Parieties Grain Crops
for
askatchewan 1956

As Recommended by
The Saskatchewan Advisory Council on Grain Crops

PUBLISHED UNDER AUTHORITY OF THE SASKATCHEWAN CO-OPERATIVE AGRICULTURAL EXTENSION PROGRAMME

Recommended Varieties of Grain Crops for Saskatchewan for 1956[†]

THE SASKATCHEWAN ADVISORY COUNCIL ON GRAIN CROPS*
known previously as the Saskatchewan Cereal Variety Committee, was
formed in 1928 and functions under the Saskatchewan Advisory Committee
on Agricultural Services. It is composed of plant breeders and other specialists
who meet annually in December to draw up recommendations for the coming
year on the basis of a large number of accurate varietal tests.

The varieties which are recommended are suitable for use over the relatively large areas represented by different zones. Local variations in soil and climate may result in a non-recommended variety giving better results than a recommended variety. For the greater number of farmers in a given zone, however, it is considered that the greatest returns will result from growing recommended varieties. Information on the local adaptation of varieties can always be obtained from the University or the nearest Experimental Farm.

BREAD WHEAT

All varieties except Selkirk are susceptible to race 15B of stem rust.

Thatcher has wide adaptability and is recommended for all zones except those where rust is a serious hazard. It has short, strong straw, early maturity and high resistance to shattering and spring frost damage. The kernels are small and tend to bleach when exposed to weathering. Thatcher is moderately resistant to common root rot and resistant to loose smut. It is susceptible to bunt and very susceptible to leaf rust.

Lake. Compared with Thatcher it is later in maturity, has longer straw of equal strength and larger kernels with less tendency to bleach. It is equal to Thatcher in resistance to shattering and equal in bushel weight. Lake possesses

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^{*}This Council is composed of: the Cerealists from the Experimental Farms at Indian Head, Swift Current, Scott, Melfort and Regina, and the Field Husbandry Department, University of Saskatchewan; representatives from the Plant Industry Branch, and the Agricultural Representative Service, Department of Agriculture, Regina; District Supervisor, Plant Products Division, Saskatoon; Soil Specialist, Experimental Farms Service. Canada Department of Agriculture, Saskatoon; Director, Junior Co-operative Tests, Saskatchewan Wheat Pool, Regina; Entomologist, Field Crops Insect Laboratory, Saskatoon; Officer in Charge, Dominion Plant Pathology Laboratory, Saskatoon; Representative, Department of Extension, Plant Pathologist and Cereal Chemist, University of Saskatchewan, Saskatoon; representative of the Saskatchewan Branch, Canadian Seed Growers' Association.

considerable resistance to bunt but it is moderately susceptible to loose smut and common root rot. It is susceptible to leaf rust.

Lee is a leaf rust resistant variety. Compared with Thatcher it has shorter, lightly weaker straw, equal resistance to shattering, equal bushel weight, is slightly later in maturity and has larger kernels with less tendency to bleach. Lee is a bearded variety which is moderately susceptible to spring frost damage, moderately resistant to common root rot but susceptible to bunt and loose smut.

Selkirk is resistant to race 15B of stem rust and moderately resistant to leaf rust. Compared with Thatcher it has straw of equal length and strength, less resistance to shattering, equal bushel weight, is equal in maturity and has larger kernels with less tendency to bleach. Selkirk is resistant to bunt and loose smut.

Rescue is a sawfly resistant variety. Compared with Thatcher it has weaker straw of equal length, less resistance to shattering, higher bushel weight, is slightly later in maturity and has larger kernels with less tendency to bleach. Rescue is susceptible to spring frost damage, moderately susceptible to common root rot and susceptible to bunt, loose smut and leaf rust. Rescue is recommended only where resistance to sawfly is needed.

Chinook is a sawfly resistant variety. Compared with Thatcher it has taller, weaker straw, less resistance to shattering, higher bushel weight, is equal in maturity and has larger kernels with less tendency to bleach. Chinook is susceptible to spring frost damage, moderately susceptible to common root rot and susceptible to bunt, loose smut and leaf rust. Compared with Rescue, Chinook is taller and earlier, has higher bushel weight and is superior in quality.

LICENSED VARIETIES NOT RECOMMENDED

Apex, Garnet, Marquis, Red Bobs, Redman, Reliance, Renown, Reward, Regent.

DURUM WHEAT

The listed varieties are very susceptible to race 15B of stem rust.

Durum or macaroni wheats have proven valuable in the sawfly infested area because of their moderate resistance to this pest. They are later maturing and weaker in the straw but, in zones where they are recommended, they usually yield as much as or more than the bread wheats.

Stewart is of good quality and is eligible for the top grades. It has moderately strong straw, is resistant to leaf rust but is very susceptible to stem rust race 15 B, and is susceptible to bunt and moderately susceptible to common root rot.

