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Information for Alberta's farmers issued by

Agdex 100/32

February, 1985

VARIETIES OF CEREAL AND OILSEED CROPS FOR ALBERTA - 1985

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 six 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.

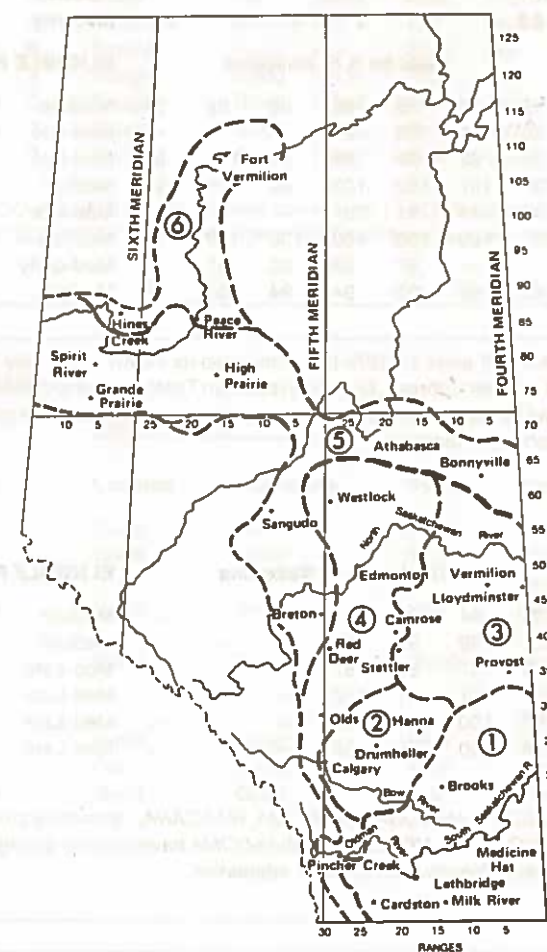
In areas 2, 3, and 5 of Alberta the following may be used as a guide for estimating maturity in actual days from seeding to harvest when the crops are seeded on fallow land: Neepawa wheat - 120 days, Park - 116, Grizzly oats - 114, Random - 107, Galt barley - 105, Otal - 94, McGregor flax - 130, Noralta - 117, Westar canola - 112, and Candle - 95 days. In area 6 the longer daylight hours usually reduce the number of days to maturity required. Area 4 has the longest requirement in the province for days to maturity. In south 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

- 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 periods 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!

GOOD SEED

- 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 PEDIGREED SEED.
- Certified seed may be purchased in bulk from authorized suppliers.
- Unlicensed varieties should not be grown. It is illegal to import unlicensed varieties without permission. It is a serious offence to misrepresent grain offered for sale. Unlicensed varieties are only eligible for feed grades.

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 composed 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 1986

--Denotes variety not generally suited to area

WHEAT

Variety	Areas (See Map)							Relative Maturity	Resistance to:				
	Irr. 1&2	1	2	3	4	5	6		Lodging	Shattering	Loose Smut	Bunt	Common Root Rot
	Yield as % of Neepawa							ELIGIBLE FOR C.W. RED SPRING WHEAT GRADES					
Benito*	97	93	96	95	96	98	94	Medium	Good	Good	Good	Fair	Fair
Canuck*	86	91	89	92	--	--	--	Med-late	Fair	Fair	Good	Fair	Fair
Columbus	92	92	98	98	99	103	96	Med-late	Good	Good	Fair	Fair	Fair
Katepwa	101	101	100	100	98	101	95	Medium	Good	Good	Good	Fair	Fair
Leader	89	94	91	101	--	--	--	Med-late	Good	Good	Fair	Fair	Poor
Neepawa	100	100	100	100	100	100	100	Medium	Good	Good	Good	Fair	Fair
Park	--	--	87	88	92	97	91	Med-early	Good	Good	Good	Fair	Fair
Thatcher*	93	93	95	94	94	103	95	Medium	Good	Good	Good	Fair	Fair

REMARKS: *CANUCK* and *LEADER* - recommended for sawfly areas only. *COLUMBUS* - late maturing in Areas 3, 4, 5 and 6. *NEEPAWA* - widely adapted. *PARK* - easier to thresh, bleaches less than Thatcher, subject to head discoloration with yield loss. *THATCHER* - widely adapted, kernels bleach. C.W. Red Spring Wheat grown under irrigation tends to have lower grades. *COLUMBUS* and *LEADER* have sprouting resistance. *KATEPWA* - easier to thresh than Neepawa.

