

The logo for the University of Arkansas Division of Agriculture Research & Extension. It features a large, stylized 'U of A' in a serif font. Below this, the words 'DIVISION OF AGRICULTURE' are written in a bold, sans-serif font, followed by 'RESEARCH & EXTENSION' in the same font. At the bottom, 'University of Arkansas System' is written in a smaller, italicized serif font.

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Longhorned Ticks

Deer Ticks

Lone Star Ticks

American Dog Ticks

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Spur on basal palpal segment

Nymph and adult female, dorsal view

Fig. 4. ALT adult and nymph- dorsal and ventral views; spur on palp.

Impact on Cattle

Because of its reproductive strategy, ALT can reach very high population densities that may result in elevated stress and has been linked to possible exsanguination of its host. In addition, it is the primary vector of theileriosis in Arkansas and U.S cattle. *Theileria orientalis* Ikeda genotype is “new” to Arkansas and because it infects blood cells, its symptoms are similar to anaplasmosis. Symptoms include weakness, going off feed, pale gums, jaundice, increased abortions and sudden death. However, in contrast to anaplasmosis, theileriosis affects both calves and adult cattle whereas anaplasmosis primarily impacts adult cattle. Currently, there are no approved treatments or vaccines available for theileriosis in cattle.

Research Efforts

The University of Arkansas has recently started a project funded by a USDA NIFA grant (USDA NIFA Award No. 2024-67016-42397) to determine the prevalence of the ALT and *Theileria orientalis* Ikeda genotype in Arkansas. We are surveilling for ALT and *Theileria orientalis* in symptomatic cattle. We will also identify suspect ticks collected by cattle producers, veterinarians, other state agencies and county agents. Suspect ticks can be preserved in a vial containing 90% ethanol or sent live in a vial containing a blade of grass to improve survival. Please provide name, contact information, GPS coordinates (or at least county) of collection, collection date and host (dog, cow, etc.) or environment (grass, wooded areas, edge of woods, etc.) with the sample. Samples can be returned to your local county office or sent directly to: Kelly Loftin, 2601 N. Young Ave. Fayetteville, AR 72704.

Asian Longhorned Tick Control

Insecticide products and methods used to control horn flies on cattle can reduce the number of ALT that attach to cattle. However, some methods are more effective in controlling ticks than others. Below is a list of control methods ranked beginning with the most effective.

1. Whole body insecticide/acaricide treatment – spraying (permethrin, permethrin/PBO, phosmet (Prolate/Lintox), coumaphos (Co-Ral)
2. Pour-on insecticides/acaricides – pyrethroids or endectocides (Dectomax, Ivomec, Cydectin)
3. Insecticide impregnated ear tags - XP820 (abamectin), others – Max40 (diazinon), Python II (zeta-cypermethrin) aid in control of ticks
4. Self- treatment devices – back rubbers with face flips and dustbags
 - a. Both should be forced use (pass through the device daily for feed mineral or water)
 - b. Back rubbers – permethrin, Prolate/Lintox, Co-Ral, Ravap
 - c. Dust bags – Python (zeta-cypermethrin), Co-Ral, permethrin

Habitat modification reduces tick density by making the habitat less favorable for tick survival. For example. modifications such as cutting/brush hogging vegetation such as brush and tall weeds may reduce humidity and promote tick desiccation and may influence host usage of the area. Fencing cattle out of wooded areas can reduce the number of ticks that attach to cattle. Because this pest is still spreading across Arkansas, keeping a closed herd can also help protect your cattle from the introduction of both ALT and *T. orientalis*.