

## ANIMAL RESEARCH DIVISION

### REPORT OF J. F. FILMER, DIRECTOR

#### DIAGNOSTIC SERVICES

With the rapid increase in the number of veterinarians in New Zealand, the Diagnostic Section at Wallaceville seems destined to play an increasingly important part. During November, 1947, all veterinarians of the Live-stock Division spent a week at Wallaceville conferring with the laboratory staff. The final-year New Zealand veterinary students, now graduated, also spent a period of extra-mural training there. It is expected that similar visits will be made annually, and they should do much to improve the liaison between field veterinarians and laboratory workers.

The following are the classes and numbers of specimens examined during the year :—

|               |    |    |    |    |    |       |
|---------------|----|----|----|----|----|-------|
| Cattle        | .. | .. | .. | .. | .. | 4,563 |
| Sheep         | .. | .. | .. | .. | .. | 599   |
| Pigs ..       | .. | .. | .. | .. | .. | 202   |
| Horses        | .. | .. | .. | .. | .. | 109   |
| Dogs          | .. | .. | .. | .. | .. | 48    |
| Poultry       | .. | .. | .. | .. | .. | 1,302 |
| Bees ..       | .. | .. | .. | .. | .. | 162   |
| Other animals | .. | .. | .. | .. | .. | 76    |
| Miscellaneous | .. | .. | .. | .. | .. | 202   |
|               |    |    |    |    |    | ----- |
| Total         | .. | .. | .. | .. | .. | 7,263 |

The following vaccines were prepared and issued free :—

#### Blackleg vaccine—

|                                |    |    |    |    |         |
|--------------------------------|----|----|----|----|---------|
| Cattle doses                   | .. | .. | .. | .. | 70,000  |
| Sheep doses                    | .. | .. | .. | .. | 79,200  |
| “Scabby mouth” vaccine : doses | .. | .. | .. | .. | 329,000 |

The function of the Diagnostic Section does not end with the laboratory examination of specimens. An endeavour is made to follow up the results of recommended treatments, and where laboratory diagnosis is not possible preliminary field investigations are conducted, thus providing the ideal link between the field veterinarians and the specialist research workers.

### RESEARCH WORK

#### *Sheep-breeding Projects*

*Progeny-testing : Romneys.*—There has been no improvement in the disappointing results reported last year. During the past four years 44 rams have been tested with the following results :—

- (a) By evaluation methods available to a breeder no one ram was located that could be considered to have left progeny sufficiently superior to those of any other ram to justify his return to the stud.
- (b) Application of statistical techniques to the progeny data revealed no significant differences in the fleece weight of progeny between rams when the fleece weight was measured on the lamb fleece. Significantly heavier fleeces were bred in one year when judged at the two-tooth stage.
- (c) Statistically significant differences in count of wool of progeny existed between rams judged at the lamb stage in two years.
- (d) Statistically significant differences existed between rams in the character of the wool of their progeny in one year judged both as lambs and two-tooths.