VARIETIES of CEREALS & OILSEEDS for Alberta - 1974

This publication is prepared by the Alberta Cereal and Oilseeds Advisory Committee for the Alberta Agriculture Co-ordinating Committee.

The Advisory Committee is composed of representatives of the Department of Plant Science, University of Alberta, Edmonton; the Research Stations, Research Branch, Agriculture Canada, located in Lethbridge, Lacombe and Beaverlodge; the Plant Products Division, Production and Marketing Branch, Agriculture Canada, Edmonton; and the Plant Industry Division, Alberta Agriculture, Edmonton, Alberta.

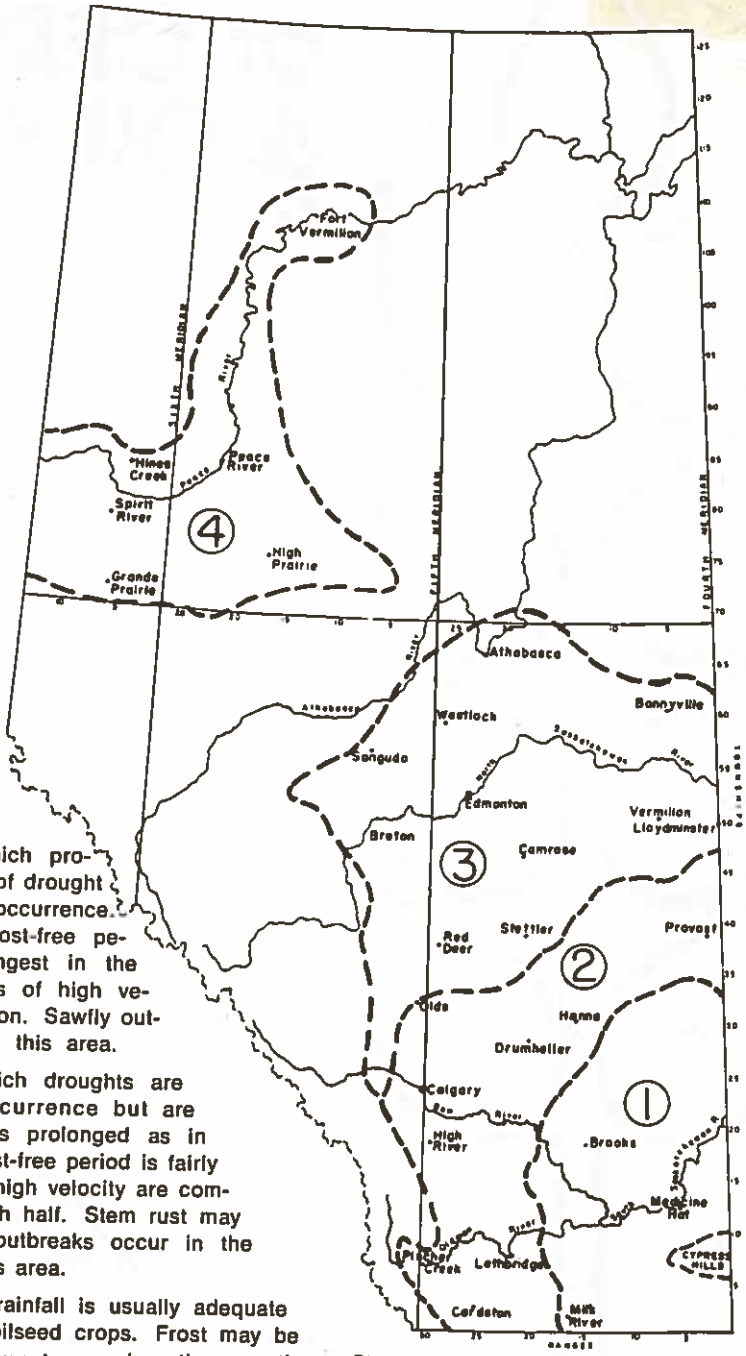
The Advisory Committee co-ordinates the findings of the various research institutions in Alberta and in this publication describes those varieties that are best suited for production in Alberta.

For more detailed information consult your local district agriculturist.

Alberta
AGRICULTURE

This and related publications are available from the publication section, Communications Branch, Alberta Agriculture, Edmonton, Alberta.

