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VARIETIES OF CEREAL AND OILSEED CROPS FOR ALBERTA – 1984

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.

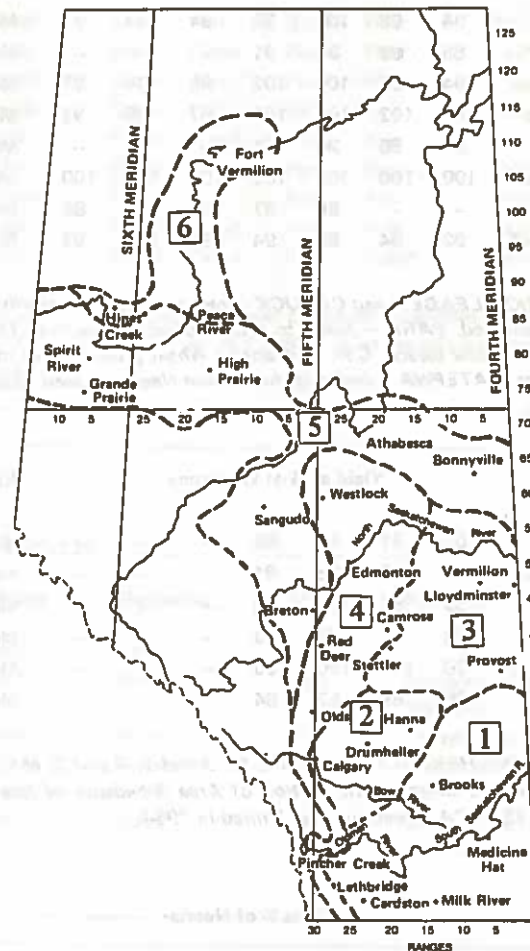
In areas 2, 3 and 5 of Alberta the following may be used as a guide for estimating maturity in actual days from seeding to harvest when the crops are seeded on fallow land: Neepawa wheat – 120 days, Park – 116, Grizzly oats – 114, Random – 107, Galt barley – 105, Otal – 94, McGregor flax – 130, Noralta – 117, Regent canola – 115, and Candle – 95 days. In area 6 the longer daylight hours usually reduces 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 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 1985

— Denotes variety not generally suited to area

WHEAT													
Variety	Irr. 1&2	Areas (See Map)						Relative Maturity	Resistance to:				
		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*	94	96	100	95	94	99	93	Medium	Good	Good	Good	Fair	Fair
Canuck*	85	92	88	91	--	--	--	Med-late	Fair	Fair	Good	Fair	Fair
Columbus	94	93	100	102	99	104	97	Med-late	Good	Good	Fair	Fair	Fair
Katepwa	99	102	102	100	97	98	93	Medium	Good	Good	Good	Fair	Fair
Leader	88	96	90	101	--	--	--	Med-late	Good	Good	Fair	Fair	Poor
Neepawa	100	100	100	100	100	100	100	Medium	Good	Good	Good	Fair	Fair
Park	--	--	86	87	90	97	88	Med-early	Good	Good	Good	Fair	Fair
Thatcher*	92	94	95	94	94	103	93	Medium	Good	Good	Good	Fair	Fair
Yield as % of Wakooma						ELIGIBLE FOR C.W. AMBER DURUM WHEAT GRADES							
Coulter	103	91	98	98	--	--	--	Medium	Good	Good	Fair	Good	Fair
Hercules*	94	83	83	81	--	--	--	Medium	Good	Good	Good	Fair	Poor
Macoun*	95	88	87	86	--	--	--	Med-late	Good	Good	Good	Good	Poor
Medora	102	96	95	103	--	--	--	Med-late	V. Good	Good	Fair	Good	Fair
Wakooma	100	100	100	100	--	--	--	Med-late	Good	Good	Fair	Good	Fair
Wascana	95	89	87	84	--	--	--	Med-late	Good	Good	Good	Good	Poor
Yield as % of Norstar						ELIGIBLE FOR ALBERTA RED WINTER WHEAT GRADES							
Norstar	--	100	--	--	--	--	--	Early	Fair	Good	Poor	Poor	Fair
Sundance*	--	98	--	--	--	--	--	Early	Poor	Good	Poor	Fair	Fair
Winalta*	--	90	--	--	--	--	--	Early	Fair	Good	Poor	Poor	Fair
REMARKS: LEADER and CANUCK — 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, seed supplies limited in 1984.													
REMARKS: HERCULES — suitable for Areas 1, 2 and 3. MACOUN, WAKOOMA, WASCANA, MEDORA — 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. MEDORA — seed supplies limited in 1984.													
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:				
		1	2	3	4	5	6				Lodg- ing	Shatter- ing	Loose Smut	False Loose & Covered Smut	Common Root Rot
ELIGIBLE FOR FEED GRADES ONLY															
Abee	88	98	96	98	97	106	101	Med-late	2	Rough	Good	Good	Poor	Fair	Fair
Diamond	97	98	105	107	108	109	96	Medium	6	Semi-smooth	Good	Good	Poor	Good	Poor
Empress	89	83	98	104	113	111	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	95	104	122	117	111	117	115	Late	6	Smooth	Poor	Fair	Fair	Poor	Fair
Klondike	96	95	94	105	107	104	97	Medium	6	Smooth	Good	Fair	Fair	Fair	Fair
Leduc	98	101	104	112	122	109	96	Med-late	6	Rough	Fair	Good	Fair	Good	Fair
Otal	--	--	--	--	96	92	86	Early	6	Rough	Poor	Fair	Poor	Fair	Poor
Scout	78	76	85	76	85	87	85	Med-late	2	Rough	Fair	Good	Poor	Poor	Fair

