

## VARIETIES OF CEREAL AND OILSEED CROPS FOR ALBERTA - 1977

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.

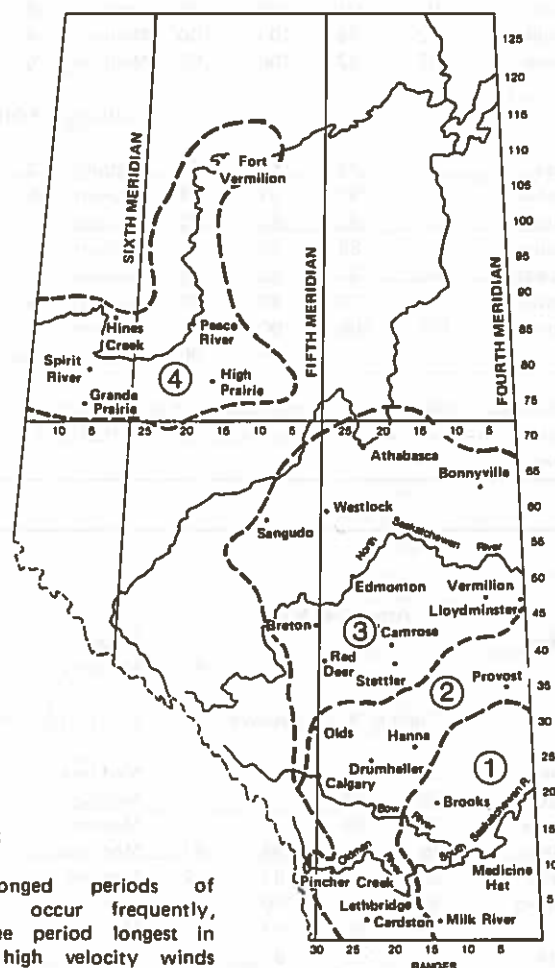
### MATURITY

The tables show relative yields for four production areas. Relative maturity is shown as early, medium-early, medium, 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

- Disease ratings are based on artificial inoculation. Lower ratings could be expected with natural infection.
- Smuts can be controlled by proper application of recommended seed treatment fungicides. Consult Alberta Agriculture publication number 100/632.
- Treated seed must not be fed to livestock or poultry or sold for feed. Dry seed treated with a fungicide can be stored for one year. 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.
- One of the easiest ways a farmer can improve his lot is by using the best variety for his own conditions.
- 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 co-ordinates 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 1978

---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
Jubilee	91	91	96	108	Late	6	Smooth	Fair	Fair	Poor	Poor	Poor
Klondike	92	98	103	100	Medium	6	Smooth	Good	Good	Fair	Fair	Fair
Windsor	87	92	100	98	Medium	6	Rough	Fair	Fair	Poor	Fair	Poor
ELIGIBLE FOR C. W. GRADES												
Betzes	87	93	87	90	Medium	2	Rough	Fair	Good	Poor	Poor	Fair
Bonanza	—	95	97	98	Medium	6	Smooth	Good	Fair	Fair	Fair	Fair
Centennial*	85	90	93	100	Med-late	2	Rough	Good	Good	Poor	Poor	Fair
Conquest	—	89	89	88	Medium	6	Smooth	Good	Fair	Fair	Fair	Fair
Fairfield	90	97	95	97	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	90	90	Medium	2	Rough	Fair	Good	Fair	Fair	Fair
Olli	—	—	74	86	Early	6	Rough	Poor	Poor	Fair	Fair	Poor
REMARKS: Galt — performance variable in Areas 3 and 4. CENTENNIAL — short, very strong straw. HECTOR — yields less than Galt under irrigation, may not be selected by maltsters. WINDSOR — scald resistant, limited seed stocks. FAIRFIELD and KLONDIKE — seed stocks limited.												

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WHEAT										
Variety	Areas (See Map)				Relative Maturity	Resistance to:				
	1	2	3	4		Lodging	Shattering	Loose	Bunt	Common
								Smut		Root Rot
Yield as % of Neepawa					ELIGIBLE FOR C. W. RED SPRING WHEAT GRADES					
Canuck	95	95	---	---	Med-late	Fair	Fair	Good	Fair	Fair
Chester	96	96	---	---	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
Napayo*	95	95	97	92	Medium	Good	Good	Good	Fair	Fair
Neepawa	100	100	100	100	Medium	Good	Good	Good	Fair	Fair
Park	---	90	97	92	Med-early	Good	Good	Good	Fair	Fair
Sinton	98	98	95	95	Med-late	Good	Fair	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 — suited to sawfly area — retains good bush weight under dry conditions. MANITOU — late maturing in Areas 3 and 4. NAPAYO — bearded. NEEPAWA — widely adapted. PARK — easier to thresh, bleaches less than Thatcher, subject to head discoloration. SINTON — bearded. THATCHER — widely-adapted, kernels bleach.

