

Owing to its insidious nature and the economic loss which it is capable of producing, more especially when it occurs in pedigree herds, the control of John's disease is causing the Division considerable anxiety. Since the introduction, a few years back, by overseas workers on the disease, of the diagnostic agent known as Johnin, this has been extensively used by the Department in the detection of the disease. Although the Johnin test cannot be said to be absolutely reliable, yet it affords the only method of detection known at present, and is undoubtedly most helpful in methods of control.

It is recognized that drastic control measures designed to prevent the movement of stock from known affected farms must necessarily inflict severe hardship on the owners; nevertheless, this becomes necessary on farms on which the disease has reached heavy proportions. In other cases in which the infection on the farm is slight, it is hoped that by the institution of periodical Johnin-testing the disease on such farms will be controlled. In this connection, Mr. Gill, District Superintendent of the Wellington District, has organized an attempt at eradication in two grade herds in Taranaki. Semi-annual testing is being carried out, with slaughter of reacting animals. Some time must necessarily elapse before an opinion can be formed, but the trial will prove highly valuable in determining the success or otherwise of such means of effecting eradication of the disease.

The intradermal testing of cattle for John's disease has been carried out in Taranaki by Mr. Stephens, Veterinarian, Stratford, and in the Waikato by Mr. Marshall, Veterinarian, Hamilton, both officers displaying keen interest in what must be recognized to be arduous work.

*Mammitis*.—Speaking generally, the incidence of this disease has not increased during the year. Evidence of increasing confidence in the adoption of hygienic methods of control in the milking-shed is observed amongst dairy-farmers. The number of farmers who continue to avail themselves of the service provided by the Wallaceville Laboratory and the subsidiary laboratory at Hamilton, in the regular examination of milk-samples in the mammitis-control scheme, is an indication of appreciation of its application. The present day outlook on this disease is more reassuring for those who take the trouble to adopt definite control practice. In the absence of any recognized curative properties in vaccination, hygienic control methods must be looked upon as affording a large degree of protection. The disease, however, is one which fully justifies intensive research.

*Contagious Abortion*.—The incidence of this disease remains somewhat as in previous years. In some instances abortion "storms" in herds have been reported, but this occurrence cannot be said to be as common as in past years, due no doubt to the result of intensive dissemination of the infection amongst dairy herds. In this disease, also, measures of control offer the only means of protection available to the farmer. Information in this direction has been largely given by field officers, and the use of the agglutination (blood) test for the disease, which is done free of charge by the Wallaceville Laboratory, continues to serve a useful purpose in indicating infected animals, and enabling control methods to be employed.

*Temporary Sterility*.—The occurrence of delayed conception in dairy herds was not reported to the same extent as in preceding years. Limitation of staff at Wallaceville prevented any extension of inquiry into this seasonal herd trouble. Investigational work with reference to the bull as a factor in the condition has, however, been continued by Mr. Blake, Veterinarian, Hamilton, his observations indicating the high percentage of bulls whose semen showed poor sperm morphology, associated with definitely bad results from the point of view of service. The necessity for continued research involving the aspects of bull, cow, and nutritional factors is indicated.

*Cattle-tick*.—The incidence of cattle-tick (*Haemaphysalis bispinosa*) in the infested areas is to a large extent governed by seasonal climatic conditions. Protection of clean areas is attempted by regulatory control, but, giving consideration to the varied means by which cattle-tick can be spread from one district to another without the agency of cattle, it is obvious that such control cannot prevent the spread of tick. As stated last year, cattle-tick must not be regarded as a serious parasite of stock, and it is again reiterated that limitation of the occurrence of ticks on any particular farm can be accomplished by individual effort on the part of the owner if attention is paid to the methods of tick destruction, which should now be well known.

*Paspalum Staggers in Cows*.—This condition, not previously observed in the Auckland Province, occurred during the autumn. In commenting on the condition Mr. Collins, District Superintendent, Auckland, reports: "Last autumn some rather alarming reports were received about cattle being affected with 'staggers.' In some cases the majority of the herd was affected, whilst in others only a few animals were showing symptoms. The trouble did not last long, however, as most cases started about the middle of April and by the first or second week in May had practically disappeared. Many districts were affected, cases being reported from the Bay of Plenty, Waikato, and North Auckland. Investigation showed that in all cases the animals had been grazing on paspalum which was affected with a fungus as well as with ergot. No mortality occurred, and although some farmers reported a diminution in the milk-supply and some slight loss of condition in the affected cattle, others stated that the animals, although they staggered when moved along, did not appear to be affected as far as general health was concerned." Experimental feeding carried out at Wallaceville showed the ergotized seed-head of paspalum to be toxic, and capable of producing the nervous symptoms.

*Tympanitis (Bloat) in Cattle*.—This seasonal trouble was not so much in evidence last spring. Further inquiry into the condition was maintained by Mr. Marshall, Veterinarian, Hamilton, who had an opportunity of observing the effect of acidulation of the drinking-water as a preventive. This was reported upon as having no beneficial effect in preventing the occurrence of bloat. A suggestion that the trouble might be associated with lime deficiency has been made, and this viewpoint is being tested in the Bay of Plenty district.

*Grass Staggers in Cows (Grass Tetany)*.—This disease which affects cows at varying periods after calving was reported to be more prevalent than in the previous two seasons. Its occurrence is mainly in the Waikato, although a few cases were reported in the Gisborne and Wanganui