Pelissier is inferior in quality and cannot be graded above Extra No. 4 C.W., however, it usually outyields Stewart especially in the drier areas of the province. Compared with Stewart, it has stronger straw and is later in maturity. It is resistant to leaf rust but susceptible to stem rust, bunt and common root rot.

LICENSED VARIETIES NOT RECOMMENDED

Carleton, Mindum, Nugget.

WINTER WHEAT

While winter wheat is not recommended for general use in Saskatchewan, it is being grown more or less satisfactorily in some parts of Zone 1C and with only occasional success in some parts of Zones 3B, 3H, 3J, 4A, and 4B. Winter wheat, where it winters successfully, may excel spring wheat in yield and has the advantage of distributing harvesting over a longer period. It should be noted that some difficulty may be encountered in the marketing of this crop, because of the danger of mixing with spring wheat. Breeding and testing work on this crop is under way.

OATS

In the drier parts of the province, especially in Zones 1A, 1B, 1C, and 1D, it is recommended that oats should be sown early on summerfallow.

Exeter is a late large seeded high yielding variety of oats. It is tall and has slightly weak straw. Exeter is susceptible to some races of stem rust and is susceptible to leaf (crown) rust and the smuts.

Rodney is a large seeded high yielding variety. It is stronger strawed than Exeter and has larger kernels with light hulls which detach readily. It is more resistant than Exeter to the prevailing races of rust.

Garry (the new strain) is a victoriae blight resistant variety selected from the original Garry. It is similar to Exeter in kernel character but is stronger strawed and earlier. Garry is more resistant to rust than Rodney.

Ajax is earlier maturing than Exeter but is similar in height, strength of straw and stem rust resistance. It is equal to Exeter in bushel weight but has a slightly smaller kernel. Ajax is susceptible to leaf (crown) rust and the smuts. Though lower in yield than other recommended varieties in the southwest, it is recommended because it tends to escape drought through earliness.

Fortune is a smut resistant variety. It is similar to Exeter in kernel type, yield, bushel weight and rust resistance, but is a little stronger strawed and ripens about the same time or slightly earlier.

Eagle is similar to Exeter in maturity and yield but has stronger straw. It is susceptible to the smuts and rusts.

Victory is a late plump seeded variety which generally yields well where rust is not a factor. It is susceptible to smuts and rusts.

VARIETIES RECOMMENDED FOR SPECIAL PURPOSES

Larain and **Valor** are much earlier than Exeter and thus are useful in wild oat control. Both are resistant to lodging but may break down soon after ripening. They are low yielding and susceptible to rusts.

Torch is a high yielding hulless variety which is useful as a special purpose feed. It is resistant to rusts and smuts.

LICENSED VARIETIES NOT RECOMMENDED

Banner, Brighton, Gopher, Laurel, Vanguard.

BARLEY

Barley usually gives more feed units per acre than either wheat or oats. It has generally given better results when sown early on summerfallow, particularly on the dry open plains. In the more moist parts of the eastern and northern zones, varieties of barley acceptable to the malting trade can be grown successfully.

Six-rowed Smooth Awned Varieties.

Vantage is a medium late, medium strong strawed feed barley. It is resistant to stem rust but susceptible to leaf rust and both loose and covered smut.

Husky is a moderately strong strawed feed barley. Compared with Vantage, it is slightly later in maturity and has a greater tendency to shatter. It is resistant to stem rust, moderately susceptible to leaf rust and covered smut and is susceptible to loose smut.

Velvon 11 is a feed barley. Compared with Vantage, it is slightly earlier in maturity and has weaker straw. It is susceptible to both leaf and stem rust and also to covered and loose smut.

Titan is a feed barley recommended only for the southwestern area of the province. Compared with Vantage, it is considerably earlier in maturity and has stronger straw. It is susceptible to stem and leaf rust and to loose smut, but moderately resistant to covered smut.

Montcalm is a blue seeded variety eligible for the highest malting grades. mpared with Vantage, it is slightly earlier in maturity but has considerably weaker straw. It is susceptible to stem and leaf rust and to loose smut, but moderately resistant to covered smut.

Two-rowed Varieties.

Hannehen is a rough awned variety eligible for the highest two row grades. Compared with Vantage, it is equal in maturity and has weaker straw, nevertheless it is reasonably satisfactory for straight combining. It is susceptible to both rusts and smuts. Because of the good quality and light colour of the seed, Hannchen is popular as a pearling barley.

Compana is a smooth awned feed barley. Compared with Hannchen, it is earlier in maturity but has shorter straw. It is susceptible to both rusts and smuts. It is reasonably satisfactory for straight combining.