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### WHEAT (Continued)

Variety	Areas (See Map)				Relative Maturity	Resistance to:				
	1	2	3	4		Lodging	Shattering	Loose Smut	Bunt	Common Root Rot
	Yield as % of Neepawa					ELIGIBLE FOR CANADA UTILITY WHEAT GRADES ONLY				
Glenlea	120	107	110	---	Late	Good	Good	Good	Fair	Fair
Pitic 62	128	117	---	---	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	ELIGIBLE FOR C. W. AMBER DURUM WHEAT GRADES				
	1	2	3	4		Lodging	Shattering	Loose Smut	Bunt	Common Root Rot
Hercules*	85	85	---	---	Medium	Good	Good	Good	Fair	Poor
Macoun	98	98	---	---	Med-late	Good	Good	Good	Good	Poor
Wakooma	100	100	---	---	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	ELIGIBLE FOR ALBERTA RED WINTER WHEAT GRADES				
	1	2	3	4		Lodging	Shattering	Loose Smut	Bunt	Common Root Rot
Kharkov 22MC	---	90	---	---	Early	Fair	Poor	Poor	Poor	Fair
Sundance	---	100	---	---	Early	Fair	Good	Poor	Fair	Fair
Winalta	---	90	---	---	Early	Good	Good	Poor	Poor	Fair

REMARKS: KHARKOV 22MC, SUNDANCE, WINALTA — Winter survival is best in southwestern Alberta. Winalta and Sundance have better milling and baking quality and shorter straw than Kharkov 22MC.

### OATS

Variety	Yield as % of Harmon in areas				Relative Maturity	Resistance to:			Remarks
	1	2	3	4		Lodging	Shattering	Smuts	
Cavell	100	101	101	105	Early	Good	Good	Poor	
Fraser	108	101	102	102	Late	Good	Fair	Fair	Plump kernels
Gemini	100	101	99	109	Med-late	Good	Good	Fair	Plump kernels
Grizzly	108	102	105	110	Late	Fair	Good	Poor	Plump kernels
Harmon	100	100	100	100	Med-late	Good	Good	Fair	Kernels similar to Rodney
Random	102	106	100	108	Med-early	Good	Good	Poor	Short straw, long large kernels, resistant to grey speck. Black lemma, awns sometimes adhere. Large kernels, de-hulls readily
Rodney	100	94	90	97	Med-late	Good	Fair	Fair	
Sioux	110	103	96	95	Med-early	Good	Good	Fair	
Victory	105	98	98	99	Late	Poor	Good	Poor	

### 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	93	Early	Good	Small	Good	Fair
Cougar	100	100	100	Medium	Fair	Medium	Good	Poor
Frontier	89	97	92	Early	Good	Medium	Good	Fair
Kodiak	106	109	109	Medium	Good	Large	Good	Fair
Puma	100	97	107	Medium	Good	Medium	Good	Fair

REMARKS: COUGAR — Shortest straw, susceptible to stalk smut.

## SPRING RYE

Variety	Yield as % of Prolific in areas				REMARKS
	1	2	3	4	
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	

## FLAX

Variety	Yield as % of Noralta in areas		Relative Maturity	Seed Size	Rust Resistance	REMARKS
	1 & 2	3 & 4				
Dufferin	109	---	Late	Medium	Good	Suitable in long season areas.
Linott	98	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	80	Med-early	Large	Good	Responds well to delayed seeding in the south.
Redwood 65	103	---	Late	Medium	Fair	Suitable in long season areas.

## RAPESEED \*\*\*

Variety	Yield as % of Torch in areas			Relative Maturity	Seed Size	Straw Length	Erucic Acid	REMARKS
	1 & 2	3	4					
POLISH TYPE** (B. campestris)								
Span	90	100	100	Early	Small	Medium	Low	Grow only under contract. Yellow seed, susceptible to Alternaria black spot and flea beetles. Extremely variable in performance.
Torch	100	100	100	Early	Small	Medium	Low	
R-500*	85	80	80	Med-early	Large	Medium	High	
ARGENTINE TYPE** (B. napus)								
Midas	110	115	---	Med-late	Large	Long	Low	Low glucosinolate.
Tower	105	115	---	Med-late	Large	Long	Low	

\*\* Polish type 2-3 weeks earlier than Argentine type. Argentine types shatter more readily than Polish when ripe. Argentine types requires early seeding in Area 3.

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

## MUSTARD \*\*\*

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

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