CEREAL and OILSEED PRODUCTION AREAS — ALBERTA



1. An area in which prolonged periods of drought are of frequent occurrence. The average frost-free period is the longest in the province. Winds of high velocity are common. Sawfly outbreaks occur in this area.
2. An area in which droughts are of common occurrence but are generally not as prolonged as in Area 1. The frost-free period is fairly long. Winds of high velocity are common in the south half. Stem rust may occur. Sawfly outbreaks occur in the south half of this area.
3. An area where rainfall is usually adequate for cereal and oilseed crops. Frost may be a hazard in the western and northern portions. Stem rust may occur in the eastern portion.
4. An area where rainfall is usually adequate for cereal and oilseed crops. The frost-free period may be somewhat shorter than in Area 3 but because of longer days the growth is usually more rapid.

FLAX

Variety	Yield as % of Noralta in areas 1 & 2	3 & 4	Relative Maturity	Seed Size	Rust Resistance	REMARKS
Noralta	100	100	Med-early	Small	Good	Suitable to all areas. Resistant to lodging.
Norland	107	–	Late	Large	Good	Suitable for southern areas.
Raja	97	84	Med-early	Large	Good	Responds well to delayed seeding in the south.
Redwood 65	107	–	Late	Medium	Good	Suitable to southern areas.

RAPESEED

Variety	Yield as % of Span in areas 1 & 2	3 & 4	Relative Maturity	Seed Size	Straw Length	Erucic Acid %	REMARKS
			POLISH TYPE*				
Span	100	100	Early	Small	Medium	Low	
Torch	108	102	Early	Small	Medium	Low	
			ARGENTINE TYPE*				
Midas	120	–	Med-late	Large	Long	Low	Shatters more readily than
Zephyr	110	–	Late	Large	Long	Low	Polish when ripe.

*Polish type 2 – 3 weeks earlier than Argentine type. Argentine yields can be severely reduced in Areas 1 and 2 due to drought and heat stress. Seed of Argentine type is often degraded in Areas 3 and 4 because of immaturity.

MUSTARD

Type	Seed Size	Seed Color	Relative Maturity	REMARKS
Brown	Small	Brown	Med-late	
Oriental	Small	Yellow	Med-late	
Yellow	Large	Yellow	Med-early	

*Mixtures of rapeseed and mustard are inseparable and unacceptable.

RYE

COUGAR, PUMA, FRONTIER and ANTELOPE are varieties of fall rye suitable for Alberta. COUGAR is the highest yielder but is slightly less winter hardy than the other three. ANTELOPE and FRONTIER are slightly early maturing than COUGAR and PUMA, but have smaller kernels. PROLIFIC is a suitable variety of spring rye.

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 mustard. 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.

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.

— Denotes not generally suited to area.

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: Thatcher wheat — 120 days, Saunders — 116, Eagle oats — 112, Glen — 106, Galt barley — 105, Olli — 92, Redwood 65 flax — 130, Noralta — 117, Zephyr rapeseed — 115, and Span — 94 days. In southern Alberta, Thatcher 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 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.

● TREATED SEED IS POISONOUS. DO NOT FEED TO LIVESTOCK AND POULTRY. DO NOT DUMP WHERE WILDLIFE FEEDS.

● Costs of crop production are becoming extremely high — land use, machinery, fertilizers, chemicals, labor, etc. In relation to this total, the cost of 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 best way to be absolutely sure of obtaining a particular variety is by use of PEDIGREE seed with known ancestry.

Copies of this publication may be obtained from your District Agriculturist or the publication section, Communications Branch, Alberta Agriculture, 18 Agriculture Building, Edmonton.

COMPARISON OF VARIETIES

– Denotes not generally suited to area.

