

SEED-TESTING.

The year under review was a record one so far as the Seed-testing Station is concerned, and the number of samples received for analysis show an increase of 2,806 on the number for the previous year. The increase in work has been so rapid that it was with great difficulty the staff was able to cope with the work. This position has lately been remedied by the appointment of additional staff and the provision of additional equipment. Further, the accommodation available has been rearranged and slightly added to, with the result that henceforth the station will be better able than in the past to render prompt and efficient service.

Attached hereto is the report of the Seed Analyst, who deals in detail with the work under his immediate control.

REGISTRATION OF FERTILIZERS.

The registration and certification of fertilizers and fertilizer-vendors was carried out as usual during the year as one of the Division's activities.

All superphosphate-works, a number of freezing, boiling-down, and other works, were inspected, and both official and unofficial samples of fertilizers of various kinds were obtained. In some cases technical phases of manufacture and sale of fertilizers were investigated.

Twenty-two lots of official samples of fertilizers were collected for analyses from fertilizer works and stores and over ninety visits of inspection of premises of vendors and manufacturers made.

A considerable number of unofficial samples of fertilizers were either examined or submitted for analyses of fertilizing ingredients.

In special circumstances samples of lime, weed-killer, and stock-licks were qualitatively examined.

Several samples of fertilizers were collected for estimation of their cobalt content and further samples for examination of radio activity.

A close scrutiny was kept on all imported fertilizers, imported slag and other materials of foreign origin being periodically examined or sampled.

Very few samples or complaints were received from farmers. Apparently they are satisfied with the quality of the goods they are receiving.

It is to be hoped that the Dominion market will absorb all the blood-and-bone and other similar types of organic manures which are manufactured from the carcasses of animals grazing the pastures of this country. The comparative high price and the growing scarcity of blood-and-bone fertilizer is handicapping the market gardener and grower to some extent at the present time.

The price of ground Nauru phosphate in the North Island requires further investigation as there are soil types on which this class of raw phosphate could be used to economic advantage.

A considerable amount of work appears to have been done in connection with synthetic substances that regulate growth in plants, and on the market has appeared various proprietary compounds which purport to regulate the growth of plants by prior treatment of their seeds.

This aspect of growth regulation requires much careful study and experimentation in view of some of the extravagant claims made for proprietary compounds offered to the public, following upon the work of scientific men overseas.

THE PHORMIUM INDUSTRY.

No considerable improvement has been experienced in the bad times through which the hemp industry has been passing during the past several years. There has, however, been a slight increase in the amount of hemp and tow milled. The output of hemp for 1936-37 was 39,792 bales, an increase of 4,265 bales over the figures for the preceding year. As regards tow, the total output of 12,732 bales showed an increase of 1,364 bales over the corresponding figure for 1935-36.

DEPARTMENTAL PHOTOGRAPHY.

The photographic section of the Division located at Palmerston North continues to render excellent service not only to officers of the Fields Division, but to all other sections of the Department requiring photographic services and to research institutions such as the Plant Research Bureau, the Dairy Research Institute, Massey Agricultural College, and others.

The class of work put out by the departmental photographer is of a very high standard, and this is one of the reasons why his services are so sought after by those requiring photographs, lantern slides, &c., outside the Division.

STAFF.

I desire to place on record my sincere thanks for the whole-hearted support received from all officers of the Division during a very particularly busy year.

FIELD EXPERIMENTAL WORK.

Mr. J. W. Woodcock, Crop Experimentalist, supplies the following sub-report :—

The investigational work carried out by officers of the Fields Division continues to increase, and each year these activities become more varied in character. At the present time 976 experiments or demonstrations are being conducted throughout the Dominion, and most of these are carried out on a co-operative basis on private farms. Close collaboration in many of the projects is maintained between the Fields Division and the various branches of the Plant Research Bureau, and much of the work outlined below represents the translation into field and district practice of research work carried out by officers of the Bureau. A detailed summary of experiments in progress is given in Appendix A.