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VARIETIES OF CEREAL AND OILSEED CROPS FOR ALBERTA – 1980

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.

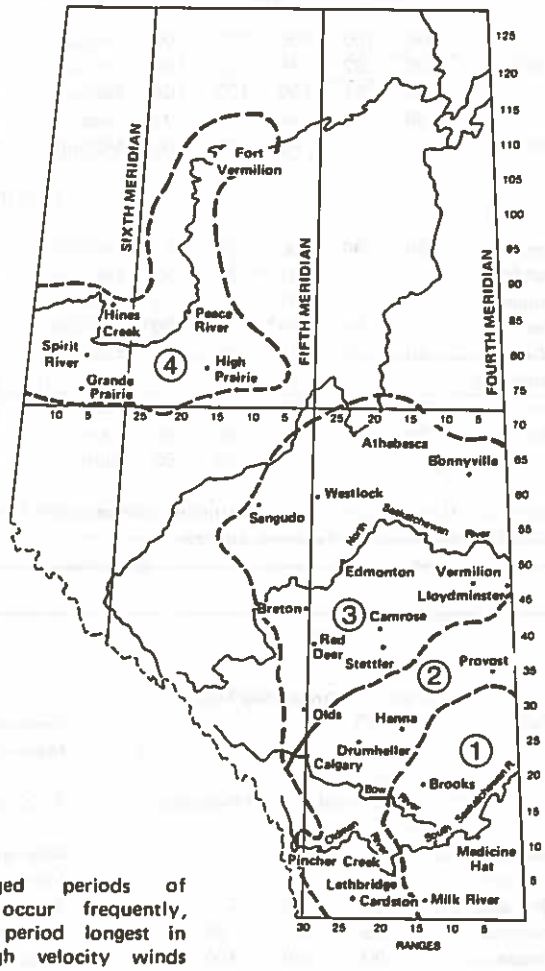
MATURITY

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, Olli – 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 – 1980 (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. Refer to label. 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 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 1981
——Denotes variety not generally suited to area

BARLEY

Variety	Areas (See Map) Yields as % of Galt in areas					Relative Maturity	No. of Rows	Awn Type	Lodging	Shattering	Resistance to: Loose Smut	False Loose & Covered Smut	Common Root Rot
	Irr. 1&2	1	2	3	4								
ELIGIBLE FOR FEED GRADES ONLY													
Galt	100	100	100	100	100	Medium	6	Semi-smooth	Good	Good	Poor	Good	Poor
Klondike	100	92	96	108	100	Medium	6	Smooth	Good	Good	Fair	Fair	Fair
Melvin	100	97	100	103	104	Medium	6	Smooth	Good	Good	Poor	Fair	Poor
Summit	90	94	98	96	92	Late	2	Rough	Good	Good	Poor	Fair	Fair
Windsor	——	——	92	100	100	Medium	6	Rough	Fair	Fair	Poor	Fair	Poor
ELIGIBLE FOR C.W. GRADES													
Betzes	80	90	90	92	87	Medium	2	Rough	Fair	Good	Poor	Poor	Fair
Bonanza	——	——	93	98	95	Medium	6	Smooth	Good	Fair	Fair	Fair	Fair
Conquest	——	——	87	90	88	Medium	6	Smooth	Good	Fair	Fair	Fair	Fair
Elrose	85	90	90	93	90	Medium	2	Rough	Good	Good	Poor	Poor	Fair
Fairfield	92	95	98	98	94	Medium	2	Rough	Good	Good	Fair	Fair	Fair
Gateway 63	——	——	79	80	87	Med-early	6	Smooth	Fair	Fair	Poor	Fair	Poor
Hector	90	103	98	96	90	Med-late	2	Rough	Fair	Good	Fair	Fair	Fair
Klages	85	——	90	98	95	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. KLAGES — preferred by maltsters to older 2-row varieties. ELROSE — seed supplies limited, of Klages type and quality.

