Varieties of Grain Crops for Saskatchewan 1962

DESCRIPTIONS AND RECOMMENDATIONS AS PREPARED BY

The Saskatchewan Advisory Council on Grain Crops

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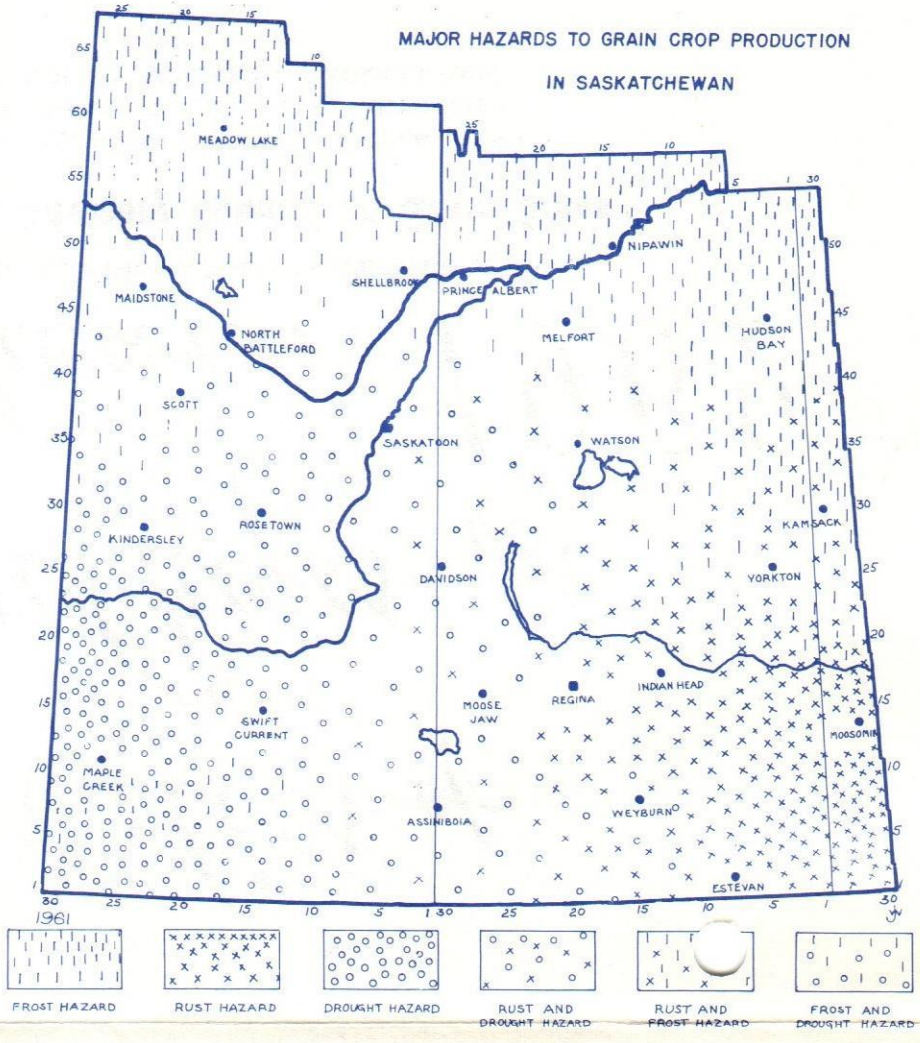
The following tables contain the main characteristics of commonly grown varieties of cereal crops, and of varieties that are new to most farmers. The recommendations and comments are based on the collective experience of agrologists who have tested varieties under a wide range of conditions.

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	Resistance to							Kernel Size
		Lodging	Stem Rust	Leaf Rust	Loose Smut	Bunt	Spring Frost	Shattering	
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. **Pembina** has excellent milling and baking quality, but is slightly shorter and lower yielding than **Selkirk. Canthatch** is resistant to stem rust, but is susceptible to leaf rust.

Where drought is a hazard **Canthatch** and **Thatcher** are the most 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 baking quality.

In the northwestern part of the province **Lake** has yielded 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 Extra 4 C.W.