ELIGIBLE FOR C.W. GRADES

Argyle	93	92	100	109	110	106	103	Med-late	6	Smooth	Good	Fair	Good	Poor	Fair
Betzes	78	88	89	88	86	94	91	Medium	2	Rough	Fair	Good	Poor	Poor	Fair
Bonanza	93	86	99	98	104	96	92	Medium	6	Smooth	Good	Fair	Fair	Poor	Fair
Conquest	87	80	85	92	95	89	81	Medium	6	Smooth	Good	Fair	Fair	Fair	Fair
Elrose	85	91	92	88	97	92	97	Medium	2	Rough	Good	Good	Poor	Fair	Fair
Fairfield	89	99	94	92	97	95	97	Med-late	2	Rough	Good	Good	Poor	Fair	Fair
Gateway 63*	--	--	--	--	86	86	82	Med-early	6	Smooth	Fair	Fair	Poor	Fair	Poor
Harrington	89	95	97	93	103	103	98	Med-late	2	Rough	Good	Good	Poor	Poor	Fair
Klages	84	87	94	96	93	99	104	Late	2	Rough	Good	Good	Poor	Good	Fair

REMARKS: *KLAGES* — preferred by maltsters to older 2-row varieties. Smuts can be controlled with seed treatment fungicides. *ARGYLE*, *ELROSE* and *HARRINGTON* being evaluated by maltsters and brewers. *SCOUT* — hullless, similar to *Fairfield* in agronomic performance. *Elrose* subject to severe yield losses from net blotch in central and northern Alberta.

OATS

Variety	Irr. 1&2	Yield as % of Harmon						Relative Maturity	Resistance to:			Remarks
		1	2	3	4	5	6		Lodging	Shattering	Smuts	
Athabasca	89	90	92	92	102	100	95	Early	Good	Fair	Poor	
Cascade	98	111	105	109	124	117	119	Med-late	Good	Good	Poor	Kernels similar to Random
Foothill	92	103	100	105	100	103	104	Med-late	Good	Good	Poor	Forage variety
Grizzly	97	95	106	102	113	111	104	Late	Fair	Good	Poor	Plump kernels
Harmon	100	100	100	100	100	100	100	Med-late	Good	Good	Fair	
Random	103	105	104	90	105	106	106	Med-early	Good	Good	Poor	Short straw, long large kernels

NOTE: *DUMONT* and *CALIBRE* — no seed available in 1984.

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.

TRITICALE — *WELSH*, *CARMAB* and *TRIWELL* — spring varieties — yields equal to or higher than *Glenlea* utility wheat and equal or later in maturity. Triticale is grown under contract or for feed where ergot is not a problem. Due to possible feed quality problems, the present triticales should not be used as a total ration for poultry or hogs.

FALL RYE

Yield as % of Kodiak in areas

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

Yield as % of Noralta in areas

Variety	Irr. 1&2	Yield as % of Noralta in areas						Relative Maturity	Seed Size	Rust Resistance	Remarks
		1	2	3	4	5	6				
Dufferin	102	105	106	96	95	--	--	Late	Medium	Good	
McGregor	106	105	121	103	104	--	--	Late	Medium	Good	
Noralta	100	100	100	100	100	100	100	Early	Small	Poor	
Norlin	103	100	122	111	113	93	100	Medium	Medium	Good	Good for delayed seeding

REMARKS: McGREGOR and NORLIN seed supplies limited in 1984.

CANOLA

Yield as % of Candle in areas

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	110	105	105	100	Early	Medium	Mixed yellow and brown seed
ARGENTINE TYPE (<i>B. napus</i>)										
Altex	130	110	120	125	110	125	120	Med-late	Long	
Andor	125	110	120	125	110	125	120	Med-late	Long	
Regent*	130	105	115	115	100	125	120	Med-late	Long	
Westar	130	105	130	125	115	135	130	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 type 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.