

By Mr. SEMPLE:—

Q.—The questions I wished to ask were: can you give the committee the yield per acre of wheat and barley grown on the Experimental Farm? A.—I have a list here of the yield of every variety from single grains grown a foot apart, but I do not think the yield from small plots of grain can be given by me with anything like a certainty, for several reasons. In the first place, in cutting we have to be very careful; we always leave a few of the plants on the outside rows, for fear that in sowing they might have been mixed. If a sheaf of any variety is dropped on the way to the barn it goes in with the mixed grain, and then in threshing the first two or three quarts are thrown in the mixed grains. These points interfere seriously with the result of small plots of grains.

Q.—Can you give a single area which would be more satisfactory than single plots? A.—That is what we are attempting to do this coming year, not only on this farm, but on other farms—to sow acre plots and two-acre plots of each variety.

Q.—Have you sown any Red Fife and Red Fern on the farm? A.—Yes; I have both Red Fife and Red Fern. I made up the figures the other evening of the comparative yield of the Red Fife, Ladoga and White Russian, and I am speaking from memory when I say that the Red Fife was between 12 and 13 bushels, the Ladoga was 16 bushels, and the White Russian was 16½ bushels per acre, grown under similar conditions. This year the land will be in better condition and we expect better results. The wheat last year was more or less shrunken with dry weather.

Q.—I had reference to Red Fern wheat? A.—I could get you the particulars of the yield of Red Fern, but they are not filled up yet.

Q.—It is the Fife wheat in the section where I live. I haven't seen it for more than two years. It yields well and makes good flour. It averages about 20 bushels to the acre? A.—I think that was probably a fair yield.

The CHAIRMAN.—Is the Red Fern a soft wheat?

Prof. SAUNDERS.—No, sir; it is a hard wheat.

By Mr. SEMPLE:—

Q.—It is the hard wheat in the section I come from.

By Mr. COCHRANE:—

Q.—Are you experimenting in fall wheat? A.—Yes, sir; we have eight or ten large plots of fall wheat, and a hundred varieties were planted in small plots as single plants. As far as I am able to judge, some of the varieties have come through the winter fairly well. We did grow some fall wheat last year, but not much. One or two varieties last year did not come through the winter very well, but some others were fairly productive.

By Dr. ROOME:—

Q.—Where did you get these samples of fall wheat? A.—Mostly from England; from Oakshott and Millard, of Reading, and from Carter's, and from Mr. Mold, who employs most of his time in selecting wheat to be used as seed. He calls these selected samples ennobled wheats. These three parties we have got most of our samples from.

Q.—Could you get fall wheat from a colder climate than this? A.—I don't know that we could.

By Mr. CARPENTER:—

Q.—For ensilage purposes you recommend that we plant corn in a certain way. Now, for soiling purposes, and for feeding purposes during the months of August and September, don't you think it would be better to put it in thickly—say, three or four bushels to the acre. The object in growing corn in that way is to get a great quantity, but you do not think we would get as great a quantity from putting it in thickly as thinly? A.—Corn has not that nutriment in it which you desire until it