

*Pneumonia in Sheep.*—Several outbreaks of so-called "Southland" pneumonia in sheep were reported during the last few months of 1949, particularly from the Milton area of South Otago. The following is a summary from the laboratory findings and field investigations to date :—

- (1) "Southland" pneumonia is a specific condition of sheep occurring in the South Otago - Southland area and may be considered of economic importance. On ten properties visited in the Milton-Balclutha area during the recent outbreak 236 deaths were reported out of 7,070 sheep, or 3.3 per cent. The highest mortality would be in the region of 8 per cent.
- (2) The condition occurs only in aged ewes, six-tooth and older, usually suckling one or two lambs.
- (3) The ewes are invariably in good to fat condition.
- (4) The condition apparently is more serious in certain years. For example, the Live-stock Superintendent at Dunedin reports a serious outbreak in the same area in 1935, when it was estimated that 6,000 sheep were lost.
- (5) It has a distinct seasonal incidence, occurring from October to January.
- (6) The onset of symptoms is sudden and the course of the disease is rapid, culminating in death within twelve to twenty-four hours.
- (7) Some of the most serious losses have been associated with shearing, deaths occurring four or five days later.
- (8) Most common finding on post-mortem examination has been a severe fibrinous pleurisy, broncho-pneumonia involving about one-third of the lung, particularly the anterior lobes and the ventral marginal borders of the diaphragmatic lobes, and severe congestion of the non-pneumonic areas of the lungs.
- (9) Cultural examination of the lung usually reveals the presence of a haemolytic "pasteurella-like" organism, but this is not constant.
- (10) All transmission tests using cultures, macerated pneumonic lung tissue, and filtrates of lung tissue to date have yielded only negative results.
- (11) Histological examination of lung sections shows a distinct pathological picture.

The condition in the past has been referred to as "pasteurella-like pneumonia": this would seem to be unjustified, as the presence of the organism is not a constant feature and laboratory tests have shown the organism to be non-pathogenic for sheep and all laboratory animals.

*Salmonellosis in Sheep.*—Salmonellosis in sheep due to *S. typhi murium* has reached important dimensions in the past year; twenty-three outbreaks were confirmed in Wanganui, Manawatu, and Central Hawke's Bay districts especially, and also in Southland, Westland, the Wairarapa, and King-country. Salmonellosis was seen on farms varying in type from flat plain to rolling ploughable hill country intersected with deep gullies and where the over-all rate of stocking varied from 2 sheep to 6 sheep per acre.

Most farmers experienced very light losses among their flocks during the previous winter and spring and the lambing percentages were very high. There was no shortage of feed at any stage, but it dried off from mid-December in most districts.

Of these outbreaks eighteen occurred in the period between Christmas, 1949, and March, 1950, and most were observed in January.

Adult ewes carrying plenty of condition were predominantly affected, but a few mortalities extended to involve wethers, rams, hoggets, and lambs, while in two others losses were restricted to two-tooth ewes only.

Although losses tended to be between 1 and 3 per cent. of the ewes carried on a farm, they reached 9 per cent. in one small flock of 90 ewes.

The course of each outbreak varied somewhat, but by and large an odd sheep died at first and in a few days the mortality built up so that daily losses amounted to a dozen or more in a thousand ewes for two to three days. Then, fluctuating somewhat, the death-