

Fall Wheat.

"Advancement" is the watchword in the experimental work at Guelph. The work that has been so ably conducted at that station by Mr. Zavitz for a number of years is continually growing in magnitude and completeness. The system of testing the various kinds of fall and spring grains, grasses, roots, fodders of all kinds, etc., grown under all practicable conditions, is so complete on the Farm that no farmer of Ontario can afford to ignore the conclusions arrived at from year to year. And when every farmer is given an opportunity of receiving a number of the most productive varieties to test on his own farm, surely there is a wealth of information to be gained by co-operating with the Station in this experimental work. From year to year more farmers are finding out the value of this opportunity and sending for packages of the sorts they wish to test. Usually from six to eight of the best varieties of whatever line of experiments they wish to conduct are sent. Among these will be included, in fall wheats for instance, Long-strawed and Short-strawed varieties, Bearded and Bald, White and Red chaffed and White and Red grain, thus enabling farmers on all sorts of land, and in all localities, to find two or three sorts specially suited to their peculiar conditions of soil, lay of land and climate. At the end of the year a report is expected to be sent to the Station by each experimenter, which, when summed up with the other reports and the results at the Station, a very conclusive knowledge of the value of the most promising varieties is arrived at.

At the time of our visit the fall grains were the only sufficiently matured plots to enable an observer to decide as to their relative values. The ranges of fall wheats are situated in a tolerably favorable location, being high and dry, and sloping eastward. As is generally the case, this year, throughout the western part of the Province, no rust was to be seen, and not more than two or three of the most weakly varieties showed any signs of winter killing. In the twenty or twenty-five sorts that have done best for two, three or four years, very little distinction could be made as to which would lead this year, because they all looked able to yield about 100 per cent. of a crop. There can be seen, however, a decided difference in strength of straw. It may be said that the pink-strawed varieties, as Golden Drop, Golden Cross, Hybrid Mediterranean, Lancaster, Red Lion, etc., show a general weakness of straw, some of them being lodged so badly that plump filling can hardly be expected in the centre of the plots. Some of the yellow strawed sorts, too, are badly broken, among which we may mention Rodgers, Manchester, Egyptian and Early Red Clawson. Among the best kinds standing well, at the same time very much tillered, are the Surprise, Bonnell, Standard, Seneca, New Monarch, Americah Bronze, Jones, Winter Fife, Canadian Velvet Chaff, Dawson's Golden Chaff, Valley, Scott and White Leader. Many of these wheats have been described pretty fully on previous occasions, and therefore need very little description here. The sorts that have yielded best for four years are: Surprise, Early Red Clawson, Golden Drop, Golden Cross or Volunteer. And so far as weight of crop is concerned, we would not expect this year's report to vary much, except the filling be slightly defective in the varieties most lodged. Surprise is almost certain to retain its position as No. 1 wheat. It stands well and is well tillered and well filled from top of head to bottom. Early Red Clawson shows a slight weakness of straw when grown on rich land, but while it is somewhat down on the plot, the straw is not broken but very little. Golden Drop and Golden Cross are both quite badly lodged, owing to excessive tillering and length of straw. In all probability these two pink-strawed varieties will have to take a lower place in the list for weighed bushels per acre.

Fall oats and barley have been sown for several years, but until this year there has been nothing but failure to report. This year's barley plot bore about half a crop of splendid grain; the heads are rather short, but very compact. The fall oats did not survive the winter. *of growing wheat are being*

Various methods of growing wheat are being tested, such as drilling at different distances, different quantities sown per acre, sowing spring barley along with the wheat to act as a mulch, sowing choice selected seed and inferior seed. Each of these methods will be carefully reported on after the actual results are known.

In the vicinity of London there is, perhaps, as much or more good fall wheat grown as in any part of the Province. New varieties are liberally sown from year to year. Notwithstanding the hardships the crop has had to contend with, a splendid crop has just been harvested. Had this been a rusty year there would have been a different tale told concerning the crop, as germination did not take place last autumn in many localities for four or five weeks after sowing, which caused the crop to be somewhat later than usual, and in some cases thinner on the ground. The continued wet spell in May and June also had an adverse effect, and, last of all, the very dry, hot weather just at the ripening season hurried maturity to the extent of shrinking the grain a little.

LOCAL REPORTS.

On the farm of Mr. Robt. McEwen, Manchester, is a splendid crop, there being seventeen acres

standing well and bright; also, two new varieties, namely: Rural New-Yorker and Genesee Giant. Of the former Mr. McEwen has about four acres of good crop; it has four or five inches more straw than Manchester, and a longer, more open head. The grain is large and comes among the red wheats. Genesee Giant, a fairly well-known new variety, also promises well. It is one of Mr. Jones' new sorts, which has become popular wherever grown. It has a very compact, bearded head, bearing an average of about thirty grains. The straw is of medium length, being a little longer than that of Manchester.

