semi-smooth	Good	Good	Poor	Good	Poor	
Johnston	93	117	113	119	115	Late	6	Smooth	Poor	Fair	Fair	Poor	Fair	
Klondike	101	101	95	109	97	Medium	6	Smooth	Good	Good	Fair	Fair	Fair	
Melvin	105	99	97	108	107	Medium	6	Smooth	Good	Good	Poor	Fair	Poor	
Summit	96	97	94	97	90	Late	2	Rough	Good	Good	Poor	Fair	Fair	
Windsor	88	95	94	103	102	Medium	6	Rough	Fair	Fair	Poor	Fair	Poor	
ELIGIBLE FOR C.W. GRADES														
Betzes	80	94	93	93	86	Medium	2	Rough	Fair	Good	Poor	Poor	Fair	
Bonanza	91	87	92	99	91	Medium	6	Smooth	Good	Fair	Fair	Fair	Fair	
Conquest	90	87	82	93	84	Medium	6	Smooth	Good	Fair	Fair	Fair	Fair	
Elrose	91	98	91	100	96	Medium	2	Rough	Good	Good	Poor	Poor	Fair	
Fairfield	93	98	95	101	94	Medium	2	Rough	Good	Good	Fair	Fair	Fair	
Gateway 63	---	---	---	85	82	Med-early	6	Smooth	Fair	Fair	Poor	Fair	Poor	
Hector	92	100	98	99	92	Med-late	2	Rough	Fair	Good	Fair	Fair	Fair	
Klages	86	98	91	103	92	Late	2	Rough	Good	Good	Poor	Fair	Fair	
Olli	---	---	---	75	76	Early	6	Rough	Poor	Poor	Fair	Fair	Poor	

REMARKS: GALT -- performance variable in Areas 3 and 4. KLAGES -- preferred by maltsters to older 2-row varieties. JOHNSTON -- seed supplies limited. ELROSE -- seed supplies limited, of Klages type and quality.

OATS

Variety	Irr. 1&2	Yield as % of Harmon				Relative Maturity	Resistance to:			Remarks
		1	2	3	4		Lodging	Shattering	Smuts	
Athabasca	92	101	99	102	103	Early	Good	Fair	Poor	Plump kernels
Cascade	99	110	112	115	128	Med-late	Good	Good	Poor	Kernels similar to Random
Cavell	99	99	104	99	110	Early	Good	Good	Poor	
Foothill	90	110	106	104	108	Med-late	Good	Good	Poor	Forage variety
Fraser	99	101	106	104	105	Late	Good	Fair	Fair	Plump kernels
Grizzly	98	98	103	108	113	Late	Fair	Good	Poor	Plump kernels
Harmon	100	100	100	100	100	Med-late	Good	Good	Fair	Kernels similar to Rodney
Random	107	103	108	102	114	Med-early	Good	Good	Poor	Short straw, long large kernels
Rodney	93	101	96	97	99	Med-late	Good	Fair	Fair	Large kernels, de-hulls readily
Victory*	86	101	98	98	105	Late	Poor	Good	Poor	

SPRING RYE

GAZELLE -- only recommended variety and has maturity similar to Neepawa wheat

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	81	85	Early	Good	Small	Good	Fair
Cougar	100	100	100	Medium	Fair	Medium	Good	Poor
Frontier	92	94	91	Early	Good	Medium	Good	Fair
Kodiak	100	108	105	Medium	Good	Large	Good	Good
Musketeer	100	111	106	Early	Good	Large	Good	No data
Puma	101	101	101	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.
MUSKETEER — Seed supplies limited.

FLAX

Variety	Yield as % of Noralta in areas				Relative Maturity	Seed Size	Rust Resistance	Remarks
	Irr.	1&2	3	4				
Culbert	85	97	89	85	Medium	Medium	Good	Use where rust attacks Noralta.
Dufferin	108	109	105	—	Late	Medium	Good	Suitable in long season areas.
Linott	98	95	99	90	Med-early	Small	Good	Use where rust attacks Noralta.
Noralta	100	100	100	100	Med-early	Small	Fair	Suitable in all areas. Resistant to lodging.
Raja*	74	95	87	84	Med-early	Large	Good	Responds well to delayed seeding in the south. The earliest variety.
Redwood 65	105	106	97	—	Late	Medium	Fair	Suitable in long season areas.

CANOLA***

Variety	Yield as % of Candle in areas			Relative Maturity	Straw Length	Erucic Acid	Gluco-sinolate	Remarks
	1&2	3	4					
POLISH TYPE** (<i>B. campestris</i>)								
Candle	100	100	100	Early	Medium	Low	Low	Mixed yellow and brown seed.
ARGENTINE TYPE** (<i>B. napus</i>)								
Altex	140	125	—	Med-late	Long	Low	Low	Earliest and shortest strawed type.
Regent	140	115	—	Med-late	Long	Low	Low	
Tower	140	115	—	Med-late	Long	Low	Low	

Footnote — Market for high glucosinolate rapeseed will be limited (Torch and Midas).

**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 (staghead).

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