VARIETIES RECOMMENDED FOR SPECIAL PURPOSES

Olli, Titan and Warrior are early maturing varieties suitable for delayed seeding for wild oat control outside the rust area. Titan has been described under recommended varieties. Olli is a six rowed, rough awned malting variety with weak straw. It is susceptible to smuts and rusts and is generally lower in yield than the recommended varieties. Warrior is a six-rowed, hooded (awnless) feed barley with strong straw, but low bushel weight. It is susceptible to smuts and rusts.

LICENSED VARIETIES NOT RECOMMENDED

Gateway, Newal, O.A.C.21, Plush, Sanalta.

RYE

Rye, particularly fall rye, is very useful in the lighter textured, droughty soils and is useful in annual weed and soil erosion control.

Dakold 23 is a winter hardy high yielding fall rye.

Antelope fall rye is equal to Dakold 23 in winter hardiness, is higher in yield and has a slightly larger kernel.

Prolific is a high yielding variety of spring rye.

FLAX

To control flax diseases it is advisable to treat the seed every year with a mercury fungicide at the rate of one and a half ounces per bushel. In addition, as most flax diseases over-winter on the straw, flax should not follow flax. All recommended varieties are susceptible to pasmo, but this disease so far has caused little damage in Saskatchewan. An early maturing variety is recommended where late seeding is necessary.

Rocket is resistant to wilt and rust. It is medium late and is high in oil content and quality.

Norland, a selection of Victory, is resistant to wilt and rust. It has white blossoms, large seeds and is high in oil content and quality. It is equal to Rocket in maturity.

Redwood is resistant to wilt and rust. It is medium late and is exceptionally high in oil content and quality.

Redwing is resistant to wilt and susceptible to rust and has small seeds. Compared with Rocket it is lower in yield but as it matures about a week earlier it is useful where early maturity is essential.

Marine is resistant to wilt and rust and moderately tolerant to pasmo. It is early maturing and is below Rocket in oil content.

LICENSED VARIETIES NOT RECOMMENDED

B.5128, Dakota, Royal, Sheyenne, Viking.

RAPE SEED

Rape, as an oil seed crop, has assumed a place of considerable importance in the northern areas of Saskatchewan. This crop, of which there are two main types, namely Argentine and Polish, should only be grown under contract to insure disposal of the seed. The Argentine type is somewhat later and higher yielding than Polish.

Golden is a newly licensed variety of the Argentine type. It has good yielding ability and is higher in oil content than Argentine or Polish.

FIELD PEAS AND BEANS

Peas. Dashaway, an early variety, and Arthur a late variety, are suitable for the split pea trade and satisfactory for combining.

Beans. The large white seeded varieties, Great Northern and Norwhite, and the large brown seeded variety, Norwegian, all have high cooking quality. Norwegian and Norwhite are early but Great Northern is medium late.

SEED FACTS

SEED GRAIN

Good seed is plump, high in germination percentage, free from weed seeds, pure as to variety and is sound.

Germination tests should be made on all grain used for seed. Tests may be made at home in soil or between blotting papers. Your local elevator agent will also accept and send samples for laboratory tests, or you may send your sample direct to the Plant Products Division, 413 London Building, Saskatoon, for official tests. The fee for the latter test is 75 cents per sample.

Registered and certified seeds are pure as to variety, high in germination, free from objectionable weed seeds and practically free from disease and seeds of other crops. It is a worthwhile investment to purchase even small quantities of registered or certified seed each year.

Seed grain is obtainable from the various seed companies, the University, Experimental Stations and from seed growers advertising in the farm papers. Orders for seed grain may be placed with your elevator agent. Information on seed prices and sources may be obtained from your agricultural representative, the Plant Products Division, 413 London Building, Saskatoon, The Plant Industry Branch of the Saskatchewan Department of Agriculture, Regina, or your local elevator agent.

SEED CLEANING

Thorough cleaning of seed is extremely important and should be confined to either home cleaning units or to central cleaning plants specializing in this operation. The practice of cleaning seed at commercial grain elevators should be avoided as it tends to encourage spread of weed seeds and disease.

SEED TREATMENT

Mercury fungicides control the smut diseases excepting loose smut of wheat and true loose smut of barley. Wheat should be treated at least one day before seeding, and barley and oats at least one week before seeding. Good seed grain can be treated with a reliable fungicide at the proper rate well in advance of seeding. If treated seed is kept for more than six months it is advisable to check the germination before seeding. Under no circumstances should tough or damp grain be treated with these preparations. Seed that is known to be sound and disease-free may be sown without treatment.

For wireworm control seed dressings containing gamma isomer of benzene hexachloride (BHC, lindane) or aldrin, 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 on sound, dry seed. They may be applied anytime during the winter or spring prior to seeding.

GUIDE TO FARM PRACTICE IN SASKATCHEWAN

Your free copy of the Guide to Farm Practice giving further details on seed facts and other valuable information on farming in Saskatchewan may be obtained from the Department of Extension, University of Saskatchewan; the Experimental Farms; Department of Agriculture, Regina; District Offices of the Agricultural Representative Service.