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VARIETIES OF CEREAL AND OILSEED CROPS FOR ALBERTA – 1982

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, canola, 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.

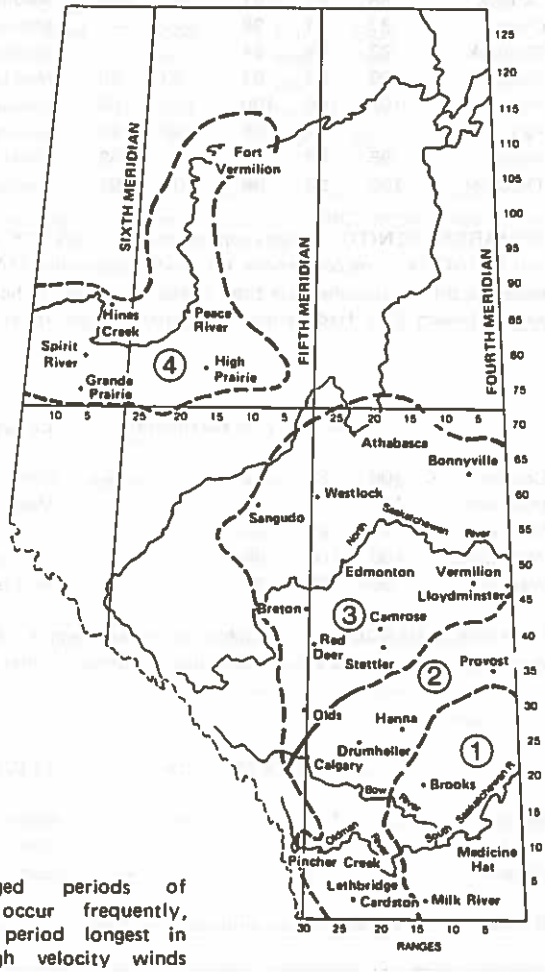
MATURITY

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 canola – 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 seed of canola to control flea beetles, seedling blight and 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* (FS 100/632).
- **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 may compensate

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 1983
— Denotes variety not generally suited to area

WHEAT

Variety	Areas (See Map) Irr. 1&2	1	2	3	4	Relative Maturity	Resistance to: Lodging	Shattering	Loose Smut	Bunt	Common Root Rot
	Yield as % of Neepawa					ELIGIBLE FOR C.W. RED SPRING WHEAT GRADES					
Benito	92	88	100	94	97	Medium	Good	Good	Good	Fair	Fair
Canuck	88	91	91	—	—	Med-late	Fair	Fair	Good	Fair	Fair
Chester	87	91	98	—	—	Med-late	Good	Good	Fair	Good	Fair
Chinook	93	89	94	—	—	Medium	Fair	Poor	Poor	Fair	Poor
Manitou	99	87	94	90	86	Med-late	Good	Good	Good	Fair	Fair
Neepawa	100	100	100	100	100	Medium	Good	Good	Good	Fair	Fair
Park	—	—	89	90	93	Med-early	Good	Good	Good	Fair	Fair
Sinton	95	90	91	97	98	Med-late	Good	Poor	Fair	Fair	Fair
Thatcher	100	93	98	100	97	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 tends to have lower grades. Columbus seed not available until 1983.

	Yield as % of Wakooma					ELIGIBLE FOR C.W. AMBER DURUM WHEAT GRADES					
Coulter	100	86	98	—	—	Medium	Good	Good	Good	Good	Fair
Hercules	100	76	84	—	—	Medium	Good	Good	Good	Fair	Poor
Macoun	97	93	91	—	—	Med-late	Good	Good	Good	Good	Poor
Wakooma	100	100	100	—	—	Med-late	Good	Good	Good	Good	Fair
Wascana	96	99	98	—	—	Med-late	Good	Good	Good	Good	Poor

REMARKS: HERCULES — suitable for Areas 1 and 2 MACOUN, WAKOOMA, WASCANA — 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.

	Yield as % of Norstar					ELIGIBLE FOR ALBERTA RED WINTER WHEAT GRADES					
Norstar	—	100	—	—	—	Early	Good	Good	Poor	Poor	Fair
Sundance	—	97	—	—	—	Early	Fair	Good	Poor	Fair	Fair
Winalta	—	97	—	—	—	Early	Good	Good	Poor	Poor	Fair

