Tick Control

Lew Strickland
Extension Veterinarian
University of Tennessee

With the recent warm weather and rain showers, there has been an increase in tick infestations on Tennessee farms. With this increase of tick infestations and some cattle deaths, this article will give some prevention/treatment options.

Diagnosis

Proper identification of tick species can help pinpoint health issues in a cattle herd. Ticks can be collected from animals and placed in alcohol (not formalin) for preservation, and these samples can be submitted for identification. Tennessee Extension services, Tennessee Department of Agriculture, and the entomology department at the University of Tennessee can all help identify tick species.

Treatment/Prevention

Ticks, including the Asian Long horned tick (ALT) appear to be susceptible to most of the chemical products commonly used to treat other species of ticks on cattle. Some products containing Macrocyclic lactones and organophosphates are both labeled for species of ticks. Pyrethroids have also been recommended to treat cattle that are parasitized with ALT.

Macrocyclic lactones are a class of endectocides that consist of Dectomax®, Eprinex®, Cydectin®, LongRange®, and Ivomec®. Dectomax®, Eprinex®, and Cydectin® pour-ons are all effective in treating animals with ticks. An important note here is that all these products are brand name products. Generic forms of macrocyclic lactones have varied reports of controlling ectoparasites.

Organophosphates come as concentrates that can be mixed up in sprays or applied to backrubbers. Pyrethroid pour-ons like CyLence®, Saber®, Ultra Boss®, and StandGuard® are not labeled for tick control but can be used to treat the ticks. A limitation of the mentioned pour-on treatments is that they may not reach high enough concentrations in the areas that the tick clusters, such as the ears and groin. Many fly tags containing macrocyclic lactones, organophosphates, or pyrethroids are labeled for ticks. It is important to remember that mixing two classes of chemicals together quickly causes resistance. Stick to one class of chemical in all control products for 1-2 years, then swap to a different class. A useful website for selection of control products is https://www.veterinaryentomology.org/. This site allows you to choose the pest to be controlled, species, and application methods. Best of all, it is free to use.

Pasture Control

Treatment of pastures is possible but as I have heard before, it's about like bear hunting with a switch in the woods at night. Carbaryl (Sevin®) is one example of a product approved to treat pastures for ticks. Before treating pastures, you should consult an expert in your area and only treat those areas with the densest tick populations.

Other helpful recommendations for controlling ticks are to fence cattle away from swampy areas and woods and keep pastures clipped short. The ALT especially prefers shaded moist areas such as tree lines and creek banks. Unfortunately, these recommendations can negatively impact beef cattle production and may outweigh the benefits of tick control. Furthermore, wildlife can drop ticks off as they pass through pastures, reintroducing ticks into previously treated and/or fenced areas. Successful treatment and control programs for ALT will require an integrated approach. A single application of any of these products is unlikely to provide complete control of most tick species.

Tick control requires diligence but not overuse of products. Consult with your Extension agent, or local veterinarian, before starting any control protocol to ensure it is the best suited for your situation, and always follow labelled directions when applying chemicals. Always wear PPE equipment when applying. Please feel free to contact me. 865-974 3538, lstrick5@utk.edu, or askdrlew.tennessee.edu

Resources

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