



A COMPARATIVE TEST OF BARLEY VARIETIES AT TISDALE

VARIETIES of Grain Crops

for Saskatchewan

Am 1951



As Recommended by
The Saskatchewan Cereal Variety Committee

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CO-OPERATIVE AGRICULTURAL EXTENSION PROGRAMME



Recommended Varieties of Grain Crops for Saskatchewan for 1951†

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 scientific experts. The committee meets 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 Dominion Experimental Station.

BREAD WHEAT

These varieties are resistant to stem rust (excepting for Race 15B)

Thatcher has wide adaptability and is recommended for all zones. It has short, strong straw, early maturity, high resistance to shattering and spring frost damage. The kernels are small and tend to bleach when exposed to weathering. It is moderately resistant to common rootrot and resistant to loose smut, but susceptible to leaf rust and bunt.

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Rescue. Compared with *Thatcher* it is sawfly resistant, has weaker straw of equal length, slightly later maturing, with slightly less resistance to shattering. It is susceptible to spring frost damage. The kernels are larger, brighter and have less tendency to bleach. It is moderately susceptible to common rootrot and susceptible to bunt, loose smut and leaf rust. The baking quality is inferior to that of *Thatcher*, and therefore *Rescue* is recommended only where resistance to sawfly is needed.

Redman. Compared with *Thatcher* it has straw of equal length and strength, slightly earlier maturity and equal resistance to shattering. It is moderately susceptible to spring frost damage. The kernels are larger and have less tendency to bleach. *Redman*, although resistant to some races of leaf rust, is susceptible to those prevailing at the present time. It is resistant to bunt, moderately resistant to loose smut and moderately susceptible to rootrot.

Apex 2177-The New Improved Apex. Compared with *Thatcher* it has somewhat weaker straw, slightly later maturity and equal resistance to shattering. It is moderately resistant to spring frost damage. The kernels are slightly larger and brighter. It is moderately resistant to rootrot, bunt and loose smut and moderately susceptible to leaf rust. It has longer straw, higher bushel weight and less tendency to bleach than *Thatcher*.

LICENSED VARIETIES NOT RECOMMENDED

Garnet, Marquis, Red Bobs, Regent, Reliance, Renown.

NEW LICENSED VARIETIES UNDER TEST

Lee, Saunders.

DURUM WHEAT

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 stem rust (excepting Race 15B) and leaf rust, but is susceptible to bunt and moderately susceptible to common rootrot.

Pelissier is inferior in quality and not eligible for grades above 3 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 susceptible to stem and leaf rust, bunt and common rootrot.

LICENSED VARIETIES NOT RECOMMENDED

Carleton, Mindum.

WINTER WHEAT

While winter wheat is not recommended for general use in Saskatchewan, it is being grown more or less satisfactorily in Zones 1C and with only occasional success in some parts of Zones 3B, 3H, 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 Zone 1, it is recommended that oats should be sown early on summerfallow.

Exeter is a late large seeded variety that has proven to be the highest yielding oat in all zones for which it has been recommended except Zones 3G and 3H. It is tall and has slightly weak straw. It is resistant to most but not all races of stem rust and is moderately susceptible to leaf rust and smuts.

Fortune is similar to Exeter in type of kernel, bushel weight and rust resistance. It is resistant to smut, a little stronger strawed and ripens about the same time as Exeter. In zones where both Fortune and Exeter are recommended Fortune usually yields less than Exeter. This is especially true in the north-easterly zones, but there is little difference in their yields in other parts of the province. This variety has about 10 per cent. less hull than Exeter and its grain has been shown to be higher in protein content than Exeter.

Ajax is earlier maturing than Exeter. It is similar to Exeter in height, strength of straw and stem rust resistance. It has moderate resistance to leaf rust and the smuts. Its kernel is slightly smaller, but it equals Exeter in bushel weight. Ajax yields are very similar to either Exeter or Fortune in the zones where it is recommended with these varieties.

Victory is a late plump seeded variety which may yield well where rust is not a factor. It has slightly weak straw of good length, is susceptible to smuts and rusts.

VARIETIES RECOMMENDED FOR SPECIAL PURPOSES

Larain-Valor. These oats are very early maturing in comparison with Exeter. Because of their earliness and large seed they are useful as a cleaning crop for wild oats. Both have resistance to lodging, but will not stand long after ripening. Both are susceptible to rusts. Valor is more resistant to smuts than Larain. In general Larain is higher yielding than Valor, although throughout Zone 2 and Zones 3G, 3D, and 4A, Valor has given yields equal to Larain. Both of these varieties yield much lower than Exeter.

Brighton is a high yielding, hullless variety with large kernels, is moderately resistant to smuts, but susceptible to rusts. It is useful for special purpose feeding such as young pigs, cattle and poultry.

