

A notable feature of last season's export trade was a trial shipment of duck-eggs. The experiment proved highly satisfactory—indeed, far beyond expectations—especially in view of the fact that it was generally concluded that duck-eggs could not be shipped overseas to advantage.

The Poultry Act which was placed on the statute-book last session should give gratifying results and tend towards the uplifting and protection of the poultry industry. The Act provides for the framing of regulations relative to the compulsory grading of eggs and poultry for export, also the marketing of eggs and table poultry for the local trade. It also provides for the prevention of live poultry being kept under insanitary conditions and for the prevention of cruelty.

The chief weakness of the industry continues to be the want of better organization among producers. If the industry is to expand as it is capable of doing it is imperative that producers realize the necessity for co-operation and the centralization of poultry products on the chief marketing centres. Such combined effort would not only have the effect of eliminating the present unnecessary marketing-costs between the producer and the consumer, but would also tend towards placing both the export and local trade on a more sound commercial footing.

The marketing of table poultry in a prime condition is unfortunately little practised throughout the Dominion. What is wanted in this connection is intermediate fattening-farms between the producer and consumer under co-operative control, whereby store birds could be primed, dressed, and marketed according to their weight, direct to the consumer.

There is every reason to regard the future outlook of the industry with confidence, yet if advanced methods of production are to be brought about to enable us to continue to successfully compete on the oversea market, and if the knowledge of the instructional staff is to be expanded and passed on to the producers, then it is of the first importance that breeding, research, and experimental work be undertaken by the Department.

During the year the four Poultry Instructors have been kept exceptionally busy by way of visiting plants and giving practical advice on the spot, delivering lectures, giving demonstrations, answering correspondence, judging birds and eggs at egg-laying competitions, and supervising the grading of eggs for export, &c. Owing to the limited staff, so great was the demand for the Instructors' services that all requests for visits, &c., could not possibly be complied with, and this quite irrespective of a disregard for hours of duty. In view of this and the increasing development of the industry I would recommend for favourable consideration the appointment of at least one additional Instructor.

VETERINARY LABORATORY.

The work at the Department's Veterinary Laboratory at Wallaceville has been carried out during the year by Mr. C. S. M. Hopkirk, B.V.Sc. (Melb.), as Acting Officer in Charge (in the absence of Mr. H. A. Reid, F.R.C.V.S., Officer in Charge, on extended furlough in England), with the assistance of the permanent Laboratory staff. Mr. W. T. Collins, M.R.C.V.S., District Superintendent, has kept in close touch.

The general work of the Laboratory has shown a very considerable increase, and a great amount of research work into various troubles affecting stock, particularly into abortion, sterility of dairy cows, vaginitis, and contagious mammitis of cows, has also been carried out. The number of specimens and samples received for examination during the year was 2,649, as against 1,522 for the previous year.

The following report by the Acting Officer in Charge gives in detail the scope of the work carried out:—

Milk Samples.—Contagious mastitis: Samples numbering 1,613 were examined. Of these, 648, or 40·2 per cent. of the whole number, or 71 per cent. of affected quarters, were positively streptococci in origin. 266, or 16·4 per cent. of the whole number, or 29 per cent. of affected udders, were not definitely streptococci or were from cases of staphylococci or coliform infection. 699 were normal. An explanation of the large number of normal cases can be given in the fact that a number of herds were examined where possibly only 5 to 10 per cent. of the cows showed abnormality of the quarters. Farmers have been encouraged to send forward milk-samples so that the position of mastitis in the dairy herds of the country could be judged more accurately. From the fact that the samples doubled in number, it would indicate that the farmer is awake to the usefulness of correct diagnosis, and also awake to the danger and prevalence of this disease in the Dominion.

Tuberculosis: Composite milk-samples from town-supply herds were received to the number of 285 during the colder months of the year. None of the guinea-pigs inoculated from these milk-samples developed tuberculosis. Tuberculin to the amount of 1,600 c.c. sufficient to test 5,333 cattle was distributed. This showed an increase of 600 c.c. over last year.

Contagious Abortion in Routine Work.—Blood samples from cases of suspected contagious abortion have been received regularly during the year to the number of 329, an increase of 88 over last year. Positive reactions to the agglutination test were obtained in 188 cases (57·1 per cent.). Several of these positive cases were from bulls. More attention will be given to this phase of the question in consideration of sterility work.

Anthrax.—Blood samples received were at all times negative.

Blackleg.—That the vaccine prepared at this Laboratory is pure has been demonstrated during the year by cultural and biological methods. As regards vaccine, a substantial decrease in the number of doses supplied has taken place. 37,000 doses were sent out, as against 71,250 of the previous year. One fresh batch of vaccine was made. A machine has recently been imported to turn out the blackleg vaccine material in tabloid form, so reducing work in this direction to a minimum. Credit for this innovation must be given to Mr. Kidd, Laboratory Assistant.

Pasteurellosis.—There have been several outbreaks of this disease in pigs in the Feilding district. In some of the outbreaks the organism has been quite virulent, but in others the virulence has been so low that most of the animals have been able to recover. The diagnosis was made on biological testing of materials on rabbits, mice, and fowls, together with cultural work for confirmation.

Actinomycosis.—A representative number of specimens was received of this disease, principally from tongues of cattle.

Botriomycosis.—Two specimens of this disease were received from horses, there being little doubt that these were positive cases.

Xanthosis and Ragwort.—Mr. Danskin, Government Veterinarian, Invercargill, is forwarding specimens from definite cases of xanthosis with a view to establishing a link between ragwort poisoning and xanthin deposition. The supposition that this is the case is reasonable, but specimens only commenced coming forward late in the year. Suspected ragwort-poisoning specimens have come to hand on several occasions from widely separated districts.

Parasites.—Numerous parasites have been forwarded for examination and identification, most of which were easily identified and did not require the further assistance of the Entomologist.

Tumours.—An increase in the number of specimens examined has taken place from 119 of last year to 219 of this. 193 of these specimens were epitheliomatous in character, while the remaining 26 were representative of endothelioma, carcinoma, adeno-carcinoma, hypernephroma, sarcoma, melanoma, papilloma, fibroma, chondroma, and osteoma.¹

Work for the Dairy Division.—A good deal of work has been done for this Division. All of it has been in the nature of cultural examination of "starters" from factories, foreign dry-starter cultures, cheese and butter specimens, and water-supplies from factories. Wherever possible we have been of assistance to the Dairy Division, recognizing the immense amount of work which it requires done to maintain the supremacy of New Zealand produce. One great drawback had been the absence of a low-temperature incubator (22°C.). This has now come to hand, and it will be put into use as soon as possible.