

ANIMAL RESEARCH DIVISION

REPORT OF J. F. FILMER, DIRECTOR

DIAGNOSTIC SERVICES

The Diagnostic Section at Wallaceville examined the following samples during the year :—

Milk samples—						Total.
Mastitis	..	..	..	..	..	1,252
Biological test for tuberculosis	..	..	..	..	..	148*
<i>Br. abortus</i> infection	..	..	..	..	..	52
						1,452
Blood samples (agglutination test)—						
<i>Br. abortus</i> infection—						
Cattle	..	..	..	..	..	1,542
Pigs	..	..	..	..	..	20
Sheep	..	..	..	..	..	27
<i>S. pullorum</i> infection: Poultry	..	..	..	..	..	273
						1,862
Specimens—						
Cattle	..	..	..	..	..	519
Sheep	..	..	..	..	..	239
Pigs	..	..	..	..	..	101
Horses	..	..	..	..	..	100
Dogs	..	..	..	..	..	39
Poultry	..	..	..	..	..	2,483
Bees	..	..	..	..	..	177
Other animals	..	..	..	..	..	35
Miscellaneous	..	..	..	..	..	71
						3,764
						7,078

* Six positive.

Blackleg and “scabby mouth” vaccines were prepared, and the number of doses issued free were—

Blackleg vaccine—					
Cattle doses (1 ml.)	..	..	..	..	73,900
Sheep doses (2 ml.)	..	..	..	..	29,510
“Scabby mouth” vaccine: Doses	..	..	..	..	174,000

RESEARCH WORK

Facial Eczema.—The summer and autumn temperatures of 1946–47 were several degrees below normal, and this probably accounted for the absence of clinical outbreaks of facial eczema. Following the February and March rains there were short periods of very rapid pasture growth in the Poverty Bay and Hawke's Bay districts. Some slight changes were noted in lambs' livers collected from the meat-works at Hastings and the Facial Eczema Research Station at Manutuke.

Broom-corn Millet Photosensitivity.—Extracts of dried toxic broom-corn millet (*Panicum miliaceum*) have been made by the methods devised for use with facial-eczema grass. Slight photosensitivity, but no liver damage, was seen in a lamb dosed with an alkaline aqueous extract. Photosensitivity has been produced in both rats and guinea-pigs fed ground broom-corn millet, and in rats fed on ether extract of millet. Ether extract of normal grass has also produced photosensitivity in rats, but the dose required is greater than with similar extracts of millet. Other experiments suggest that this