

During the winter the opportunity was taken to arrange for the Division's Cheese Instructors to spend a few days at the Laboratory. These visits were primarily for the purpose of giving some tuition in the refinements of bacteriological technique with a view to achieving more satisfactory handling of starters under factory conditions. Apart from the practical bacteriological work done by the Instructors themselves on that occasion, a number of useful discussions took place upon various phases of the Laboratory work and its relation to factory work.

As already mentioned, the bacteriological testing of Auckland butters has been carried out during the past year in the grading-store at Auckland. Apart from the relief to the work done at Wallaceville, this arrangement has the advantage of enabling the Grader, and also factory-managers who may visit the grading-stores, to see the actual procedure adopted to ascertain the bacterial content of the butter. As in the previous season, pH colour tests of butters have been carried out in the principal grading-stores, and at Auckland these tests have continued to be checked electrically. In contrast to the position obtaining before this work was undertaken, very few of the butters now manufactured are either too acid or too alkaline. In particular the use of excessive amounts of soda for neutralizing cream is now comparatively rare. The skilled assistance available at Auckland has also enabled various other useful pieces of Laboratory work to be undertaken when necessary.

#### LEGISLATION.

No legislation with a direct bearing on the Division's work was enacted during the year. The consolidation of the Dairy-produce regulations is now almost completed, and it is expected that the regulations in their new form will be ready by the opening of the new dairying year.

Mention should perhaps be made of an important amendment to the Primary Products Marketing Act, 1936. The amendment in effect divided the Marketing Department into two branches external and internal marketing, and bestowed considerable powers in respect of the Government control of dairy-produce intended for local consumption.

#### PROSECUTIONS.

Legal action in respect of breaches of the Dairy Industry Act was taken in two cases during the year. One concerned neglect to cover cream-vats, and the other failure to make differential payments according to grade in respect of milk received for cheesemaking. In both cases the Magistrate's decision was in favour of the Department, and fines were imposed. The moral effect of the publicity emanating from such prosecutions is an important influence in causing dairy companies and dairy-factory managers to adhere to the regulations.

#### CERTIFICATE-OF-RECORD TESTING.

Entries for certificate-of-record test seem to have reached a more or less stable position, and the number of certificated cows varies little from year to year.

During the calendar year 1937 first-class certificates of record were issued for 554 cows, as compared with 534 cows in 1936, 494 cows being in the yearly test division and the remaining 60 in the 305-day division.

An increase in average production is recorded for first-class records in the yearly division, the 1937 figure 512.68 lb. butterfat representing an increase of 3.68 lb. over the average of 509 lb. for the year 1936. A considerable increase in average production was also shown in the 305-day test division. The average production for the sixty first-class certificates issued in this division was 452.90 lb. butterfat, compared with 437.94 lb. for forty-four certificates issued during 1936, an increase of 14.96 lb.

#### GOVERNMENT OFFICIAL HERD-TESTING.

This adjunct to the certificate-of-record system received increased support during the tenth year's operations, and the summary for the year ended 30th September, 1937, shows that 2,102 cows were tested, an increase of 192 over the previous season's total of 1,910. This season 207 breeders tested cows, as compared with 183 in the previous season. The average yield for the 1,904 cows milked 180 days or more was 332.76 lb. butterfat from 6,971.7 lb. milk.

It is interesting to place on record the fact that since the commencement of the system 18,794 statements of seasonal production have been issued for 12,953 cows, 5,841 of which have been tested more than once.

#### ORDINARY HERD-TESTING.

Although this work is now under the supervision of the Herd Recording Department of the New Zealand Dairy Board, the Dairy Division still carries out the "association own-sample" testing for a few associations, numbering about four hundred cows in all.

#### STAFF.

Four officers were added to the staff during the year, while one officer, Mr. A. Y. Cowie, resigned owing to ill health.

Messrs, J. Kerruish, J. Mitchell, and G. Campbell were appointed as Farm Dairy Instructors, and Mr. K. Henshilwood as Testing Officer in place of Mr. Cowie.

#### THANKS.

Appreciation is once more extended to the staff of the Division for assistance rendered during the year. It is also desired to place on record the courtesy and co-operation of those organizations whose functions bring them in contact with the work of the Division.