TESTING OF MILK AND CREAM SAMPLES FOR BUTTER-FAT.

The Instructors of the Division have tested many samples of milk and cream at the factories in the course of their rounds. In addition to this, special visits to factories have been made for the purpose of supervising and reporting to the directors upon the accuracy of the testing as carried out by the factory-manager or other employees of the dairy company, as in past years assistance of this nature has been helpful in creating more confidence in the correctness of testing amongst the milk or cream suppliers.

Many of the dairy-farmers again took advantage of the facilities provided by the Division for the testing of samples of milk and cream at Wellington. As a general rule the samples came to hand in good order. Some of the senders, however, neglected to fill the bottles quite full; consequently the contents churned in transit, and could not be dealt with, which led to dis-

appointment.

CERTIFICATE-OF-RECORD TESTING OF PUREBRED DAIRY COWS.

The testing of purebred cows has experienced a good year despite influences calculated to curtail this work. A few breeders who had been testing found it necessary to defer further work along this line, but their places have been very largely filled by the enrolment of names of new There are at present on test 330 cows owned by ninety-nine different breeders.

In the period under review two records of outstanding merit have been recorded. yearling Jersey, owned and tested by F. S. McRae, of Palmerston North, produced in 365 days 663.64 lb. of butter-fat, which constituted a word's record for heifers of all breeds of that age. This record has attracted a good deal of attention in New Zealand and abroad.

Salma Johanna Lyons has won the leadership of the senior four-year-old Friesian class with a production of 21,439.8 lb. of milk containing 730.19 lb. of butter-fat. Her milk-yield constitutes a record for New Zealand, and displaces that of Manola, one of the Department's Friesians

A larger proportion of the cows tested have been heifers on their first lactation period. These are not required to produce as much butter-fat as older cows in qualifying for certificates, and the greater proportion of young stock tested tends to reduce the average yield for all cows tested. The fact that these young cows usually get good treatment and a long lactation during their first milking period must be a potent factor in their development as superior dairy cows.

During the past year 145 cows have qualified for certificates, and seventeen repeat certificates have been issued for records of second or later tests. There are now 630 C.O.R. cows, and as this number increases each year purchasers of purebred butter-fat-record bulls are afforded better

possibilities of selection.

COW-TESTING ASSOCIATIONS.

Abnormal conditions in the rural districts have so affected available labour that there is a tendency to delete from the dairyman's work all duties which can reasonably be avoided. This inclination has been evidenced in some of the cow-testing associations, where the membership has shown a falling off.

The maintenance of the numerical strength of the dairy herd with a decreased number of farm hands has compelled many dairymen to install milking-machines. Where the releaser principle is in evidence the satisfactory sampling and testing of milk from individual cows is more difficult, and causes more loss of time than with the hand-milking. We are hopeful that this

difficulty will be overcome.

Despite the many circumstances which have militated against this testing work the majority of the associations have kept running, and their number has been augmented by the formation of new associations. The Aria, Piopio, and Waitanguru Dairy Companies united for the purpose of starting an association, and asked this Division to appoint a testing officer whose salary the association would pay. This arrangement has worked well, and good work has been done. There are now three associations in charge of Dairy Division officers paid by the dairy companies. Recent inquiries received would suggest that this method is likely to extend. Mr. S. S. Steele, who during recent years has been successfully running associations in the Cheltenham and Apiti districts, extended his operations to Awahuri and Woodville. This has been the means of considerably increasing the number of cows tested during the past season.

INSPECTION OF NEW ZEALAND DAIRY-PRODUCE ON BRITISH MARKET.

The advantage of having an officer in London who can report on the quality and condition of New Zealand butter and cheese as seen on arrival and also on the various markets has again been demonstrated by the valuable reports received from Mr. W. Wright. Where necessary, copies of these reports were sent to the dairy companies or factory-managers whose produce was commented upon by the London Inspector, and in this way an opportunity was afforded of inquiring into the cause of any particular faults in the produce examined. In addition to this work Mr. Wright has reported on many matters of special interest in regard to dairying, and thus kept this office informed of any new developments which came under his notice. It is to be regretted that Mr. Wright has been compelled to return to New Zealand on account of family reasons.

STAFF.

It is desired to place on record the willing assistance and co-operation of all members of the Division in carrying on the year's work. Unfortunately two of the Instructors have been absent on sick-leave for several months, and this has entailed extra work on other members of the staff; but the additional duties have been performed with a keen anxiety to make up as far as possible the shortage of help in this respect. Altogether there are now seven officers of this branch on active service or in military camp, all of whom at latest advice were reported as being well.