

YOUNG FARMERS' CLUBS.

Since the beginning of the war it has been necessary to curtail many of the activities of the Y.F.C. organization, particularly those held on a national scale. Depletion of membership through overseas service, labour shortage, and transport difficulties arising from petrol restrictions have made it increasingly difficult for many clubs to hold successful meetings. As a consequence many clubs have gone into recess for the war period.

FIELD EXPERIMENTAL WORK.

Outstanding features in the various activities in the period under review may be briefly summarized as follows:—

- (1) A marked decrease in the number of observational top-dressing trials:
- (2) The closing-down of a number of trials with subterranean clover:
- (3) The laying-down of a number of small-scale pasture and crop trials by members of Young Farmers' clubs and pupils of district high and correspondence schools.

In spite of the fact that so many of the standard trials were finalized after providing the necessary information, or on account of staff shortage and difficulty of working under present conditions, the total number for the year was 935 compared with 901 at this time in 1941.

Pasture Trials.—Investigations into the effect of top-dressing with various fertilizers are being continued under both the observational and mowing technique, the latter now principally under the "enclosure" technique, which is proving highly satisfactory. The production from new strains of rye-grass, simple and complex pasture mixtures, and effect of liquid-manure applications are also under investigation by this method.

Crop Trials.—Manurial trials with various crops (in which varying rates of manuring and also the value of serpentine superphosphate were investigated) were carried out during the year. Results are indicative of the fact that in the case of wheat, potatoes, and linen flax additional work is required to ascertain whether present phosphate applications are warranted. This is of obvious importance under present conditions of fertilizer shortage.

Trials with wheat and linen-flax varieties were continued and provided useful information, much of which will be incorporated into farm practice in the coming season. This work will be repeated wherever possible.

In the North Island a total of thirty-five "pilot" areas in linen flax, both autumn and spring sown, were laid down during the year, and the information secured was not favourable to the extension of commercial growing in the selected districts. Failures were due to unfavourable weather conditions at sowing and harvest time, weed competition, and the effect of diseases.

Miscellaneous Trials.—Those under way last year in connection with pampas grass, control of ragwort and other weeds, and observations on transplanted worm colonies and their effect on pastures were continued. New work on blind seed of rye-grass, renovation of pastures on marine silts, trials with new lines of rape and lucerne and pasture sowings to overcome effect of *Porina* and *Odontria* damage was commenced during the year. Comparisons between production from commercial, sweet blue, and sweet yellow lupins were also conducted.

Survey of Linen-flax Crops.—A comprehensive survey covering over eight hundred linen-flax crops grown commercially during the season was carried out, and the results and recommendations were published. This work is being continued on a reduced scale, and information of great practical value is becoming available.

Publications.—In the period under review the results from three long-term mowing and grazing trials describing respectively the effect of liming at various rates, a comparison between hard and soft, coarse and fine limes, and the response from various phosphatic top-dressings, were written up for publication in the *Journal of Agriculture* and *Journal of Science and Technology*. In addition, the recommendations from the linen-flax survey, results from trials with serpentine superphosphate, and irrigation trials with wheat were published in the *Journal of Agriculture*. Work on the grassland maps was completed, but publication has been delayed owing to paper shortage.

General.—All investigational work is being drastically reduced, and only trials in connection with urgent fertilizer and crop problems will be continued. These will deal with the reduction in phosphate applications with crops, the use of serpentine superphosphate, and variety trials of linen flax.

DAIRY DIVISION.

REPORT OF W. M. SINGLETON, DIRECTOR.

The earlier months of the 1941-42 dairying season were poor for production, the weather being cold and wet in all districts. Autumn conditions, however, were very much better, and, with the exception of portions of the Auckland province, where the autumn conditions were rather dry, production was very well maintained during the final quarter of the financial year.

Quantities graded for Export.—Creamery butter received for grading amounted to 109,707 tons and cheese to 148,331 tons, as compared with 138,745 tons butter and 114,355 tons cheese for 1940-41, a decrease of 29,038 tons butter, or 20.92 per cent, and an increase of 33,976 tons cheese, or 29.71 per cent. In terms of butterfat, a decrease of 10,874 tons, or 6.77 per cent., is shown when compared with the total butterfat represented in butter and cheese graded during the preceding financial year.

Export Values.—Dairy-produce exported from this country during the past financial year was valued for Customs purposes at £25,464,651, a decrease of £2,235,138 from the 1940-41 figure of £27,759,789. All dairy-produce is included under this heading—namely, butter, cheese, casein, dried milk, sugar-of-milk, and condensed milk and cream.