Information for Farmers on Anaemia and Theileriosis in Cattle

Background

Veterinarians in Northland have reported an increase in the number of cases of anaemia over recent months—mostly in beef calves, but also in some dairy cattle.

The Ministry for Primary Industries is currently investigating what has caused these cases of anaemia. Some cases have been associated with a blood parasite called Theileria. This species of Theileria (T. orientalis) is widespread throughout the world and was first confirmed in New Zealand in the 1980s. It may cause a condition known as theileriosis. However, Theileria parasites may also be found in normal, healthy cattle. Other Theileria species may cause severe disease in cattle; these are not found in New Zealand.

Benign theileriosis affects cattle. The condition has not been confirmed in deer in New Zealand. Deer may however be severely affected by heavy tick burdens.

Theileria is spread by ticks. In New Zealand the cattle tick is the only tick that may spread this parasite. Veterinarians in Northland have noted an increase in tick numbers this year. The presence of ticks can also contribute to anaemia in cattle in the absence of Theileria.

There are no human health or food safety risks associated with Theileria.

What to Look Out for in Your Herd and What Actions to Take if You Suspect a Problem

Clinical signs of anaemia in cattle include lethargy, exercise intolerance and increased respiratory and heart rates. Stress and movement of affected animals should be minimised as their reduced capacity to transport oxygen around the body can lead to collapse and death. Animals should be rested, given high quality feed and water, and handled only when absolutely necessary. Movement or yarding should be minimised.

Farmers who suspect they have animals with anaemia should contact a veterinarian for advice. There are a number of causes of anaemia, and its symptoms can be similar to those of other diseases. A veterinary diagnosis is necessary to identify the cause of the problem, so that appropriate advice can be provided on the care and treatment of the animals.

Advice on Theileriosis Prevention and Control

The control of ticks is strongly advised. Not only are ticks the carriers of Theilerias, but high tick numbers can in itself result in severe anaemia.

The Theileria parasite is currently believed to be most common in the upper North Island.

Theileriosis can arise through cattle movements, when cattle are introduced into areas where infected ticks occur. Cattle with infected ticks can also spread the disease to areas where it has not previously occurred. The disease is not transmitted directly from animal to animal, but is spread by infected ticks feeding on uninfected animals.

In areas where the disease is known to occur calves should be closely inspected for signs of anaemia, especially between the ages of 6-12 weeks. Introduced cattle should be examined closely when they have been in the area for 3-8 weeks.
In areas where Theileria are normally not present, but cattle from Theileria infected areas have been introduced, home-bred cattle should be checked regularly between 2 and 6 months after the introductions.

Farmers should check the health status of source herds for incoming animals, and keep newly brought-in animals separate from the rest of the herd for 2-3 weeks or on pasture that is tick-free or has low tick numbers. Tick treatment on arrival may be advisable. Speak to your veterinarian about a suitable tick control programme for your property. When using tick treatments it is important to observe withholding periods for whatever treatments are used.

Cattle will build up a degree of immunity to Theileria. The biggest risk is to animals that have no previous exposure to Theileria – for example animals from outside the area that enter a herd where Theileria is present. Cases have also been seen in uninfected herds where animals with infected ticks have been introduced. Young stock are particularly susceptible; older animals are usually immune if they have been raised in an area where Theilerias occur.

MORE INFORMATION

More information on anaemia, Theileria and tick control is available from your local veterinarian.

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