

The root crop on the Experimental Farm was, strange to say, for such a year, a poor one. The roots came up well, and for some time gave great promise, but on account of worms, flies and winds, that promise was not fulfilled, and when taken up the crops of turnips, mangels, carrots and potatoes were found to be very small. Throughout the Territories, however, the crop of roots and vegetables has been a large one. The failure on the experimental farm was mainly due to repeated winds, as in plots protected by hedges and wind-breaks, the same varieties produced yields three times greater than those grown in the open fields.

For tree-culture the season was very favourable. Starting to grow early in April, everything was in leaf by 1st May. The heavy frosts about middle of that month, however, killed all young and tender shoots, putting them back considerably, but the check was of very short duration, and in no previous year has the progress made by all the trees growing on the farm, been so satisfactory.

Weeds have been very troublesome the past year on this farm, especially the Tumbling Mustard (*Sisymbrium Sinapistrum*), which seems to have a special liking for the hedges and shelter belts on the farm, and it has required an endless amount of labour to keep it within bounds.

Several very bad weeds are obtaining a foothold in almost every district in Assiniboia; the principal of which are, Tumbling Mustard (*Sisymbrium Sinapistrum*), Hare's Ear Mustard (*Erysimum orientale*), and French or Stink weed (*Thlaspi Arvense*).

The rain fall during the growing season was largely in excess of the average for the past six seasons. A very rank growth of straw was the result, making harvest work and threshing heavy and expensive.

#### EXPERIMENTS WITH WHEAT.

The wheat tests on the Experimental Farm, the past year, were on the whole satisfactory. In no year have we had better samples or anything approaching such large yields. The straw as a rule was not badly lodged, and the heads were large and well filled. A few plots were injured slightly by frost, but not enough to decrease the yield.

In fields and acre tests, the results in all cases were not very satisfactory. A field of thirty acres was badly blown when the grain was just above ground, one-half of the field being injured to such an extent, that when frost came on 30th August the grain was still green. The yield on this portion was small, and the grain a very poor sample. On the part that escaped injury the return was a large yield of excellent grain.

Acre lots of Ladoga, Red Fern and Wellman's Fife were not seriously injured by winds and gave good returns, but Stanley, Alpha, Percy, Mars, White Connell and White Fife, in the same test, were so much hurt, and the growth retarded so long, that frost overtook them before they came to maturity.

All the new cross-bred varieties did well, producing large yields of very fine grain.

Following will be found the tests in detail, with remarks on results:—

#### WHEAT FIELD LOTS.

Thirty acres of Red Fife were sown on one field of fallowed land, on 8th April. The soil was a good sandy loam.

Fifteen acres of the field were exposed to winds and suffered greatly by them; not only were large portions blown out but considerable areas were covered with dust from other parts of the farm. Where the grain was not so injured the crop was a good one.

One-tenth acre of a fair average of the crop on the portion that escaped the winds, was cut and threshed separate from the field to determine the difference, if any, between the yield of one-tenth acre and of the whole field.