Variety	Yield as % of Wakooma							Relative Maturity	Resistance to:				
	1	2	3	4	5	6	Lodging		Shattering	Loose Smut	Bunt	Common Root Rot	
	ELIGIBLE FOR C.W. AMBER DURUM WHEAT GRADES												
Arcola	105	94	94	97	--	--	--	Medium	Good	Good	Fair	Good	Poor
Coulter	104	92	96	100	--	--	--	Medium	Good	Good	Fair	Good	Fair
Macoun*	96	87	86	87	--	--	--	Med-Late	Good	Good	Good	Good	Poor
Medora	102	97	97	102	--	--	--	Med-Late	V. Good	Good	Fair	Good	Fair
Wakooma	100	100	100	100	--	--	--	Med-Late	Good	Good	Fair	Good	Fair
Wascana*	96	90	88	86	--	--	--	Med-Late	Good	Good	Good	Good	Poor

REMARKS: *MACOUN*, *MEDORA*, *WAKOOMA*, *WASCANA*, - should be grown only in Area 1 and 2 and the southeastern portion of Area 3 because of late maturity. *COULTER*, *MEDORA* and *WAKOOMA* have superior quality for export. *ARCOLA* - seed supplies limited in 1985. *WAKOOMA* yields about 9% more than Neepawa in areas of adaptation.

Variety	Yield as % of Norstar							Relative Maturity	Resistance to:				
	1	2	3	4	5	6	Lodging		Shattering	Loose Smut	Bunt	Common Root Rot	
	ELIGIBLE FOR ALBERTA RED WINTER WHEAT GRADES												
Norstar	--	100	--	--	--	--	--	Early	Fair	Good	Poor	Poor	Fair
Sundance*	--	98	--	--	--	--	--	Early	Poor	Good	Poor	Fair	Fair

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

BARLEY

Variety	Irr. 1&2	Area (See Map) Yield % as of Galt						Relative Maturity	No. of Rows	Awn Type	Resistance to:			False & Covered Smut	Loose Smut	Common Root Rot
		1	2	3	4	5	6				Lodg- ing	Shatter- ing	Loose Smut			
ELIGIBLE FOR FEED GRADES ONLY																
Abee	88	100	98	98	100	103	102	Med-late	2	Rough	Good	Good	Poor	Fair	Fair	
Diamond	96	98	104	106	107	105	98	Medium	6	Semi-smooth	Good	Good	Poor	Good	Poor	
Empress	89	83	97	102	111	110	99	Medium	6	Rough	Good	Good	Poor	Poor	Fair	
Galt	100	100	100	100	100	100	100	Medium	6	Semi-smooth	Good	Good	Poor	Good	Poor	
Johnston	90	102	117	113	112	116	112	Late	6	Smooth	Poor	Fair	Fair	Poor	Fair	
Klondike	93	95	97	104	107	101	95	Medium	6	Smooth	Good	Fair	Fair	Fair	Fair	
Leduc	96	100	103	109	119	106	97	Medium	6	Rough	Fair	Good	Fair	Good	Fair	
Otal	--	--	--	--	94	91	88	Early	6	Rough	Poor	Fair	Poor	Fair	Poor	
Scout	76	78	84	77	84	81	85	Med-late	2	Rough	Fair	Good	Poor	Poor	Fair	
ELIGIBLE FOR C.W. GRADES																
Argyle	91	92	99	105	107	104	102	Med-late	6	Smooth	Good	Fair	Good	Poor	Fair	
Betzes	78	89	90	87	88	93	91	Medium	2	Rough	Fair	Good	Poor	Poor	Fair	
Bonanza	91	86	98	98	102	93	93	Medium	6	Smooth	Good	Fair	Fair	Poor	Fair	
Conquest	87	81	86	93	92	87	82	Medium	6	Smooth	Good	Fair	Fair	Fair	Fair	
Elrose*	84	91	91	88	98	92	94	Medium	2	Rough	Good	Good	Poor	Fair	Fair	
Fairfield*	88	99	95	92	97	94	96	Med-late	2	Rough	Good	Good	Poor	Fair	Fair	
Harrington	90	96	97	93	101	100	96	Med-late	2	Rough	Good	Good	Poor	Poor	Fair	
Klages	83	87	94	94	92	98	103	Late	2	Rough	Good	Good	Poor	Good	Fair	

REMARKS: Smuts can be controlled with seed treatment fungicides. *SCOUT* and *TUPPER* - hullless, low in fibre. *ELROSE* subject to severe yield losses from net blotch and scald in central and northern Alberta. *DIAMOND*, *EMPRESS*, *JOHNSTON* and *LEDUC* have superior scald resistance. *HEARTLAND* and *TUPPER* - no seed available in 1985.

