

REVIEWS WORK OF DEPARTMENT OF AGRICULTURE

Resume given of many new lines opened up and others satisfactorily concluded during past year.

EXPERIMENTAL RESULTS

Generally speaking, the efforts of the Dominion Department of Agriculture during the last three or four years have been mainly directed towards increasing agricultural production and improving methods of and facilities for marketing agricultural products in this country. Of the many new lines of work that have been opened up and of the many others carried to a satisfactory conclusion during the last year, those given in the following brief paragraphs are the most outstanding and important.

Military requirements have caused a great increase in the importance of the fibre flax industry in this country, and, to keep pace with this, a Fibre Division of the Experimental Farms Branch was formed a few years ago, and a fully equipped flax mill, fitted up with all appliances and every facility for testing and experimenting, has been erected at the Central Experimental Farm. Investigations into improved labour-saving flax machinery have met with a certain amount of success, and an attempt is now being made to discover some economical method of utilizing western flax straw, usually burned after threshing, for fibre purposes.

STUDY OF BLACK RUST.

A further step forward has been taken in the study of that disease which has often caused enormous losses in the Western grain fields, namely, black or stem rust. In order to work out effective control measures, field laboratories have been established at Brandon, Man., and at Indian Head and Saskatoon, Sask., where the various stages of the disease may be carefully studied. Steps are being taken to eradicate the common barberry, which, it has been established, acts as a host-plant and thus carries the disease over from year to year.

Another notable line of work of the Experimental Farms Branch has been the production of field root and vegetable seeds, in co-operation with the Seed Branch, in order to prepare for a threatened shortage of these seeds in the near future. This work was commenced in 1917, on certain of the Experimental Farms, as well as on a number of leased areas, and, as two seasons are required for the production of these seeds, 75,000 pounds of mangel turnip and carrot seed were obtained in 1918 from the 200 acres of stockings produced from the 1917 seedling. The seed produced, all of proved varieties, is now available for sale to seedsmen, farmers' organizations, etc., and, besides this, large quantities of stockings have also been grown, so that, if thought necessary, these may be utilized for the production of further seed during the present year.

PLANT BREEDING WORK.

Plant breeding work with fruits, vegetables, tobacco, forage plants and cereals has yielded some valuable and interesting crosses. Of these, the most important new varieties produced in sufficiently large quantities for distribution are Ruby wheat, a heavy-yielding, early-maturing kind; Liberty oats, a hullless variety; and Alberta

barley, a very early-ripening variety. With live stock, the work with milking machines and experimental calf-rearing has been brought to a satisfactory conclusion, while some poultry survey work and egg-laying contests have been commenced. Other work has included the study of fertilizers and substitutes, plant diseases, tobacco growing, and bee-keeping.

The Feed Division of the Live Stock Branch was organized in 1917, to purchase live stock feeds and distribute them to farmers at cost, and thus counteract, if possible, the shortage of cattle feed that had developed and the curtailment of live stock production that seemed imminent. Notwithstanding the successful utilization of elevator screenings, feeds had to be imported to meet the situation. This was done as a war measure, and it is not intended to continue it beyond the present year.

Owing to the dry summer of 1918, a serious feed shortage developed in the southern districts of the Prairie Provinces, while in the northern parts feed was plentiful, and in order that the cattle might be brought through the winter, the Department undertook to meet half of the freight charges of carrying feed from the north to the south or cattle from the south to the north, the other half being met by the railways. The Live Stock Branch was given charge of this work, and over 10,000 cars of feed were transhipped under this policy, while in Alberta 31,000 cattle and 59,000 sheep and in Saskatchewan 118 cars of cattle and one car of sheep were moved north.

The work of this branch has also consisted of assistance to various live stock organizations to encourage the breeding of better live stock. Increased meat production is likely to result from the newly inaugurated policy of giving assistance in shipping back unfinished live stock and live stock fit for breeding purposes that has been placed on the market.

The Health of Animals Branch has established a new research station at Hull, Que., for the study of various live stock diseases and the testing of biological products.

DAIRY CONFERENCE.

A Dominion dairy conference was held under the auspices of the Dairy and Cold Storage Branch. At this conference a National Dairy Council, to be composed of representatives of the various dairying industries of the country, was organized. A uniform standard of grading for dairy products was inaugurated and the legal standards for milk and its products revised, with a view to their recognition and adoption by all Canadian municipalities engaged in food inspection.

A survey of seed stocks was taken by the Seed Branch in collaboration with the United States Seed Stocks Committee, with reassuring results. The seed-testing work at the seed laboratories at Ottawa and Calgary has been increasing greatly during the last few years, over 12,000 samples being tested at Ottawa and nearly 14,000 at Calgary in 1917. It was accordingly found necessary to open a new laboratory at Winnipeg in October last, in order to test, for purity and germination, samples sent in by farmers and seed merchants. The operations of the Seed Purchasing Commission were extended to include rye, pease, beans and corn, and a new marketing service for clover and grass seed was started at the Canadian Government elevator at Calgary with successful results.

The Fruit Branch has been of great assistance to the Canada Food Board in enforcing its regulations, and in this connection has also done a great deal by aiding shippers in marketing their fruit and vegetable products to the best advantage. Certain amendments were made to the Inspection and Sales Act last year, aiming at more clearly defined grades for fruit and the greater standardization of fruit packages.

ENTOMOLOGICAL BRANCH.