Mr. O'Brien has seventeen acres of a new sort, known as Amber Mediterranean. It has a medium-sized bearded head and good length of straw; although a little thin on much of the field, we look for about twenty-five bushels per acre. Canadian Velvet Chaff, too, will yield a good sample on this farm, but is rather thin to make a heavy record per acre.

Mr. R. Gibson has 28 acres of a very superior crop of White Leader. For such a large field it looks as though the day for fall wheat growing is not, as some suppose, about at an end. The field at the time of our visit was like a waving golden sea. Only a very few patches were lodged. We would estimate the crop at thirty bushels per acre. Alongside the Leader stood ten acres of American Bronze, looking very well indeed, but will no doubt yield something less per acre than the White Leader.

On the farm of Mr. Stephen Weld we saw about three acres each of Golden Cross or Volunteer, and American Bronze. Both pieces were very heavy, being somewhat lodged in patches. There seems to be very little choice between these two sorts in point of yield.

Mr. Joseph Weld grew three very good varieties this year, viz.: American Bronze, Manchester and Red Clawson. Of the two latter sorts, little can be said between them for weight of crop, but the twelve acres of American Bronze is really a beautiful crop. Although this variety is counted among the strong-strawed sorts, in many parts of the field the crop was too heavy to stand. We would not be surprised to hear of the crop approaching forty bushels per acre.

In some parts of Middlesex County excellent fields have been grown of Jones' Square Head, or, as it is sometimes called, "Harvest Queen."

Reports from Ontario Fall Wheat Growers.

R. NICHOLSON, Sylran:—The American Bronze is the general favorite around here, as it stands up well, has good, long straw, and is a good yielder. The Manchester has also a good many friends in this vicinity. It is a fairly good yielder. No new varieties have been tried, to my knowledge, in this neighborhood this year.

H. BOLLERT, Cassel :—Nearly all the varieties have stood the winter equally well this season. Most of the fields suffered some during the cold, wet weather in May, but on the whole a fair yield will be produced. The varieties most grown in this section are: Early Red Clawson, Sunrise, Golden Cross, Velvet Chaff, Democrat and Walker Reliable, and from their appearance in the field, stand in the order named. I have a splendid piece of Genesee which stands up well and has large, plump heads, which should yield well. I have a new variety, known as Minnesota Reliable. I think it a very hardy wheat, and would recommend it for trial in sections where the softer varieties are not doing so well.

THOS. A. CHISHOLM, Dunkeld:—I take pleasure in being able to report a good crop of fall wheat in this vicinity. The kinds chiefly grown are the bald and bearded varieties of Velvet Chaff. There are also some good fields of Michigan Amber, and a promising field of Mediterranean, which has red chaff resembling Clawson.

Huron, S. R.—The crop outlook in this section is, on the whole, encouraging. The varieties of fall wheat giving most promise are the Manchester and the Democrat, with the latter in the lead on good, well-prepared land, and the former on soil of poorer quality. The Democrat seems to do best. Early Red Clawson and Canadian Victory are also doing well in some cases, but not so well as the others. The results with corn are more variable, but there have been too few surprises and harvest time is too late to make the results of the better tested sorts.

out the older and better test of the weather, says W. R. James McCormack, Rockton:—Of the well-known sorts, Red Clawson, Manchester, Golden Cross and Democrat have been about equally well this year. Harvest Queen was well spoken of by opinion of late. I have a sort called the Femany, from the name of a woman, which was introduced from New York State and which was imported from New York State to a slight extent, that promises well. Most of the wheat is ripe, and because of the cold, wet spell in May and June, followed by a return of the cold, wet weather, the grain is not so good as it would be.

extreme drouth and near Ontario, S. R.

JOHN BARTLETT, Oshawa:—The crop appears to be good in this vicinity, although somewhat affected with leaf rust. With me, Jones' Winter Life is the best wheat. The Golden Cross does well here, but it has been in order. Golden Cross two years. Early Red Clawson is next in order. Golden Cross is also good. The Canadian Velvet Chaff does not do well with us here. It is very soft in the straw. On strong, clay soil American Beauty is better than the velvet chaff. In the yield of grain, The Bronze appears to lead other. On strong, clay soil American Beauty is better than the velvet chaff. In the yield of grain, The Bronze appears to lead other. On strong, clay soil American Beauty is better than the velvet chaff. In the yield of grain, The Bronze appears to lead other.

The Old Clawson is highly spoken of by my neighbor; he thinks it is the coming wheat.

Northumberland, E. R.
WM. STILLMAN, Campbellford: The American Bronze and Surprise are the best varieties in this vicinity. Jones' Winter Fire and Red Clawson are also grown quite successfully, but the two former varieties are stiffer in the straw and better in head. Wheat was badly winter-killed, but all that survives promises well.

F. BIRDSELL, Birdsell—The Surprise is most sown in this immediate vicinity and looks well. The straw is of good length, and the heads long and pointed. I believe the Surprise to be the best variety sown in East Peterborough. Velvet Chaff is also sown very good, although quite a bit is sown. The low price of acreage is not so large as usual, owing to the fact that the straw is of good length, and the heads long and pointed. The low price of acreage is not so large as usual, owing to the fact that the straw is of good length, and the heads long and pointed. The low price of acreage is not so large as usual, owing to the fact that the straw is of good length, and the heads long and pointed.