WHEAT

*May not be described in 1975

Variety	AREAS (See Map) 1	2	3	4	Relative Maturity	Resistance to: Lodging	Shattering	Loose Smut	Bunt (Covered Smut)	Remarks:
	Yield as % of Thatcher				**ELIGIBLE FOR C.W. RED SPRING WHEAT GRADES**					
Canthatch*	100	100	100	98	Medium	Good	Good	Good	Fair	A widely-adapted variety – kernels tend to bleach.
Chinook	95	95	–	–	Medium	Fair	Poor	Poor	Poor	Suited to sawfly area – retains good bushel weight under dry conditions.
Cypress	95	95	–	–	Med-late	Fair	Fair	Poor	Poor	Similar to Chinook with better resistance to sawfly.
Manitou	100	100	99	102	Med-late	Good	Good	Good	Fair	Late maturing in Areas 3 and 4.
Napayo	100	100	100	97	Medium	Good	Good	Good	Fair	Bearded variety.
Neepawa	105	105	103	105	Medium	Good	Good	Good	Fair	A widely adapted variety.
Park	–	100	100	97	Med-early	Good	Good	Good	Fair	Easier to thresh and bleaches less than Thatcher. Subject to head discoloration.
Saunders	–	90	92	95	Med-early	Good	Good	Good	Fair	Best suited to Area 4.
Thatcher	100	100	100	100	Medium	Good	Good	Good	Fair	A widely-adapted variety – kernels tend to bleach.
	Yield as % of Glenlea				**ELIGIBLE FOR CANADA UTILITY WHEAT GRADES ONLY**					
Glenlea	100	100	100	100	Med-late	Good	Good	Good	Fair	Depending on moisture and fertility Glenlea outyields Neepawa by up to 35% (average 11%). Pitic 62 yield is very variable. This variety is suited only to the southern portions of areas 1 and 2.
Pitic 62	105	110	–	–	Very late	Fair	Fair	Poor	Poor	
	Yield as % of Stewart 63				**ELIGIBLE FOR C.W. AMBER DURUM WHEAT GRADES**					
Hercules	97	97	–	–	Medium	Good	Good	Good	Fair	Suitable for Areas 1 and 2.
Stewart 63	100	100	–	–	Late	Fair	Good	Fair	Poor	Because of later maturity should be grown only in Area 1 and the south-eastern portion of Area 2.
Wakooma	110	110	–	–	Med-Late	Good	Good	Good	Good	Wascana and Wakooma equal to Hercules in quality.
Wascana	110	110	–	–	Med-Late	Fair	Good	Good	Good	
	Yield as % of Kharkov 22MC				**ELIGIBLE FOR ALBERTA RED WINTER WHEAT GRADES**					
Kharkov 22MC	–	100	–	–	Early	Fair	Poor	Poor	Poor	Winter survival is best in southwestern Alberta. Winalta and Sundance have better milling and baking quality and shorter straw than Kharkov 22MC or Yogo.
Sundance	–	111	–	–	Early	Fair	Good	Poor	Fair	
Winalta	–	96	–	–	Early	Good	Good	Poor	Poor	
Yogo*	–	100	–	–	Early	Fair	Good	Good	Good	

BARLEY

Variety	Yield as % of Galt in areas 1	2	3	4	Relative Maturity	No. of rows	Awn Type	Resistance to: Lodging	Shattering	Loose Smut	Covered Smut	REMARKS
					ELIGIBLE FOR FEED GRADES ONLY							
Galt	100	100	100	100	Medium	6	Semi-smooth	Good	Good	Poor	Good	Performance variable in Areas 3 and 4.
Jubilee	91	91	96	108	Late	6	Smooth	Fair	Good	Poor	Poor	May shatter in southern areas.
Palliser*	100	91	–	–	Med-late	2	Semi-smooth	Fair	Good	Fair	Fair	
					ELIGIBLE FOR C.W. GRADES							
Betzes	90	93	87	95	Medium	2	Rough	Fair	Good	Poor	Poor	May shatter in drier areas.
Bonanza	–	93	95	98	Medium	6	Smooth	Good	Good	Good	Fair	
Centennial	85	90	93	100	Med-late	2	Rough	Good	Good	Poor	Poor	Short strawed variety.
Conquest	–	89	89	85	Medium	6	Smooth	Good	Good	Good	Fair	
Gateway 63	–	79	80	87	Med-early	6	Smooth	Fair	Good	Poor	Fair	May shatter in southern areas.
Hector	100	98	90	90	Medium	2	Rough	Fair	Fair	Fair	Fair	Seed stocks limited.
Olli	–	–	74	86	Early	6	Rough	Poor	Fair	Fair	Fair	
Paragon	–	93	97	93	Medium	6	Smooth	Good	Good	Good	Fair	Not accepted by maltsters.

OATS

Variety	Yield as % of Victory in areas 1	2	3	4	Relative Maturity	Resistance to: Lodging	Shattering	Smuts	REMARKS
Eagle	103	105	105	100	Late	Fair	Good	Poor	Best suited to central areas.
Fraser	103	105	104	102	Late	Good	Fair	Good	Plump kernels.
Garry*	93	95	91	92	Med-early	Good	Good	Good	Large kernels. Good disease resistance.
Glen	96	100	95	96	Med-early	Good	Good	Fair	Has long large kernels. Resistant to gray speck.
Grizzly	103	103	107	105	Late	Fair	Good	Poor	Plump kernels.
Harmon	95	100	100	96	Med-late	Good	Good	Good	Kernels similar to Rodney.
Random	95	105	105	108	Med-early	Good	Good	Poor	Short straw, long large kernels, resistant to gray speck. Black lemma awns sometimes adhere.
Rodney	95	100	95	96	Med-late	Good	Fair	Good	Large kernels, de-hulls readily.
Sioux	105	105	95	95	Med-early	Good	Good	Good	
Victory	100	100	100	100	Late	Poor	Good	Poor	