

Parasitic Diseases.—Parasitic gastritis, which in past years has caused considerable loss either through pulling down in condition or by death among hoggets and occasionally calves, still causes considerable trouble, though less than in some previous seasons. The extent of its prevalence is largely influenced by climatic and resultant feed conditions, wet weather in autumn and winter being favourable to its spread. Fluke is still met with in Hawke's Bay, though no serious mortality caused by it came under notice. It is among sheep grazing in wet swampy areas that this trouble usually occurs. Sheep-maggot fly was in evidence to a slight extent in Marlborough, but these parasites are not generally troublesome in New Zealand.

Pasteurellosis.—This disease was demonstrated to have occurred among pigs on three farms in the Feilding district, where some mortality took place as a result. The outbreaks were taken in hand, and by a process of isolation and disinfection of the sties the outbreaks were checked and no further trouble was experienced.

Ragwort Poisoning.—Deaths of cows attributed to ragwort poisoning occurred in Southland and also in some parts of Otago, and it is the opinion of Mr. Blair, Veterinarian, supported by that of the District Superintendent, Dunedin, that considerable mortality takes place yearly in these ragwort-infested districts through the ingestion of this weed. Wherever possible, dairy-farmers should run some sheep to keep this and other weeds in check, as well as taking other more energetic measures to control the weed on their properties. Mr. Blair remarks that few cases of the acute form of ragwort poisoning came under notice—practically all the cases assumed the chronic form.

TICKS AFFECTING CATTLE.

Auckland District.—While this pest has not shown much, if any, diminution in the districts known as A area, no apparent increase has taken place in B area, and on the whole fewer ticks were in evidence. In Matamata and Cambridge districts, where ticks were in previous years known to exist, no evidence of their presence was found during the past season. In all cases where ticks were found in B area, and on two farms immediately south of the boundary where ticks were reported, control methods were carried out with the willing co-operation of the settlers concerned. The control of the tick within the A area is a difficult proposition owing to the conditions and the difficulty there would be in any attempt at weekly dipping or spraying of other than dairy cattle. Settlers in this area do a great deal of tick-destruction, but more individual and collective action is needed in order to effectively combat these parasites. Means additional to dipping and spraying are within the power of settlers, and if practised systematically would materially assist to reduce the pest. It is very noticeable that in open country where ground-cover is not afforded by long coarse grass, rushes, &c., ticks are not present at all, or, if occasionally seen, do not increase. This applies also to the North Auckland area, while in the Waikato the tendency is to diminution.

Wellington District.—Unfortunately, the presence of ticks was reported from Waitara district in December last, having been found on a cow owned by a small settler there. Investigations were immediately instituted, with the result that ticks were found on other small properties all in close proximity to the area where they were first discovered. A comprehensive examination of all stock within a radius of from two to three miles was made, with the result that a single tick was found on an animal distant about half a mile from the original outbreak, but it is satisfactory to record that, although a strict examination of stock has been carried out, no further ticks have been discovered. With a view to eradicating the ticks from the district the small areas involved have been unstocked, and wherever possible all cover has been destroyed and burnt. An area embracing the Waitara borough and surrounding properties has also been proclaimed a quarantine area within which the movements of all stock are controlled.

The indications are that these ticks are not likely to be troublesome outside those portions of the northern area where hot-weather and plenty of ground-cover conditions are suitable for them. Notwithstanding this, the restrictions against their spread are being thoroughly enforced.

SO-CALLED "BUSH SICKNESS," OR SOIL DEFICIENCY.

Good progress has been made with the experiments being carried out at Mamaku, and these have now reached a stage when they can be given practical application by farmers located on what has in the past—for want of a better name—been known as "bush-sick country." Full particulars of the work that has been carried on have recently been consolidated by Mr. B. C. Aston, Chemist to the Department, who has for some years past been actively associated in the work, and these have been published in the Department's *Journal*. It is therefore unnecessary to cover the same ground here, but the following report of the Farm Overseer is of interest as showing some of the results of the year's operations:—

Experiments: Paddocks No. 2 and part of No. 5 have been treated with a top-dressing of finely ground sulphate of iron at the rate of $\frac{1}{2}$ cwt. per acre. It was decided that two yearling steers which have been reared on the farm should be grazed on these paddocks for the purpose of testing the effect of the soil treatment. At the time of writing, these steers, which are now eighteen months old, are in excellent condition. Paddocks 2A and 2B, from which hay has been taken for the past three years, have been top-dressed with finely ground Nauru phosphate dust. This was applied to these paddocks in August last, and has proved very beneficial—the grass responding quickly to treatment, and a great improvement in the pasture is noticeable. This is the first year since the farm was taken over by the Department of Agriculture that we were successful in rearing all the calves. Twelve were born in the months of September and October, 1923, and are still in first-rate condition. At various times some of them have shown signs of the sickness, but these quickly responded to a little medicinal treatment by citrate of iron and ammonia. On one of the dairy cows a new method of treatment was administered—that of subcutaneous administration of sodium iron citrate; but after twenty-five days' treatment practically no improvement was noticeable.