Dundas.
ANNIE KYLE, North Winchester : - Very little winter wheat is grown in this vicinity, owing to severe winter frosts. Clawson is the only sort grown, and it looks remarkably well. Spring crops never looked better than they do this year.

Northumberland, E. R.

JOHN B. STONE, Norham:—All varieties of fall wheat have ripened without rust, and the quality is first class. The Surprise is a favorite, and the old Clawson continues to do well. Velvet Chaff is a safe wheat to sow on high and dry land, but should not be sown on low, undrained soil. According to my tests of new varieties, I can recommend Genesee Giant and Dawson's Golden Chaff to growers in this vicinity.

Preparing Ground for Wheat Seeding.

The present state of the wheat market is having its effect in very materially lessening the wheat acreage; at the same time, where fall wheat can be grown successfully, many farmers are going to continue to sow a field or two each year. No doubt much of the crop will be fed this year, but the markets may improve before the harvest of '35 is taken off, and we are always glad of the abundant crop of straw that accompanies a crop of fall wheat. If the price be low, that is an additional reason why the greatest possible care should be taken to secure a large yield by sowing the best varieties and pursuing the best methods of cultivation.

tion. Mr. M. T. Cole gives his experience in the Michigan Farmer, from which we glean a few points:—"There is a wide range of opinion in regard to the preparation of the seed bed. If wheat or oat stubble is to be ploughed, the sooner it is done the better, as pulverized land is more retentive of moisture than unploughed stubble land. A rain that will prepare it for seeding may not be sufficient to wet down more than two inches before ploughing. In many sections ploughing is a difficult matter during the later summer months, and many farmers are finding out that surface cultivation can be made to answer well in such cases, while in mellow soils, surface stirring answers well every time. Why should we plough the land, then spend tedious days for both man and team in packing and tramping to get a solid foundation for the wheat roots? Nearly all agree that a very fine seed bed is required on the surface, but doubt arises as to the most desirable condition further down. Last year a very heavy clay field, which had grown oats, was manured, and disk harrowed three times over, and a portion of the field was "ploughed at," but the ground was too hard to make a job of it. On part of the field no farmyard manure was spread, but 200 lbs. of superphosphate were sown, and the remainder of the field received 125 lbs. along with the farmyard manure. The crop was cut on July 7th, and promised a yield of about 20 bushels per acre, which would have been much more except for the heavy spring rains. The part that was neither ploughed nor manured with farmyard manure was much the better. The varieties of wheat were Early Red Clawson and Winter Fife. When ground is quite dry below the surface at time of seeding, it should be sown very shallow. A light rain will bring up wheat sown near the surface that will only spoil the seed if down three or four inches. If the ground is moist below and dry on top, the wheat should be drilled down into the moisture. If the soil is in suitable condition, sow not deeper than two inches if possible. If ground is quite dry, it should be rolled immediately after sowing, but if moist enough to bring up the wheat, rolling is not necessary, except where very lumpy or uneven.

Plant Lice on Wheat.

In many fall wheat fields, this and last year, have been noticed, about the time the heads were filling, numerous plant lice (*Aphides*). Some heads have been literally filled with them, naturally causing considerable anxiety among wheat growers; but when the crop has ripened, little injury has apparently been done the grain. Prof. Pantan says of them that there is little to be feared, as they have many insect foes, among which is the Lady Bird (*Coccinella*), whose eggs can frequently be found on the heads most affected with lice.

The Oldest Agricultural Society on the Continent.

The 104th annual report of the Kings County (N. S.) Agricultural Society has just been issued. It contains a large amount of valuable matter of general interest to all. This Society has for years followed the practice of furnishing its members, at trifling expense, good blood for improving their live stock :

live stock : "The Society owns or controls a number of good, useful animals; as soon as one proves unsatisfactory, he is removed and succeeded by another even better, and in some cases, of another breed, which often proves an advantage to members. Our Society has provided its members with one Jersey and four Shorthorn bulls; one Shropshire ram, and four Berkshire, Chester and Yorkshire boars; ten sires in all. There are but a small percentage of the members who keep sheep (so this accounts for our Society supporting only one ram), and some of these prefer to keep a pure-bred for themselves. One member has a fine Shropshire ram, and another a Border Leicester. The latter are gaining a footing in the Province through the Government importation of 1841, and the Cheviots imported at the same time are proving satisfactory. The Berkshire pigs used to be the favorites here, but the Yorkshire cross has given our farmers a good, lengthy hog, prolific sows, and, it might be added, plenty of squeal. We can now use a dash of Chester blood to give bone and frame."

The chairman of this notable old Society, Mr. A. G. Goodacre, lives at Grand-Pré, the scene of Longfellow's "Evangeline."