38 H.—29.

The early-potato crop was fairly good and not much affected by blight. For a time the main crop promised well, but turned out very disappointingly. The potato-moth has been bad in several districts. Field-pumpkins were good in the Gisborne district, and a few fair crops were grown in Hawke's Bay, but generally, owing to the dry weather, the average crop was poor. Very few were grown on the west coast this year.

Rye-grass and crested dogstail were saved under good conditions, and the seed is of good quality, with a satisfactory yield per acre. Not much cocksfoot was saved. There have been numerous complaints about the germination quality of seeds, particularly permanent-pasture seeds. Samples submitted to the Biological Laboratory show that a lot of the seed on the market was old and

germinated badly, some samples running as low as 3 per cent.

Manures and Lime.—All manures have been high in price, and until recently fairly hard to procure. The prohibition of the exportation of superphosphate from Australia and the late arrival of several shipments of slag last spring were severely felt. For a time farmers had to accept anything offering and this is making itself manifest in the poor results from many of the crops. The necessity of using fertilizers with root crops and for top-dressing pastures is being more fully realized. The value of lime is now fully realized in most districts, and all that becomes available is being put on the land. Up to the present the existing lime-works have not been able to cope with the demand. Several samples of limestone and shell rock have been submitted to the Department's Chemist for analysis. Samples of soil from various districts have also been submitted to the Chemist to ascertain the lime content; these without exception have shown a deficiency in lime.

Experimental Work.—This has been mainly confined to the Stratford, Waimate West, Marton, and Rawhiti areas, but a few additional experiments on a small scale have been conducted in Taranaki and Hawke's Bay. Detailed accounts of the operations on the main areas are published in the

Journal, brief references only being given here.

Stratford Model Dairy Farm: The experiments on this farm have been in the direction of tests between different varieties of roots for suitability and disease-resistance, growing of forage or hay crops, laying down of pastures, and a small variety test of different lucernes. Different manures have also been experimented with, both for sowing with crops and for top-dressing. The most interesting result under this heading is the good showing of basic slag and the poor results from rock phosphate, the latter having little or no effect on the pasture.

Waimate West Demonstration Area: The work started on this area has been continued. Further plots have been top-dressed, and a start has been made to establish lucerne, 4 acres having

been sown during the season. Milking is being continued, and the herd is doing well.

Marton Experimental Area: The season was bad for this area; the spring being wet and cold, work was delayed. However, better harvest weather was experienced than was the case last year, and this to some extent compensated for the wet spring. The crops grown this year consisted of oats, wheat, barley, lucerne, rye-grass, clover, peas, Japanese millet, Sudan grass, maize, sugar-beet, turnips, and swedes. The balance of the area was in fallow for the destruction of couch-grass.

Rawhiti Area (Hawke's Bay): The work on this area has consisted of observing the grasses and lucerne previously sown, and the preparation by means of a rape crop of another 14 acres to be sown in permanent pasture of different mixtures. The drought conditions that prevailed practically reduced the area to a dust-bed, and further work has been deferred.

The Stratford and Waimate West farms are now fairly established. At Stratford some 70 acres have been stumped, and the crops grown have generally been good. Last year the returns of butterfat showed an increase of over 12 per cent., and this year, notwithstanding the bad season, they show fully 30-per-cent. increase. The policy on these farms is more demonstration of good farming than experimental work, although a certain amount of the latter is being done. That the work carried out is widely appreciated is shown by the large number of people who visit these farms during the year, and the interest that is being taken in all published reports. It is the general opinion that the establishment of these farms has already been fully justified, and that their continued development will prove of great value to the districts in which they are situated. The strong points are that they are within easy reach of the people they are expected to serve; that the results obtained are applicable to the surrounding country; and that they provide places where farmers can meet and discuss farming problems not only among themselves, but with officers of the Department.

Field Competitions.—These continue to create considerable interest, and are the means of getting farmers together to see and discuss the best crops to grow and the most satisfactory methods of

Ten additional centres have started competitions this year.

Returned Soldiers.—A good number have been visited on their farms and others advised by letter. At Putorino, in northern Hawke's Bay, the returned soldiers and the settlers have formed an association known as the Putorino Settlers' Association, and the Department is co-operating with it to a small extent in carrying out some experiments. This year the work has been confined to mangold variety tests and the establishment of a small area of lucerne. As opportunity offers it is proposed to take up top-dressing and pasture establishment.

Boys' and Girls' Agricultural Clubs.—A start was made with these under the auspices of the Taranaki Provincial Executive of the New Zealand Farmers' Union, the Agriculture Department and officers of the Education Board co-operating. As the start was late it was decided to confine the work for the first year to mangold- and swede-growing competitions, and the area to South Taranaki. (A

full account of the operations has been published in the Journal.)

Lectures and Correspondence.—During the year I have met farmers at a number of centres and given short addresses on different agricultural subjects. A considerable number of these meetings have been in the open field, and there is no doubt that such meetings are preferable to meetings in a room, provided the weather is favourable. The policy I have found most satisfactory is to briefly