

By Mr. Blain:

Q. What is the distance of Fort Vermilion from Edmonton?

A. It would be about 400 miles in a straight line and about 700 miles by the mail route, which follows the course of the lakes and rivers. The season of 1910 was earlier there than that of 1909. Seeding was begun on the 26th of April and was general by May 1st. The growth of all crops was very rapid, but on June 28th a frost occurred which injured potatoes, beans and some other tender vegetables. No other set-back occurred until August 14th, when there was a light frost, followed by a heavier one on the 16th, when grain in some parts of the district was injured, although the wheat on the experimental station escaped damage.

Six varieties of wheat were under test, and their average yield from experimental plots of one-sixtieth of an acre each was 43 bushels, 24 lbs. per acre. I have brought two varieties of grain with me to show the Committee. Marquis, which is one of our new early varieties, has given, at Fort Vermilion, a yield of 40 bushels per acre, the wheat weighing 65 lbs. per bushel. The other is a sample of Red Fife, which gave 43 bushels per acre, weighing 62 lbs. per bushel. You will notice that the Red Fife is not very well matured and appears to have been slightly frosted, whereas the Marquis is a very good sample of grain, showing the advantage of using the earlier ripening sort for these far northern districts.

Four varieties of oats were under test and their average yield from similar plots was 69 bushels 16 lbs. per acre.

Three varieties of six-row barley were under trial and the average yield was 55 bushels 29 lbs. per acre. Our superintendent usually sends me, a little later, yields from the fields of the farmers in that district, but I have not yet got those particulars from him.

By Mr. Wilson (Lennox and Addington):

Q. How do they compare with the yield from your plots?

A. There is no uniformity at all. Sometimes the plots are lower than the field, but, as a rule, the fields are lower than the plots, sometimes considerably lower. Last year the average in the Peace River country was about 24 bushels of wheat per acre, and I am expecting to hear that the average is pretty nearly the same this year. The season was a little earlier, which gave the wheat a little better chance to mature.

By Mr. Wright:

Q. Grown on comparatively new land, I suppose?

A. We made an arrangement with this man for carrying on this experimental work on at least five acres of the best land he could secure. It was all good land for wheat growing. Of course, that district is very far north, and I have not been able to visit it and inspect it myself; but from what we know of the land, I should say it compares favourably with other land in Alberta, but is probably not superior to those lands that the other settlers have under cultivation.

While the yield of wheat in 1910 in Alberta was very low, averaging 12.59 bushels per acre for fall wheat and 12.32 for spring wheat, compared with 24.80 and 24.90 bushels per acre, respectively, in 1909, and the figure given as the average yield in Manitoba, 13.65 bushels per acre, is also low, it is worthy of note that even these lowest yields compare very favourably with those of our neighbours to the south of us.

YIELDS OF PRINCIPAL GRAIN CROPS IN UNITED STATES FOR YEARS 1909 AND 1910.

The following table gives some of the details of the yields of the principal grain crops in the United States for the season of 1910 and of 1909, taken from the 'Crop Reporter,' the official organ of the United States Department of Agriculture. The average yield per acre of the entire wheat crop of that country is given, also that of