

Varities
of
Grain Crops
for
Saskatchewan
1961

DESCRIPTIONS AND RECOMMENDATIONS AS PREPARED BY

The Saskatchewan Advisory Council on Grain Crops

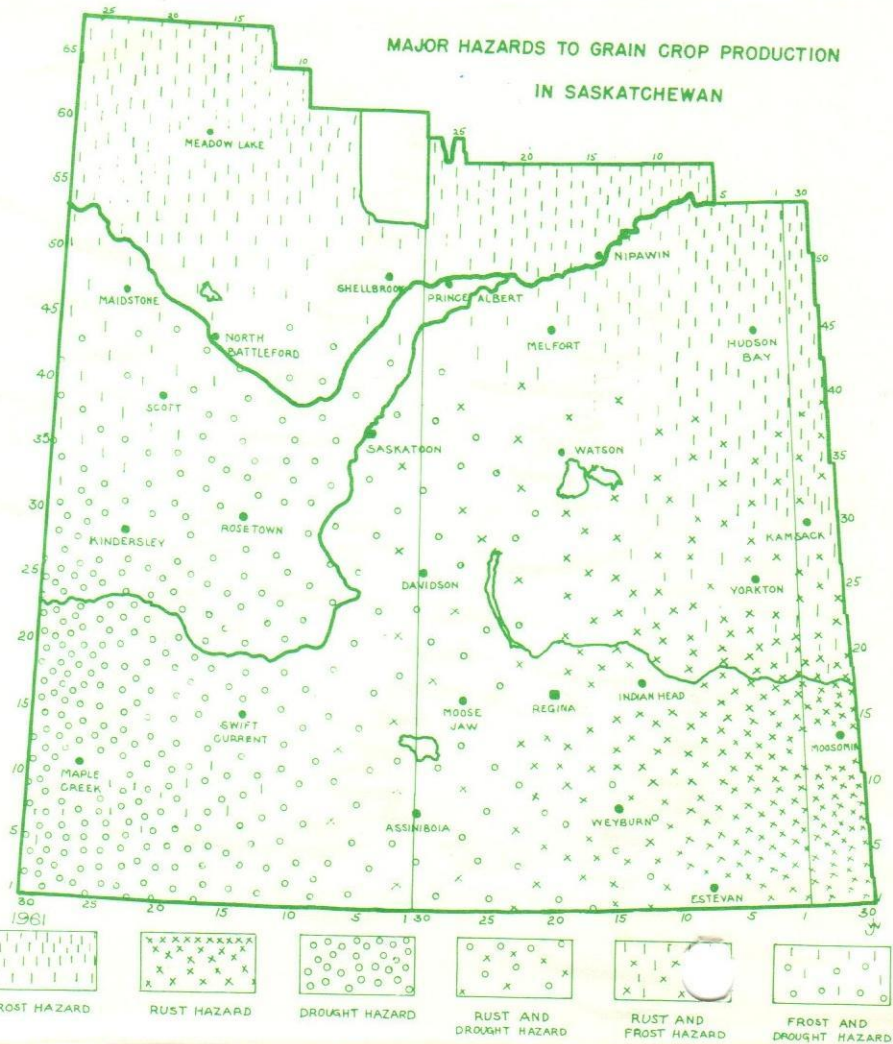
PUBLISHED UNDER THE SASKATCHEWAN CO-OPERATIVE
AGRICULTURAL EXTENSION PROGRAMME BY AUTHORITY
OF THE HON. I. C. NOLLET, MINISTER OF AGRICULTURE.

VARIETIES OF GRAIN CROPS FOR SASKATCHEWAN 1961

The following tables contain the main characteristics of commonly grown varieties of cereal crops, and of varieties that are new to most farmers. The recommendations and comments are based on the collective experience of agronomists who have tested varieties under a wide range of conditions.

Growers should choose varieties with characteristics best able to meet the crop hazards which experience has shown are most likely to occur under their conditions.

