

APPENDIX TO THE REPORT OF THE MINISTER OF AGRICULTURE

# EXPERIMENTAL FARMS

## REPORTS

OF THE

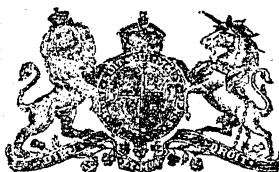
DIRECTOR - - - - -	Wm. SAUNDERS, C.M.G., LL.D.
ENTOMOLOGICAL AND BOTANICAL DIVISION - - - - -	J. H. "GRISDALE, B. Agr.
AGRICULTURIST - - - - -	W. T. MACCOUN
HORTICULTURIST - - - - -	F. T. SHUTT, M.A.
CHEMIST - - - - -	C. E. SAUNDERS, Ph.D.
CEREALIST - - - - -	A. G. GILBERT
POULTRY MANAGER - - - - -	R. ROBERTSON
SUPT. EXPERIMENTAL FARM, NAPPAN, N.S. - - - - -	JAMES MURRAY, B.S.A.
" " " BRANDON, MAN. - - - - -	ANGUS MACKAY
" " " INDIAN HEAD, SASK. - - - - -	W. H. FAIRFIELD, M.S.
" " " LETHBRIDGE, ALTA. - - - - -	G. H. HUTTON, B.S.A.
" " " LACOMBE, ALTA. - - - - -	THOS. A. SHARPE
" " " AGASSIZ, B.C. - - - - -	

FOR THE

YEAR ENDING MARCH 31

1909

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

PRINTED BY C. H. PARMELEE, PRINTER TO THE KING'S MOST  
EXCELLENT MAJESTY

1909

[No. 16—1909.]

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# APPENDIX

TO THE

## REPORT OF THE MINISTER OF AGRICULTURE

ON

### EXPERIMENTAL FARMS

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OTTAWA, March 31, 1909.

SIR,—I beg to submit for your approval the twenty-second annual report of the work done, and in progress, at the several Experimental Farms.

Following the report of the Director will be found a report on the work done by the Division of Entomology and Botany, with special references to the work of the late chief officer of this Division, Dr. James Fletcher.

You will find also appended reports from the following officers of the Central Experimental Farm:—From the Agriculturist, Mr. J. H. Grisdale; from the Horticulturist, Mr. W. T. Macoun; from the Chemist, Mr. Frank T. Shutt; from the Cerealist, Dr. C. E. Saunders, and from the Poultry Manager, Mr. A. G. Gilbert.

From the branch Experimental Farms there are reports from Mr. R. Robertson, Superintendent of the Experimental Farm for the Maritime Provinces, at Nappan, Nova Scotia; from Mr. James Murray, Superintendent of the Experimental Farm for Manitoba at Brandon; from Mr. Angus Mackay, Superintendent of the Experimental Farm for Saskatchewan at Indian Head; from Mr. W. H. Fairfield, Superintendent of the Experimental Farm for Southern Alberta at Lethbridge; from Mr. G. H. Hutton, Superintendent of the Experimental Farm for Central Alberta at Lacombe, and from Mr. Thomas A. Sharpe, Superintendent of the Experimental Farm for British Columbia at Agassiz.

In these reports there will be found the results of many important and carefully conducted experiments in agriculture, horticulture and arboriculture, the outcome of practical and scientific work in the fields, barns, dairy and poultry buildings, orchards and plantations at the several Experimental Farms; of scientific research in connection with the breeding of cereals and in determining their relative value; of research work in the chemical laboratories bearing on many branches of agricultural and horticultural employment; and of information gained from the careful study of the life histories and habits of injurious insects and the methods by which noxious

## EXPERIMENTAL FARMS

9-10 EDWARD VII., A. 1910

weeds are propagated and spread, together with the most practical and economical measures for their destruction. In the report of the work of the Entomological and Botanical Division will also be found particulars of the experiments and observations which have been made during the past year in connection with the apiary.

The large and constantly increasing demand by the farmers of the Dominion for the publications issued from the Experimental Farms, the rapidly extending correspondence, and the readiness shown by farmers everywhere to co-operate with the work of the Farms in the testing of new and promising varieties of cereals and other farm crops, furnish gratifying evidence of the desire for information among this class of the community, also of the high esteem in which the work of the Farms is held. It is hoped that the facts brought together in the present issue will be found of much practical value to the Canadian farmer and fruit-grower, and that they may assist in advancing agriculture and horticulture in this country.

I have the honour to be, sir,

Your obedient servant,

WM. SAUNDERS,

*Director of Experimental Farms.*

To the Honourable

The Minister of Agriculture,

Ottawa.

# ANNUAL REPORT OF THE EXPERIMENTAL FARMS

For the year ending March 31, 1909

## REPORT OF THE DIRECTOR

WM. SAUNDERS, C.M.G., LL.D., F.R.S.C., F.L.S.

The season of 1908, although not everywhere favourable to the farmer, was, in most parts of Canada, fairly satisfactory. The field crops of the Dominion are said to have covered a total area of 27,505,663 acres, and to have yielded crops which, estimated at average local market prices, would reach the value of \$432,534,000.

In Ontario the season was not very favourable. The spring was exceedingly wet, and the early sowing of grain was therefore impossible. When at length the seed was all in, the weather changed, and unusual heat and rather severe drought prevailed through the greater part of the summer and autumn. These adverse conditions reduced the crops to considerably below the average except where the soil was unusually rich and retentive of moisture. The results of this season have emphasized the necessity for early sowing, and in those localities where early seeding was possible the resulting crops were more satisfactory. The crop of winter wheat was 15,798,000 bushels, the average yield being 23.60 bushels per acre. Spring wheat gave an average of only 15.80 bushels per acre and the crop was 2,259,000 bushels. The total crop of oats was 103,821,000 bushels, with an average yield of 33.40 bushels per acre. The barley, the total crop of which was 21,124,000 bushels, gave an average of 28.40 bushels per acre. The hay and clover, which occupies a larger acreage than any other crop in Ontario, gave 5,187,000 tons, which brought an average return of \$11.02 per ton, or a total of \$57,160,000.

In Quebec, where the acreage under crop is very much smaller than in Ontario, winter wheat is not grown. Spring wheat gave an average of 13.50 bushels per acre, oats, 23 bushels, and barley, 19.80 bushels per acre. These three cereals returned to the farmers nearly twenty-two million dollars in all. Hay and clover, on account of drought, gave a yield somewhat less than in Ontario, the total crop being 3,473,000 tons, valued at \$38,198,000. The summer weather in this province was unusually dry.

In the Maritime Provinces, the winter was mild, the spring dry and the land ready for seeding early. The season was favourable for growth, and the yield of most crops has been up to or above the average. Spring wheat has yielded better crops than in Ontario. In Nova Scotia the average has been 17.40 bushels per acre, in New Brunswick 17.30, and in Prince Edward Island 14.25 bushels per acre, but oats, which occupied a much larger area, have not averaged quite so well as in Ontario. Dairying has been prosperous, cheese and butter bringing unusual prices. Apples have been fairly plentiful and have been of better quality than usual bringing higher prices. The exports of apples from Nova Scotia during 1908 are said to have been the largest on record, amounting to nearly 600,000 barrels. Hay was a heavy crop with lower prices. The yield of potatoes has been excellent.

In Manitoba the spring weather was suitable for early sowing, and all crops were got in in good time and under favourable conditions. Good weather continued until about the middle of July, when very hot weather set in, which lasted for two weeks.