WHEAT

Variety	Areas (See Map)				Relative Maturity	Lodging	Resistance to: Shattering	Loose Smut	Bunt	Common Root Rot
	1	2	3	4						
	Yield as % of Neepawa				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	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) 1	2	3	4	Relative Maturity	Resistance to: Lodging	Shattering	Loose Smut	Bunt	Common Root Rot
	Yield as % of Neepawa				ELIGIBLE FOR CANADA UTILITY WHEAT GRADES ONLY					
Glenlea	107	106	109	—	Late	Good	Good	Good	Fair	Fair
Pitic 62	119	128	—	—	Very Late	Fair	Fair	Poor	Poor	Fair
	Yield as % of Wakooma				ELIGIBLE FOR C.W. AMBER DURUM WHEAT GRADES					
Coulter	95	95	—	—	Medium	Good	Good	Good	Good	Fair
Hercules	89	85	—	—	Medium	Good	Good	Good	Fair	Poor
Macoun	89	91	—	—	Med-late	Good	Good	Good	Good	Poor
Wakooma	100	100	—	—	Med-late	Good	Good	Good	Good	Fair
Wascana	104	103	—	—	Med-late	Good	Good	Good	Good	Poor
	Yield as % of Sundance				ELIGIBLE FOR ALBERTA RED WINTER WHEAT GRADES					
Norstar	—	103	—	—	Early	Fair	Good	—	Poor	Fair
Sundance	—	100	—	—	Early	Fair	Good	Poor	Poor	Fair
Winalta	—	96	—	—	Early	Good	Good	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.

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. Coulter and Wakooma have superior quality for export.

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

OATS

Variety	Yield as % of Harmon in areas 1	2	3	4	Relative Maturity	Resistance to: Lodging	Shattering	Smuts	Remarks
Athabasca	90	96	101	107	Early	Good	Fair	Poor	Plump kernels
Cascade	99	103	114	124	Med-late	Good	Good	Poor	Licensed in 1979
Cavell	100	103	99	108	Early	Good	Good	Poor	
Foothill	89	102	104	107	Med-late	Good	Good	Poor	Forage variety
Fraser	108	101	104	105	Late	Good	Fair	Fair	Plump kernels
Gemini*	100	101	103	111	Med-late	Good	Good	Fair	Plump kernels
Grizzly	108	102	107	114	Late	Fair	Good	Poor	Plump kernels
Harmon	100	100	100	100	Med-late	Good	Good	Fair	Kernels similar to Rodney
Random	102	107	102	113	Med-early	Good	Good	Poor	Short straw, long large kernels
Rodney	100	97	97	98	Med-late	Good	Fair	Fair	Large kernels, de-hulls readily
Sioux*	110	100	96	102	Med-early	Good	Good	Fair	
Terra*	68	66	70	84	Early	Good	Good	Poor	Hulless
Victory	105	98	98	104	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 1&2	3	4	Relative Maturity	Winter Hardiness	Seed Size	Straw Strength	Stem Smut
Antelope	77	83	83	Early	Good	Small	Good	Fair
Cougar	100	100	100	Medium	Fair	Medium	Good	Poor
Frontier	99	98	92	Early	Good	Medium	Good	Fair
Kodiak	97	108	107	Medium	Good	Large	Good	Good
Puma	98	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 1	2	3	4	Relative Maturity	Seed Size	Rust Resistance	Remarks
Culbert	78	87	95	88	Medium	Medium	Good	Use where rust attacks Noralta
Dufferin	100	117	107	—	Late	Medium	Good	Suitable in long season areas.
Linott	98	99	101	95	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	73	79	89	82	Med-early	Large	Good	Responds well to delayed seeding in the south. Is earliest variety.
Redwood 65	91	112	99	—	Late	Medium	Fair	Suitable in long season areas.

RAPESEED***

Variety	Yield as % of Torch in areas 1&2	3	4	Relative Maturity	Straw Length	Erucic Acid	Gluco-sinolate	Remarks
				POLISH TYPE** (B. campestris)				
Candle	85	95	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.
Regent	120	105	—	Med-late	Long	Low	Low	
Tower	110	105	—	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 (staghead).

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

MUSTARD

Mustard table is being deleted because of insufficient data – for information contact your District Agriculturist or contracting company.

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