Additional information concerning these varieties, or varieties not mentioned in this pamphlet, can be obtained from Agricultural Representatives, Experimental Farms and the University.



BREAD AND DURUM WHEAT — Main Characteristics of Varieties

Type and Variety	Maturity	Lodging	Stem Rust	Leaf Rust	Resistance to		Spring Frost	Shattering	Kernel Size
					Loose Smut	Bunt			
Bread									
Canthatch	Early	Good	Fair	Poor	Good	Poor	Good	Good	Small
Chinook	Early	Fair	Poor	Poor	Fair	Poor	Poor	Fair	Medium
Lake	Medium	Good	Poor	Poor	Fair	Fair	Good	Fair	Medium
Lee	Early	Good	Poor	Good	Poor	Poor	Good	Good	Medium
Pembina	Early	Good	Good	Good	Good	Poor	Good	Fair	Medium
Rescue	Early	Fair	Poor	Poor	Poor	Poor	Poor	Fair	Medium
Selkirk	Early	Good	Good	Good	Good	Fair	Good	Fair	Large
Thatcher	Early	Good	Poor	Poor	Good	Poor	Good	Good	Small
Durum *									
Pelissier	Late	Fair	Poor	Good	Fair	Poor	Good	Good	Large
Ramsey	Late	Fair	Good	Good	Fair	Fair	Good	Good	Medium
Stewart	Late	Fair	Poor	Good	Fair	Poor	Good	Good	Medium

* Durums tend to be susceptible to root rots. They are moderately resistant to sawfly.

RECOMMENDATIONS AND COMMENTS:

Where rust is a hazard **Pembina** and **Selkirk** are the only recommended varieties of bread wheat and **Ramsey** is the only recommended durum wheat. **Canthatch** is resistant to stem rust, but is susceptible to leaf rust.

Where drought is a hazard **Canthatch** and **Thatcher** are very satisfactory varieties. However, if sawfly is a problem either **Chinook** or **Rescue** should be used. **Rescue** is the most sawfly resistant variety, but it is inferior in milling and baking quality.

In the northwestern part of the province **Lake** has performed well although it is somewhat later than other bread wheat varieties.

Where frost is a hazard the durum varieties are not recommended because they are late maturing. **Pelissier** is not eligible for grades above 4 C.W.

Lee is not recommended because it is susceptible to loose smut and to stem rust.

Winter Wheat is not recommended in Saskatchewan because of a lack of winter hardiness and of the difficulty in marketing due to the danger of mixing with spring wheat.

BARLEY — Main Characteristics of Varieties

Type and Variety	Six or Two Rowed	Maturity	Lodging	Resistance to				Head Shattering	Head Breakage
				Stem Rust	Leaf Rust	Loose Smut	Covered Smut		
Feed									
Husky	Six	Late	Fair	Good	Good	Poor	Fair	Fair	Fair
Jubilee	Six	Late	Fair	Good	Good	Poor	Fair	Fair	Fair
Titan	Six	Early	Good	Poor	Poor	Fair	Fair	Good	Fair
Vantage	Six	Medium	Good	Good	Poor	Poor	Poor	Good	Good
Vantmore	Six	Medium	Good	Good	Poor	Poor	Poor	Good	Good
Eligible for C.W. Grades									
Betzes	Two	Medium	Fair	Poor	Poor	Poor	Poor	Good	Good
Compana	Two	Medium	Poor	Poor	Poor	Poor	Poor	Good	Good
Hannchen	Two	Medium	Poor	Poor	Poor	Poor	Poor	Good	Good
Olli	Six	Early	Poor	Poor	Poor	Poor	Poor	Fair	Poor
Montcalm	Six	Medium	Fair	Poor	Poor	Poor	Fair	Fair	Fair
Palliser	Two	Medium	Fair	Poor	Poor	Poor	Poor	Good	Good
Parkland	Six	Medium	Fair	Good	Poor	Poor	Poor	Fair	Fair

RECOMMENDATIONS AND COMMENTS:

Where rust is a problem the high yielding feed barleys **Husky**, **Jubilee** and **Vantage** are recommended. Jubilee is very similar to Husky, but higher in yield. Seed stocks of Jubilee will be available for general distribution in 1962.