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

BARLEY

Variety	Area (See Map) Yield as % of Galt: Irr 1&2	1	2	3	4	Relative Maturity	No. of Rows	Awn Type	Resistance to: Lodging	Shattering	Loose Smut	False Loose & Covered Smut	Common Root Rot
ELIGIBLE FOR FEED GRADES ONLY													
Galt	100	100	100	100	100	Medium	6	Semi smooth	Good	Good	Poor	Good	Poor
Johnston	95	107	113	115	114	Late	6	Smooth	Poor	Fair	Fair	Poor	Fair
Klondike	97	95	94	110	97	Medium	6	Smooth	Good	Good	Fair	Fair	Fair
Melvin*	95	93	96	107	102	Medium	6	Smooth	Good	Good	Poor	Fair	Poor
Norbert*	97	82	87	105	89	Med-late	2	Rough	Good	Good	Poor	Fair	Poor
Summit*	96	95	95	102	90	Late	2	Rough	Good	Good	Poor	Fair	Fair
Windsor*	86	89	96	107	102	Medium	6	Rough	Fair	Fair	Poor	Fair	Poor
ELIGIBLE FOR C.W. GRADES													
Betzes	78	89	89	89	86	Medium	2	Rough	Fair	Good	Poor	Poor	Fair
Bonanza	91	85	90	101	92	Medium	6	Smooth	Good	Fair	Fair	Poor	Fair
Conquest	91	82	81	93	83	Medium	6	Smooth	Good	Fair	Fair	Fair	Fair
Elrose	89	91	92	105	93	Medium	2	Rough	Good	Good	Poor	Poor	Fair
Fairfield	92	96	93	97	92	Medium	2	Rough	Good	Good	Fair	Fair	Fair
Gateway 63	—	—	—	90	82	Med-early	6	Smooth	Fair	Fair	Poor	Fair	Poor
Hector*	91	99	95	97	92	Med-late	2	Rough	Fair	Good	Fair	Fair	Fair
Klages	86	88	93	99	95	Late	2	Rough	Good	Good	Poor	Fair	Fair
Olli*	—	—	—	82	75	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. Harrington seed not available in 1982. Norbert seed supplies very limited.

OATS

Variety	Yield as % of Harmon: Irr 1&2	1	2	3	4	Relative Maturity	Resistance to: Lodging	Shattering	Smuts	Remarks
Athabasca	88	93	94	98	96	Early	Good	Fair	Poor	Plump kernels
Cascade	100	111	117	119	114	Med-late	Good	Good	Poor	Kernels similar to Random
Cavell	100	98	99	99	107	Early	Good	Good	Poor	
Foothill	94	103	110	104	102	Med-late	Good	Good	Poor	Forage variety
Fraser	100	102	105	106	105	Late	Good	Fair	Fair	Plump kernels
Grizzly	97	92	102	108	111	Late	Fair	Good	Poor	Plump kernels
Harmon	100	100	100	100	100	Med late	Good	Good	Fair	Kernels similar to Rodney
Random	104	103	104	101	110	Med early	Good	Good	Poor	Short straw, long large kernels
Rodney*	93	100	97	101	99	Med-late	Good	Fair	Fair	Large kernels, de-hulls readily
Victory*	87	96	100	99	107	Late	Poor	Good	Poor	

OTHER CEREAL CROPS

SPRING RYE — GAZELLE — only recommended variety and has maturity similar to Neepawa wheat.
SOFT WHITE SPRING WHEAT — FIELDER — only recommended variety.
OTHER WHEATS — GLENLEA — is a late maturing variety eligible for utility wheat grades only.
PITIC 62 — is a late maturing variety with yields variable depending on the season. It is eligible for Canada Feed Grade only. Pitic 62 yields well under irrigation.

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	81	85	Early	Good	Small	Good	Fair
Cougar	100	100	100	Medium	Fair	Medium	Good	Poor
Frontier	98	107	91	Early	Good	Medium	Good	Fair
Kodiak	92	106	105	Medium	Good	Large	Good	Good
Musketeer	94	101	106	Early	Good	Large	Good	No data
Puma	110	122	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 – No seed available in 1982.

FLAX

Variety	Yield as % of Noralta in areas Irr.	1&2	3	4	Relative Maturity	Seed Size	Rust Resistance	Remarks
Culbert	83	92	96	80	Medium	Large	Good	
Dufferin	108	105	102	—	Late	Medium	Good	Suitable in long season areas.
Linott	93	94	96	89	Medium	Medium	Good	Use where rust attacks Noralta.
Noralta	100	100	100	100	Early	Small	Fair	Resistant to lodging.
Redwood 65	105	106	97	—	Late	Medium	Fair	

CANOLA

Variety	Yield as % of Candle in areas 1&2	3	4	Relative Maturity	Straw Length	Erucic Acid	Gluco-sinolate	Remarks
				POLISH TYPE** *(B. campestris)*				
Candle	100	100	100	Early	Medium	Low	Low	Mixed yellow and brown seed.
				ARGENTINE TYPE** *(B. napus)*				
Altex	140	120	—	Med-late	Long	Low	Low	Earliest and shortest strawed type.
Regent	135	105	—	Med-late	Long	Low	Low	
Tower	130	105	—	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). ANDOR and TOBIN seed not available until 1983.
***Mixtures of Canola and mustard are inseparable and unacceptable.

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