

FIELD EXPERIMENTS.

The experiments to determine the value of nitrogenous top-dressing at different times of the year have been continued. These nitrogenous experiments are conducted on private farms in co-operation with the owners, and also on the Manaia, Stratford, Dargaville, and Winton subsidized demonstration farms. There has also been considerable extension in connection with the manuring of rye-grass to determine its effect on seed-production. Additional to the above there are in operation approximately six hundred experiments of various kinds under the direction of the Crop Experimentalist.

CROP-CERTIFICATION.

The object of crop-certification is to supply information that will enable merchants and growers to obtain seed that is true to name and reasonably free from seed-borne diseases. This certification business, which was commenced in the 1927-28 season, has been greatly extended, and now includes certification of rye-grass, white clover, and brown-top.

ENSILAGE.

During the 1929-30 season a definite drive to encourage ensilage-making was carried out by the instructional staff of the Fields Division, and the results have been very gratifying. There are still a few districts lagging behind, but special attention will be paid to these during next season with a view to bringing them into line with the more progressive districts. An article relating to the feeding of sheep on ensilage was published in the Department's *Journal*, and it is anticipated that the information contained in that article will be of assistance in the extension of ensilage-making in sheep-farming districts.

INSECT CONTROL OF NOXIOUS WEEDS.

Distributions of cinnabar moth for ragwort-control were made during 1929 at fifty centres throughout the Dominion. These distributions have been done by officers of the Fields Division, working in co-operation with the Cawthron Institute. It yet remains to be seen what effect the cinnabar moth will finally have on ragwort.

IRONSTONE LAND IN NORTH AUCKLAND.

In the far north of Auckland is a considerable tract of country of ironstone formation which at the present time is not being utilized. Arrangements have recently been made for a small area to be taken in hand by the Department with a view to discovering whether this land can be economically broken in, and, if so, at what cost.

REPORTS FOR OTHER DEPARTMENTS.

During the year an increased number of reports and investigations on land propositions have been made for the Lands and Survey and Forestry Departments. This work has occupied a considerable amount of time on the part of the officers concerned.

THE HEMP INDUSTRY.

Two instructors in the milling of phormium (New Zealand flax) have continued to visit the various mills throughout the country and tender advice with a view to improving the milling practice. The services of these instructors have been largely availed of, and some improvement in the quality of the fibre coming forward from the mills for grading is apparent.

There has been a general increase in the quantity of hemp and other phormium products graded during the year. On account of the low price offering for phormium products, however, the hemp industry is in anything but a flourishing condition. Generally speaking, the leaf available for milling throughout the Dominion during the year was of fairly good average quality.

The quantity of hemp graded for the year ended 31st March, 1930, was 65,813 bales, as compared with 58,622 bales for the previous year, an increase of 7,191 bales. The quantity of tow graded was 20,070 bales, as compared with 17,534 bales for the previous year, an increase of 2,536 bales. Of stripper-tow, 1,280 bales were graded, as compared with 928 for the previous year, an increase of 352 bales. The number of bales of stripper-slips graded was 1,435, as against 1,344, an increase of 91 bales. Of the hemp graded 6.36 per cent. was good-fair, 45.19 per cent. high-fair, and 33.91 per cent. was low-fair grade. The percentage of good-fair shows a decline when compared with the corresponding figure for 1928-29, which was 8.25 per cent., but the percentage figures in respect of high-fair and low-fair show a slight increase on the corresponding figures for the previous season.

DEPARTMENTAL PHOTOGRAPHY.

The photographic work carried out for all branches of the Department, and occasionally for other Departments, has increased considerably.

STAFF.

Owing to the increasing demands by farmers for advice on general farming subjects, and the extension of experimental and other investigational work, the whole of the staff, both field and office, have been working at high pressure, and I desire to place on record my appreciation of the loyal service rendered during a particularly busy year.