Parkland is a rust resistant variety eligible for the highest C.W. Six-Row grades. The kernels of this variety are easily peeled and extreme caution should be exercised at the time of threshing and handling. Where neither rust nor drought is a hazard **Montcalm** is satisfactory as a malting barley and is eligible for the highest C.W. Six-Row grades.

Palliser is eligible for the 3 C.W. Two-Row grade. It is similar to **Compana** but has a wider adaptation. Where drought is a hazard both are satisfactory.

Betzes is rough awned and suitable for the highest C.W. Two-Row grades. It is equal to **Hannchen** in malting and pearling quality.

Where an early maturing variety is needed for wild oat control **Olli** and **Titan** are recommended.

OATS — Main Characteristics of Varieties

Variety	Maturity	Lodging	Stem Rust	Resistance to		Percent Hull
				Leaf (Crown) Rust	Smut	
Ajax	Early	Fair	Fair	Poor	Poor	Medium
Eagle	Late	Good	Poor	Poor	Poor	Medium
Exeter	Late	Fair	Fair	Poor	Poor	Medium
Fortune	Late	Fair	Fair	Poor	Good	Medium
Garry	Medium	Good	Good	Fair	Good	Medium
Rodney	Late	Good	Good	Fair	Good	Low
Victory	Late	Fair	Poor	Poor	Poor	High

RECOMMENDATIONS AND COMMENTS:

Race 7A of oat stem rust which attacks **Rodney** appears to be increasing in prevalence, particularly in Manitoba. Where rust is a hazard, **Garry** is the only variety offering good protection against all prevailing races. Rodney is the second best choice.

Where rust is not a hazard **Exeter**, **Fortune**, **Garry** and **Rodney** are all suitable. The large plump kernels of Rodney peel easily and require more care in threshing and handling.

Where early maturity is desired **Ajax** may be used.

Torch and **Vicar** are hullless varieties which are used as livestock and poultry feeds.

FLAX — Main Characteristics of Varieties

Variety	Maturity	Resistance to		Percent Oil	Oil Quality	Seed Size	Flower Color
		Rust	Wilt				
Marine	Early	Good	Good	Low	Good	Small	Blue
Norland	Late	Good	Fair	High	Good	Large	White
Raja	Early	Good	Good	Low	Medium	Large	Blue
Redwing	Early	Poor	Fair	Medium	Good	Small	Blue
Redwood	Late	Good	Good	High	Good	Medium	Blue
Rocket	Late	Good	Fair	High	Good	Medium	Blue

RECOMMENDATIONS AND COMMENTS:

Redwood, Rocket and **Norland** are recommended throughout the province except in the far north. These varieties will outyield earlier maturing varieties except when sown late. **Marine** should be used when seeding is delayed.

Where frost is a hazard **Marine** or **Raja** should be used.

Wherever flax is grown rust is a hazard.

RYE — Main Characteristics of Varieties

Type and Variety	Resistance to			Color	Kernel Size	Head		
	Winter Killing	Shattering	Lodging			Length	Density	
Winter Type								
Antelope	Good	Poor	Poor	Variable	Small	Medium	Lax	
Dakold 23	Good	Poor	Poor	Variable	Small	Medium	Lax	
Dominant	Poor	Good	Good	Blue	Large	Short	Dense	
Petkus	Poor	Good	Good	Blue	Large	Medium	Dense	
Sangaste	Poor	Fair	Good	Tan	Large	Long	Medium	
Tetra-Petkus	Poor	Good	Good	Blue	Large	Long	Dense	
Spring Type								
Prolific		Fair	Fair	Green	Medium	Medium	Lax	

RECOMMENDATIONS AND COMMENTS:

Antelope and **Dakold 23** are the only two winter ryes that are hardy enough to be generally grown in Saskatchewan.