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

Winter Wheat (including **Winalta**) 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	Resistance to						Head Breakage
			Lodging	Stem Rust	Leaf Rust	Loose Smut	Covered Smut	Shattering	
Feed									
Husky	Six	Late	Fair	Good	Good	Poor	Fair	Fair	Fair
Jubilee	Six	Late	Fair	Good	Good	Poor	Fair	Fair	Fair
Keystone	Six	Medium	Good	Good	Poor	Good	Good	Fair	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
Montcalm	Six	Medium	Fair	Poor	Poor	Poor	Fair	Fair	Fair
Olli	Six	Early	Poor	Poor	Poor	Poor	Poor	Fair	Poor
Palliser	Two	Medium	Fair	Poor	Poor	Poor	Poor	Good	Good
Parkland	Six	Medium	Fair	Good	Poor	Poor	Poor	Fair	Fair

RECOMMENDATIONS AND COMMENTS:

Husky, Jubilee, Keystone and **Vantage** are recommended feed barleys. Where rust is a problem Husky and Jubilee are recommended since both are resistant to the present races of stem and leaf rust. Keystone and Vantage are resistant to stem rust but susceptible to leaf rust.

Keystone is the only barley variety that has high resistance to loose smut.

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 in threshing and handling. Where rust is not a hazard **Montcalm** is satisfactory as a malting barley and is eligible for the highest C.W. Six-Row grades. In general six-rowed malting varieties are slightly lower yielding than other barleys.

Palliser and **Compana** are not eligible for grades above 3 C.W. Two-Row. Compared with Compana, Palliser is taller and later, and is useful over a wider area. Where drought is a hazard both are satisfactory.

Betzes and **Hannchen** are eligible for the highest C.W. Two-Row grades, but are rough-awned.

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

OATS — Main Characteristics of Varieties

Variety	Maturity	Resistance to				Percent Hull
		Lodging	Stem Rust	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
Glen	Medium	Fair	Fair	Poor	Poor	Medium
Rodney	Late	Good	Good	Fair	Good	Low
Russell	Medium	Fair	Good	Fair	Good	Low
Victory	Late	Fair	Poor	Poor	Poor	High

RECOMMENDATIONS AND COMMENTS:

Where rust is a hazard **Garry** and **Russell** offer the best protection against all prevailing races of rusts. **Rodney** is the next best choice.

Garry, Glen, Rodney and **Russell** are all suitable varieties where rust is not a problem. Under rust free conditions Glen will outyield Garry and usually matures two days earlier.

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

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

FLAX — Main Characteristics of Varieties

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

RECOMMENDATIONS AND COMMENTS:

Redwood, Rocket, Norland and **Cree** 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.

Cree is a new variety which yields as high as Redwood and matures about two to three days earlier. Cree is a day or two later than Marine.

Arny is a newly licensed flax of particular interest to the paper industry in the Morden area of Manitoba, but is also suitable for oil seed production.

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

Wherever flax is grown rust is a hazard and it is dangerous to grow Redwing.

RYE — Main Characteristics of Varieties

Type and Variety	Resistance to			Kernel		Head	
	Winter Killing	Shattering	Lodging	Color	Size	Length	Density
Winter Type							
Antelope	Good	Po	Poor	Variable	Small	Medium	Lax
Dakold 23	Good	Poo	Poor	Variable	Small	Medium	Lax
Dominant	Poor	Good	Good	Blue	Large	Short	Dense
Petkus	Poor	Good	Good	Blue	Large	Medium	Dense
Sangaste	Poor	Fa	Good	Tan	Large	Long	Medium
Tetra-Petkus	Poor	Go	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. Where drought is a hazard rape frequently gives disappointing yields. Because of disease problems rape should not be sown on rape stubble. Growers should check fields frequently and be prepared to apply insect control measures promptly.

RECOMMENDATIONS AND COMMENTS:

Argentine Type: Varieties **Nugget** and **Golden.** Varieties of this type are fairly tall growing and mature about the same time as wheat. Seedlings are susceptible to spring frost. Nugget is one to two days earlier and slightly shorter than Golden. Both varieties are similar in seed yield. Nugget is preferred because of its higher yield of better quality oil.

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. As a result of changes made in seed standards, certified

seed is now recommended for crop improvement purposes. Seed can be purchased through elevator agents and from seed dealers or seed growers.

Any non-pedigreed grain intended for seeding should be tested for germination. Elevator agents will accept samples for germination tests. Official tests can be obtained from the Plant Products Division, 413 London Building, Saskatoon, for a prepaid fee of 75 cents per sample.

SEED CLEANING

When commercial grain is to be used for seed it should be carefully cleaned in such a way that it 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 well-designed, 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 mixing and contamination during handling. Many stationary cleaning plants offer a seed treating service in conjunction with the cleaning operation.

SEED TREATMENT

Mercury fungicides will give adequate control of the surface-borne smuts, seed rots and seedling blights of cereals. Some non-mercury compounds 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 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.