H.—29.

FIELD EXPERIMENTS.

19

The extensive programme of work in field experimentation carried out during the year has dealt with variety, manurial, and other trials on all classes of roots and grains. The total number of experiments conducted was 696, spread over the whole of the Dominion. This work gives the Division a permanent record of the behaviour of the crops under different manures and different systems of manuring, and information of a similar character in other directions. With the careful summarizing of the results most valuable information is obtained, and this information is being disseminated to farmers through the Department's *Journal* and the instructional staff.

CROP CERTIFICATION.

Crop certification continues to expand, and for the season just ended the following crops have been dealt with under this scheme: Rye-grass, white clover, brown-top, wheat, and potatoes. With rye-grass a total area of 5,642 acres was certified, as against 2,447 acres the previous season. Increases have also been shown in the volume of each of the other crops, but not so great as in the case of rye-grass. The benefit to be derived from using certified seed is being more and more recognized by both the farming community and the seed-merchants, and a still further rapid expansion of this work can be looked for in the near future.

INSECT CONTROL OF NOXIOUS WEEDS.

Working in co-operation with the Cawthron Institute, officers of the Fields Division during the year made numerous distributions in widely scattered centres of the cinnabar moth for ragwort-control. This work has simply followed up that done the previous two years. The moth has now been established over many areas, and full opportunity is afforded of showing whether or not it will be effectively beneficial.

IRONSTONE LAND IN NORTH AUCKLAND.

The work in progress on a block of ironstone country at Kapiro, near the Bay of Islands, has been carried on. The establishment and growth on the area sown last autumn have been very poor, and generally results are not promising:

Ensilage.

In my last report I mentioned that a definite ensilage drive had taken place. This was continued during the past year, with the result that most districts in New Zealand have made sufficient ensilage to recognize its value, and the making of silage should now rapidly become a definite farm practice on all farms where material is available. Instructors generally report a considerable improvement in the quality of the silage made.

RADIO LECTURETTES.

Officers of the Division at regular intervals broadcast lecturettes on numerous subjects of interest to the farmer. These lecturettes, it is understood, are highly appreciated, and the intention is to continue them.

REPORTS FOR OTHER DEPARTMENTS.

Other Departments of State, particularly the Lands and Survey Department and the State Forest Service, have made a number of calls on officers of the Division for reports and investigations on land propositions.

The Hemp Industry.

The hemp industry of the Dominion has during the year fallen on very bad times, and a decrease in the amount of fibre submitted for grading as compared with the previous year has been shown to the extent of approximately 66 per cent., the actual figures being 1929–30, 65,813 bales, against, in 1930–31, 23,478 bales of hemp. This decrease is due very largely to slump prices only being obtained for sisal and manila, the other fibres which compete with New Zealand fibre. As indicated previously, the amount of hemp graded for the year ended 31st March, 1931, was 23,478 bales, as compared with 65,813 bales for the previous year, a decrease of 42,335 bales. The quantity of tow graded was 6,938 bales, as compared with 20,070 bales for the previous year, a decrease of 13,132 bales. Of stripper slips 315 bales were graded, as compared with 1,435 for the previous year, a decrease of 1,120. Of the hemp graded 8.47 per cent. was "good fair," 47.06 per cent. "high fair," and 31.25 per cent. was "low fair." The percentage of "good fair" shows an increase when compared with the corresponding figure for 1929–30, but, owing to the much smaller quantity graded in 1930–31 than in the previous season, the comparison is not reasonable.

SHOW EXHIBITS.

Officers of this Division have assisted at all centres where exhibits have been staged, and in some cases have taken charge of the complete exhibit.

DEPARTMENTAL PHOTOGRAPHY.

The photographer attached to this Division has performed excellent service during the year and has carried out, as in the past, photographic work for all branches of the Department and occasionally for other Departments.

Staff.

I desire to place on record my appreciation of the loyal service rendered by the staff, both field and office, during a particularly arduous year.