Where **Sangaste, Petkus** and **Dominant** will survive the winter they produce excellent yields of a more desirable type of grain.

Tetra-Petkus rarely survives our winters.

RAPE

Rape is adapted particularly to the Park belt area of the province but diseases are sometimes severe. Seed from diseased fields should not be used for seeding. Where drought is a hazard rape frequently gives disappointing yields. This crop has several insect pests which can be very destructive. Growers should observe fields frequently and be prepared to apply insect control measures.

RECOMMENDATIONS AND COMMENTS:

Argentine Type: Variety Golden. This type is fairly tall growing and matures about the same time as wheat. Seedlings are susceptible to spring frost. Seed of Golden has a higher oil content than other varieties available.

Polish Type: Varieties Arlo and Polish. This type is shorter growing, has smaller seeds, and matures about three weeks earlier than Golden. Seedlings are more resistant to frost than those of the Argentine type. Varieties of this type are recommended where the frost-free season tends to be short or where seeding is delayed until late May or early June. The Polish type, because of its earliness, is more likely to escape disease and drought than Golden. Arlo is quite similar to Polish but the seed has a higher oil content.

SEED FACTS

SEED GRAIN

Good seeding practice depends not only on choice of the best variety, but also on selection of seed which is sound, high in germination and free from weed seeds, disease and mixtures of other varieties, other grains or foreign material. Pedigreed seed, that is, seed which has been field inspected, bagged and sealed must meet the standards of germination and purity set out in the Canada Seeds Act. Buyers of this pedigreed seed are assured of getting a good quality product at a moderate premium over the price of commercial grain. Seed of this type

can be purchased through elevator agents, direct from seed dealers or growers.

Any non-pedigreed grain intended for seeding should be tested for germination. Local elevator agents will accept samples for germination tests. For official germination tests, samples must be sent to Plant Products Division, 413 London Building, Saskatoon, with a prepaid fee of 75 cents per sample.

SEED CLEANING

When commercial grain is to be used for seed it should be carefully cleaned to remove weed seeds, other grains and foreign material. Cleaning should be done in such a way that the seed does not become contaminated with seed borne disease, other grains or other varieties. Tests have shown that the best cleaning job can be done at a stationary seed cleaning plant or in good, carefully-operated cleaning equipment on the user's farm. Cleaning equipment in country elevators is designed for commercial operation rather than for seed cleaning and does not prevent some mixing and contamination during handling. Many stationary cleaning plants offer a seed treating service in conjunction with the cleaning operation.

SEED TREATMENT

Mercury fungicides are available which will give adequate control of the surface-borne smuts, seed rots and seedling blights of cereal. There are also non-mercury compounds which are satisfactory **for the control of bunt of wheat only**. Wheat should be treated at least one day, and barley and oats at least one week, before seeding, except when otherwise specified by the manufacturer. Good seed can be treated well in advance of seeding. If treated seed is kept for over six months, it is advisable to check the germination before seeding. As a general rule tough or damp grain should not be treated with fungicides. Sound, disease-free seed may be sown without treatment. The best way to control true loose smut of barley is to sow smut-free seed, but the hot water treatment and the salt water soak treatments are effective.

For wireworm control seed dressings containing gamma isomer of benzene hexachloride (BHC, lindane), aldrin, or heptachlor, with or without a mercuric fungicide, will protect the crop from wireworm damage and will reduce the wireworm population when used **according to recommendations**. Seed dressings should be used **only on sound, dry seed**. Dusts may be applied anytime during the winter or spring prior to seeding. However, with liquid treatments follow instructions on the label especially in regard to storage.

OTHER INFORMATION Relating to Grain Crop Production

Bulletins on fertilizers and weed control, generally revised annually, are available from sources given below. Information on plant diseases, insect pests and other aspects of production can be found in the Guide to Farm Practice in Saskatchewan, 1960. These publications may be obtained from Agricultural Representatives, Experimental Farms, and the University of Saskatchewan.