LICENSED VARIETIES NOT RECOMMENDED

Anthony, Banner, Beacon, Beaver, Cartier, Clinton, Eagle, Erban, Garry, Gopher, Laurel, Vanguard.

BARLEY

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

Six-rowed Smooth Awned Varieties.

Montcalm is a blue seeded moderately weak strawed variety of high malting quality. It is susceptible to stem and leaf rust, but moderately resistant to covered smut. It is poor for straight combining and Montcalm is eligible for grade 1 C.W. six-row.

Titan is an early maturing, strong strawed variety. Titan is susceptible to rusts but is resistant to smuts. It is suitable for straight combining and is eligible for the feed grades only.

Vantage is a medium late, strong strawed variety. It is resistant to stem rust, but susceptible to leaf rust and both loose and covered smut. Vantage is suitable for straight combining and is eligible for the feed grades only.

Velvon 11 is a medium late, strong strawed variety. It is moderately resistant to smuts but is susceptible to both stem and leaf rust. Velvon 11 is suitable for straight combining and is eligible for the feed grades only.

Plush is a medium late variety with moderately strong straw. It is susceptible to stem and leaf rust, and to loose and covered smut. It is poor for straight combining and is eligible for the feed grades only.

Two-rowed Varieties.

Hannchen is a rough awned, late maturing variety which has short straw, is satisfactory for combining and is susceptible to rusts and smuts. It is eligible for the top two row grades. In addition to the zones where Hannchen is recommended, it has a place in other localized areas because it produces fairly good yields of a high quality barley that is in good demand.

VARIETIES RECOMMENDED FOR SPECIAL PURPOSES

O.A.C. 21 has been the standard malting barley in the past, but is being replaced by the variety Montcalm which is superior, particularly in yield and neck strength.

Warrior is the best available hooded (awnless) variety. It may be useful where early maturity is required. It has strong straw and is satisfactory for straight combining. It is susceptible to rusts, moderately resistant to covered smut and resistant to loose smut. **Warrior** is eligible for the feed grades only.

LICENSED VARIETIES NOT RECOMMENDED

Newal, Olli, Prospect, Regal, Rex, Sanalta, Trebi.

NEW LICENSED VARIETIES UNDER TEST

Compana.

FLAX

To control flax diseases it is advisable to treat the seed every year with cerasan or a similar mercuric dust at the rate of $1\frac{1}{2}$ ounces per bushel. In addition, as most flax diseases over-winter on the straw, flax should not follow flax.

Royal is moderately resistant to wilt, is susceptible to pasmo and under some conditions is susceptible to rust. It has medium-sized, light brown seeds with a characteristic shading off toward very pale brown at the big end. **Royal** is a high yielder, is late maturing and has slightly weak straw.

Dakota is highly resistant to wilt, moderately resistant to rust, and appears to be moderately susceptible to pasmo. It has medium sized brown seeds. **Dakota** matures earlier and more uniformly than **Royal**, but is slightly lower in oil content.

Rocket is resistant to rust and moderately resistant to wilt and pasmo. Compared with **Royal** it is slightly earlier, better in oil content and quality and has slightly larger brown seeds.

Victory is highly resistant to wilt and rust but susceptible to pasmo. It has white blossoms, large brown seeds and is high in oil content and quality. Compared with **Royal** it ripens slightly earlier but more uniformly.

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

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 the most suitable variety of *fall rye* on account of its winter hardiness and high yield. The seed is small, wrinkled and mostly greenish in color.

Prolific is the most suitable variety of *spring rye* because of its high yield. The seed is large, fairly smooth and generally green in color.

FIELD PEAS AND BEANS

Special care is required in growing and harvesting these crops. Disease is an important factor and care should be taken to sow only disease free seed.

Peas

Dashaway is an early maturing, small yellow seeded, high yielding variety that is very suitable for the split pea trade. The vine is of medium length. As **Dashaway** does not shell readily it can be combine harvested.

Arthur is a medium large yellow pea which is acceptable for the split variety trade. It is high yielding, medium late maturing and has long vines. It can be combine harvested.

Guinevere is similar to **Arthur** but due to its larger seed it is not as suitable for combining.

Early Blue is an early maturing, medium sized, high yielding blue seeded variety. It has white blossoms and a very short vine.

Beans

Great Northern is a medium-late maturing, large, white seeded variety of good yield and high quality. It is recommended especially as a market crop.

Norwegian is an early maturing, large, brown seeded variety. It is recommended for home use because of its earliness, good yield and high quality.

Norwhite is a new early maturing variety of excellent cooking quality. It resembles **Norwegian** excepting that the seeds are white.