

Marton.—The growing of root and cereal crops has been discontinued at Marton, and the area has been converted into a grassland research farm, where work is conducted in connection with grasses, particularly rye-grass and clovers, and the application of different fertilizers at different periods to study the effect on growth with a view to increasing production at the most necessary periods of the year. At the present time this area can undoubtedly be considered the most valuable grassland research and demonstration area in the Dominion.

Ashburton.—A great deal of work in connection with the improvement of the potato crop has been carried out on this area. Some 320 different lines of potatoes which were entered for certification were tried out on this farm. In addition, a large number of selections and imported lines of potatoes were grown. Trials of improved lines of wheat, barley, linseed, peas, and onions were also carried out. Activities generally at Ashburton have entailed a great deal of very careful work.

Gore.—The Gore Experimental Area, previously utilized largely in connection with experimental work for the control of disease in crops, particularly swedes and potatoes, has during the last year also been utilized largely as a grassland experimental area, and some interesting and important experiments are in progress there.

Galloway.—This area continues to be purely a dairy-farm of the commercial type, where farming operations are being successfully carried out under irrigation.

Waimaunga.—Dairying has been conducted on this farm during the year, but if it is intended to retain this area as an experimental farm the work being conducted thereon will have to be completely reorganized. This will entail an appreciable expenditure, and a recommendation in this connection has already been submitted.

Subsidized Farms.—The subsidized farms at Stratford, Manaia, Dargaville, and Winton have continued to do useful demonstration work during the year.

WINTER LECTURES.

The holding of winter lectures, or, as they were previously called, "farm schools," was continued in certain districts during the winter of 1929, but not nearly to the same extent as during the years 1925-27, inclusive. In every case the classes were limited to one day in each centre, and attendance at all lectures and the interest shown by those attending was gratifying to the lecturers.

RUAKURA FARM TRAINING COLLEGE.

The Training College established at Ruakura in 1923 continues to meet a popular demand, and about fifty students are at present in residence. At the present moment more than sufficient students are offering to fill all vacancies that are likely to become available at the end of the June 1930 term.

BOYS' AND GIRLS' AGRICULTURAL CLUBS.

The year 1929-30 recorded another very successful season in the Boys' and Girls' Agricultural Club work, with a further increase in entries and an extension in the area covered. In the past the Government has supplied all seeds and manures required, but during 1929 a rearrangement so far as Government assistance is concerned was made, and the Government, in addition to supplying seeds and manures, now subsidizes funds for prizes, &c., up to an amount of £40 per annum collected by any approved district organization set up to develop the club movement, not more than two such organizations in any one Education Board district to be subsidized.

FARMERS' FIELD COMPETITIONS.

Farmers' field competitions continue very actively, mainly in the provinces of Taranaki and Wellington. For the season 1929-30 a very large increase in entries was experienced, the figures for the past three years being 268, 370, and 503 respectively. These competitions are varied in character, and embrace mangolds, carrots, swedes, soft turnips, chou moellier, ensilage, hay, and pastures. In addition to undertaking the actual judging of these competitions, the Department associates itself with the movement by giving certificates of merit for the first, second, and third prize winners.

LAND-DEVELOPMENT SCHEMES.

In connection with the Government's land-settlement policy the Fields Division has been entrusted with the work of breaking in a large tract of pumice land. The area selected for a commencement of this work in 1929 is situated twelve miles from Rotorua. The aim is to bring in and sow in grass 1,000 acres in 1930. The position at the time of writing is well in hand, and it is fully expected that 500 acres of the area will be sown in the spring of 1930 and 500 acres in the following autumn. A further development scheme entrusted to the Division in connection with the Government's land-settlement policy is the breaking-in of an area of pakihi land on the west coast of the South Island. A start has been made on an area of 250 acres near Westport, and the aim is to deal with 50 acres during 1930.

CHEMICAL CONTROL OF NOXIOUS WEEDS.

During 1929 comparatively small quantities of sodium chlorate and calcium chlorate were procured from overseas for experimental work in the chemical control of noxious weeds. The use of these two chemicals for the control of ragwort, from the testing already done, has given very gratifying results. Where properly applied, both chemicals mentioned gave 100 per cent. of kills, and stand out head and shoulders above any other sprays for the control of ragwort that have come under our notice. In addition to the control of ragwort, both chemicals appear equally efficient in the control of pennyroyal, St. John's wort, ox-eye daisy, and many of the other soft-leaved weeds, while there are indications that they will considerably help in the control of Californian thistle and similar weeds.

Various firms in the Dominion interested in farmers' requisites are taking the necessary steps to have commercial supplies of sodium chlorate available by the early spring of this year.