The efforts of the Entomological Branch have been specially directed towards the protection from insects of field, fruit and vegetable crops, and forest trees. A number of parasites of destructive insects were successfully introduced, while the inspection of imported plants permitted of the interception of a number of foreign pests.

CLASSIFICATION IN PROPER FORM ON CANADIAN GOODS

Customs Memorandum points out important changes coming into effect on April 1—Accurate description of goods necessary.

EXTENSIVE REVISIONS

Canadian exporters and importers are requested to note, says a Customs Memorandum, that the statistical classification of imports and exports has been extensively revised and amended, the changes coming into effect on and from April 1, 1919.

Their attention is directed to customs requirements in regard to import and export entries and to the importance of furnishing accurate descriptions of commodities, with prescribed units of quantities.

(a) In export entries particular care must be taken to classify accurately as such, *domestic and foreign* merchandise. No shipments in transit through Canada must be shown as exports.

Exporters should note particularly that a separate export entry (Customs Form B-13) executed in duplicate is required to be made for each shipment less than a carload lot, also that export entries in duplicate are required to be executed for each car used or comprised in a consignment or shipment. Also that great care is required to be exercised by the shipper or his agent in giving the correct quantities and values on such export entries (Customs Form B-13 amended).

A general export entry is not acceptable, in which the shipments of several shippers to the same consignee are "bulked" together without specifying the particulars of each shipment and the name of the shipper in each instance.

(b) The country to be shown on import entries is the country from which the goods were shipped on their continuous journey of importation into Canada. On export entries it is the country of ultimate destination of the goods shipped from Canada.

(c) The exact quantity of the merchandise entered must be shown clearly on the entry in terms of the unit of quantity required by the classification, and in cases where weight is required, *net weight* must be given.

(d) No terms are to be allowed on entries which do not give a distinct description of the goods entered such as will enable the officers of this department to determine the particular item in the tariff and classification which applies thereto. The following are examples of descriptions which are insufficient and which frequently occur:—

"Machinery," "manufactures of iron," "electrical apparatus," "drugs, n.o.p.," "wool fabrics," "clothing," "knitted goods," "stockings," "hats," "unenumerated articles," "lumber."

The classification contains several items covered by each of the above descriptions, and therefore a distinct and definite description is required in these and all similar instances. Trade names should not be used on entries unless accompanied by a specific description of the goods.

Alberta's Foreign-born.

The report of the Canada Registration Board shows that in Alberta there are 97,361 foreign-born males of 16 years of age and over, 15,158 of whom have become naturalized British subjects.

The foregoing paragraphs give very briefly the outstanding features of the work of the Department during the past year or so. Besides the above, there are, of course, many other lines of the regular work, all of greater or less importance to the agricultural progress of this country.

COULD SETTLE SOME ON SMALL HOLDINGS

Limited Number of Soldiers would do well-says Committee's Report

The special committee appointed by the Federal Soldier Settlement Board to report on the best policy to be followed in the three Prairie Provinces in settling veterans on small holdings near towns and cities has made a report to Chairman Black. Dean Howes, of Edmonton, is chairman of the committee.

While the committee does not wish to encourage to any great extent the placing of returned soldiers on small holdings, it is not disposed to discourage any well-qualified man who desires to engage in such undertaking. It believes that a very limited number could be settled on holdings that would enable them to engage in combinations of (1) market gardening and poultry; (2) market gardening, poultry and dairying, with side lines (pigs and bees).

The size of individual holdings should be left to the qualification committees of the Board, and would vary according to locality and other conditions. Three options are suggested:—

(a) For market gardening, 2 to 5 acres. This option is particularly suitable for men receiving pensions.

(b) For market gardening, with poultry, 5 to 15 acres.

(c) For market gardening, poultry and dairying, with pigs or bees, 20 to 80 acres.

Equipment required would be similar to that recommended for small holdings in Ontario, except that adequate storage facilities in the form of root cellar would have to be provided.

Only thoroughly experienced and capable men should be permitted to engage in such undertakings on the prairie, and as far as possible applicants should be encouraged to take up option "C."

Supervision by an experienced man should be undertaken and extra care should be exercised in the matter of location, character of soil, and particularly in respect to shelter from prevailing wind in districts where soil drifting is likely to occur.

ALL SERVICE FREE TO SOLDIER SETTLER

Chairman of Soldier Settlement Board denies Statement recently published

That the majority of the provincial offices of the Soldier Settlement Board are up to date with their land inspections was the statement made by Chairman W. J. Black. Unfortunately, weather conditions in the early spring in some provinces retarded field operations.

While endeavouring to prevent undue expense in cost of inspections, the Board, by the employment of a number of temporary inspectors, did everything possible to expedite the early settlement of the men on the land, and there are very few old applications now awaiting decision by the loan advisory committees.

Mr. Black emphatically denied a statement that had been published that excessive expenses in connection with loans are being charged soldier settlers.

"No expenses are chargeable to the soldier settler in connection with his loan for land purchase," he said. "The Board pays all costs of administration (office expenses and cost of inspections), and this is not charged against the settler's loan. In fact, all service is supplied free and the soldier pays only the actual cost of his land."

Canada's Foreign Peoples.

As shown by the report of the Canada Registration Board, there are in the Dominion 109,093 natives of the United States, 4,612 Frenchmen, 3,864 Belgians, 27,107 Italians, 42,104 Russians, and 174,290 other males of foreign birth, who are 16 years of age and over. Of these, 200,580 are naturalized.