

Nearly one thousand experiments were undertaken at the farm last year, over one hundred of these being made in connection with wheat, as seen by the tables in the Superintendent's last report.

It is certain that a great many thousand dollars have been saved to the farmers of Manitoba by the use of blue-stone as a preventative of smut on wheat; the use of which has been strongly urged by the Superintendent of the farm for a number of years, and is now generally adopted.

The use of the drill in sowing grain has also been strongly urged, the experiments at the farm showing its use to be most suitable for this country, so much so, that farmers are generally adopting this manner of sowing their grain, with a result that their yields are larger and their samples improved.

Tests of rolled and unrolled lands, spring and fall ploughing against fallow have been made, but have to be repeated for a number of years before definite results can be obtained. Fall wheat has been tried for a number of seasons, but so far, the trials have been unsuccessful.

As an evidence that the soil of this Province will produce large crops of wheat, if it is properly treated, Mr. Bedford says that, although the wheat crop of 1892 was not regarded as a large one, it will be seen by the following table some of the yields on the experimental farm were excellent.

Variety.	Soil.	Length of Straw, inch	Weight, per Bush, lbs.	Yield per Acre bush. lbs.
Green Mountain	Clay Loam	35	60½	41
Red Fyfe	"	45	61	40
Hungarian Mountain	"	42	60½	0
White Connell	Black Loam	40	60½	33
White Fyfe	"	40	60½	38
Pringle's Champlain	"	37	61	38
Defiance	Upland Prairie	33	55	28 30
Blue Stem	"	43	48	26 50
Red Connell	"	36	59	26 40

And just here I will mention the difference in Red Fyfe last year, according to the soil.

In Clay Loam	40 bush.	32 lbs. per acre.
In Black Loam	37 "	50 "
In Upland Prairie	24 "	50 "

OATS.—It is well known that varieties of oats greatly deteriorate, and for this reason, special attention has been paid by Mr. Bedford to the importation and trial of promising varieties, with the result that representatives of this grain from nearly every part of the world have been tested on the farm, and, it is very interesting to notice the difference in appearance when contrasted in adjoining plots. For instance, the Joannette, a black variety from France, is very short and fine in the straw, while next to it, the American Triumph, stands 5 feet high with coarse and very bright straw. Among other countries contributing oats may be mentioned Hungary, Australia, Siberia, Tartary, England, Russia, Germany, Holland and Sweden.

The yields of oats on the farm have generally been excellent, and, in one case last year, reached the very large return of 87 bushels to the acre.

BARLEY.—Although barley is not generally grown in this country for malting purposes, it is found very useful for fodder, and is in great demand. It is found on the farm that if barley is given an equal chance with the other grains, an enormous yield is assured. The returns from one variety, *Goldthorpe*, reached 67 bushels to the acre last season, and weighed 51 lbs. per bushel. Nearly every part of the world contributes towards the collection of barley, as well as towards other grains. In 1890 samples of barley grown on the Manitoba Experimental Farm were awarded several prizes when exhibited at the Brewer's exhibition in England.

A number of experiments have been made with field peas, and, although this grain is not generally grown in Manitoba, it is found a very