25 H.—29.

The Dairy Laboratory has for the past year been without the services of Mr. G. F. V. Morgan, N.D.A., N.D.D., who for nearly four years capably carried out the duties of Dairy Bacteriologist. It is particularly unfortunate that economic conditions have prevented the appointment of a successor to him, as there is a great deal of useful bacteriological work in association with the Division's instructional service—e.g., that aimed at improved control of starters—which might be undertaken.

#### INSPECTION OF NEW ZEALAND DAIRY-PRODUCE IN BRITAIN.

Owing to the greatly increased volume of butter and cheese exported the three officers in London engaged in the work of inspection of this produce on arrival have had an unusually busy year. Detailed reports on the quality and condition of the produce examined have been received by each mail in greatly increased numbers, all of which have been forwarded to the dairy companies concerned.

Mr. E. C. Wood, Dairy-produce Grader, Auckland, who temporarily assisted Messrs. W. Wright and F. H. Taylor, returned to New Zealand early in August last and was replaced by Mr. G. V. Were, Dairy Instructor, Wellington.

#### CERTIFICATE-OF-RECORD TESTING.

First-class certificates of record were issued to 486 cows in 1932, and of this total 443 cows qualified in the Yearly Test Division and the remaining 43 in the 305-day Division. In addition 25 second-class certificates were issued. These totals compare with 737 first-class and 35 second-class certificates issued in 1931.

During 1932 a new classification, to be known as "III Class C.O.R.," was introduced at the request of the New Zealand Jersey Cattle Breeders' Association and with the approval of those other breeders' associations whose breeds are represented in the C.O.R. testing. This class is for those cows which qualify for first- or second-class C.O.R. in all respects save subsequent calving.

The outstanding feature of the past year's testing was the performance of the four-year-old Jersey cow Woodlands Felicie, whose production of 1,220-89 lb. butterfat from 17,332-6 lb. milk was a world's record for the Jersey breed and is still so on an age basis. This cow was bred by Mr. H. C. Sampson, of Hillsborough, Taranaki, and was owned and tested by Mr. P. J. Petersen, of Waitara. Another individual performance worthy of mention is that of the Friesian cow Totara C.R. Buttercup, bred and tested by the Piri Land Co., who last year gained a certificate for 1,079-14 lb. butterfat from 27,108-1 lb. milk on a record commenced at the age of 4 years 267 days.

Up to the close of 1932 nine New Zealand cows had gained first-class certificates of record on production of 1,000 lb. butterfat or over.

## GOVERNMENT OFFICIAL HERD-TESTING.

The official herd-testing year closes on 30th September, and to that date in 1932 had completed five years operation. So far as the past year is concerned, the position must be considered satisfactory, 1,798 cows having been tested under this system, these being in the herds of 160 C.O.R. testing breeders. This represents a decrease of 438 cows and 15 breeders from the 1930–31 year. Using all cows in milk 180 days or more as a basis, the average yield of the cows tested under this system last year was 289.94 lb. butterfat, as compared with 298.17 for the preceding twelve-month.

## ORDINARY HERD-TESTING.

Some 259,857 cows were systematically tested during the 1931–32 season, a decrease of 11,547 cows from the preceding season. Over 90 per cent. of these cows were tested under the Group system, while 25,111 cows were tested under the Association own-sample system, and the balance of 219 by dairy companies on behalf of their suppliers. The tested cows represented approximately 16·4 per cent. of the total cows in milk. The average butterfat-production of the test cows was 236·87 lb. as compared with 241·05 lb. for 1930–31.

Herd-testing received considerable assistance for the past season by way of subsidies. The New Zealand Dairy Produce Board made a grant of £6,000, while the Government contributed approximately £7,700. This meant that newly formed groups were in most cases fully reimbursed for expenditure on purchase of plant, and that herd-owners received 11d. per cow if testing under the Group system or  $5\frac{1}{2}$ d. per cow if testing under the Association own-sample test.

The Herd Testing Central Executive or its sub-committee met on various occasions during the year, and rendered considerable assistance to the herd-testing movement by way of allocation of subsidy and general organization.

# APPRECIATION.

Consequent upon the greatly increased quantities of dairy-produce handled, all members of the staff have had an exceptionally busy year, and I desire to thank one and all for their enthusiastic co-operation. Thanks are also extended to the Department's Chief Chemist, the State Forest Service, Dairy Produce Board, the various freezing-companies handling dairy-produce, the firms handling milking-machines, and the cattle breeders' associations for their helpful assistance.