OATS

Variety	Irr. 1&2	Yield as % of Harmon						Relative Maturity	Resistance to:			Remarks
		1	2	3	4	5	6		Lodging	Shattering	Smuts	
Athabasca	91	88	93	97	98	99	97	Early	Good	Fair	Poor	Plump kernels
Calibre	107	121	117	108	114	113	120	Late	Good	Good	Poor	Thin hull, large kernels
Cascade	100	112	105	108	119	118	119	Med-late	Good	Good	Poor	Kernels similar to Random
Dumont	109	122	113	111	113	114	115	Late	Good	Good	Good	Best disease resistant oat available
Foothill	92	103	100	103	97	104	102	Late	Good	Good	Poor	Forage variety
Grizzly	99	94	106	100	110	112	107	Late	Fair	Good	Poor	Plump kernels
Harmon	100	100	100	100	100	100	100	Med-late	Good	Good	Fair	Plump kernels, dehulls readily
Random	101	106	105	89	102	108	109	Med-early	Good	Good	Poor	Short straw, long large kernels

OTHER CEREAL CROPS

SPRING RYE - *GAZELLE* - only recommended variety and has maturity similar to Neepawa wheat.

SOFT WHITE SPRING WHEAT - *FIELDER* and *OWENS* - only recommended varieties. *OWENS* should only be grown in areas where stripe rust may be a problem.

OTHER WHEATS - *GLENLEA* - is a late maturing variety eligible for utility wheat grades only and yields about 5% above Neepawa.

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.

TRITICALE - *CARMAN*, *TRIWELL* and *WELSH* - spring varieties - yields 5 to 10% higher than Neepawa and are later in maturity.

FALL RYE

Variety	Irr. 1&2	Yield as % of Kodiak in areas						Relative Maturity	Test Weight	Seed Size	Straw Strength	Stem Smut
		1	2	3	4	5	6					
Musketeer	--	122	XX	XX	106	103	XX	Early	Good	Large	Good	Good
Cougar	--	98	XX	XX	90	98	99	Late	Good	Small	Good	Poor
Kodiak	--	100	XX	XX	100	100	100	Late	Poor	Large	Fair	Good

REMARKS: *COUGAR* - has shortest straw, susceptible to seedling blight - use of treated seed can improve yields. Stem smut - use systemic fungicides in high risk areas on all varieties. Varieties listed in descending order of winter hardiness.
XX - No data available.

FLAX

Variety	Irr. 1&2	Yield as % of Noralta in areas						Relative Maturity	Seed Size	Rust Resistance	Remarks
		1	2	3	4	5	6				
Dufferin	103	105	106	96	94	--	--	Late	Medium	Good	
McGregor	108	105	117	103	102	--	--	Late	Medium	Good	
Noralta	100	100	100	100	100	100	100	Early	Small	Poor	
Norlin	106	100	119	111	111	94	100	Medium	Medium	Good	Good for delayed seeding

REMARKS: *NORMAN* - seed supplies very limited in 1985.

CANOLA

Variety	Irr. 1&2	Yield as % of Candle in areas						Relative Maturity	Straw Length	Remarks
		1	2	3	4	5	6			
POLISH TYPE (<i>B. campestris</i>)										
Candle*	100	100	100	100	100	100	100	Early	Medium	Mixed yellow and brown seed
Tobin	115	120	115	100	105	105	95	Early	Medium	Mixed yellow and brown seed
ARGENTINE TYPE (<i>B. napus</i>)										
Altex*	125	110	120	120	105	125	110	Med-late	Long	
Andor*	115	110	120	120	105	130	105	Med-late	Long	
Triton	90	XX	100	90	85	100	85	Late	Long	Triazine resistant, lower oil content
Westar	125	105	130	125	110	140	125	Med-late	Long	

REMARKS: Polish type 2-3 weeks earlier than Argentine type. Argentine types shatters more readily than Polish when ripe, requires early seeding in Areas 4,5 and 6. Argentine canola is very risky in Areas 5 and 6 because of late maturity. Mixtures of canola and mustard are inseparable and unacceptable. All canola cultivars are low in erucic acid and glucosinolates.
XX - No data available.