

## ANIMAL RESEARCH DIVISION

## REPORT OF J. F. FILMER, DIRECTOR

The conclusion of the war has made it possible to make plans for the development of the animal-research work of the Department on a permanent basis. Good progress has been made in providing facilities for handling farm animals under the carefully controlled conditions required for research. Laboratory facilities are still inadequate, but these will be provided as soon as the general building situation permits. There is, however, a critical shortage of University graduates of research calibre with an interest in the problems of domesticated animals. This factor, more than any other, is likely to limit the rate of progress in the future.

During the year Dr. C. S. M. Hopkirk terminated his long and distinguished career at Wallaceville when he left to take up an appointment with UNRRA. He has been replaced as Superintendent by Dr. I. J. Cunningham.

## DIAGNOSTIC SERVICES

The Diagnostic Station at Wallaceville has continued to render valuable services. The following samples were examined during the year :—

Milk samples .. .. .	..	..	..	..	..	1,329*
Blood samples .. .. .	..	..	..	..	..	2,797
Specimens—						
Cattle .. .. .	..	..	..	..	..	451
Sheep .. .. .	..	..	..	..	..	911
Pigs .. .. .	..	..	..	..	..	61
Poultry .. .. .	..	..	..	..	..	2,065
Horses .. .. .	..	..	..	..	..	350
Miscellaneous .. .. .	..	..	..	..	..	116
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Total .. .. .	..	..	..	..	..	8,020

\* Two hundred and thirty for tuberculosis, of which 5 were positive.

Blackleg and "scabby mouth" vaccines were again prepared, and the number of doses issued free were :—

Blackleg vaccine—

Cattle doses (1 ml.) .. .. .	..	..	..	..	70,050
Sheep doses (2 ml.) .. .. .	..	..	..	..	26,800
"Scabby mouth" vaccine : Doses .. .. .	..	..	..	..	112,400

## RESEARCH WORK

*Facial Eczema.*—A large part of the North Island experienced an unusually dry summer and grave fears were expressed that a serious outbreak of facial eczema would occur. When the autumn rains fell, however, there was a marked fall in temperature and rapid pasture growth did not occur. Under these conditions only very few cases of the disease were observed.

The Department's experimental farm at Manutuke has been subdivided into small experimental paddocks, and suitable buildings and yards have been erected. It is now well equipped for the field investigation of facial eczema.

*Millet Photosensitivity.*—With the object of providing safe grazing for his sheep during the autumn period when facial eczema is likely to occur on pasture, one pastoralist in the Gisborne district decided to sow an area of millet. As Japanese-millet seed could not be obtained, he sowed broom-corn millet (*Panicum miliaceum*), which is imported from Australia for use as bird-seed. Some 500 lambs were grazed on this area. After four days 120 were noticed to be showing swelling of ears, face, and eyelids characteristic of facial eczema. Eventually over 80 died. The affected lambs all showed acute jaundice. The millet remained toxic for three months and was still toxic after it had seeded.