

Vet Call

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Control of lice on beef cattle

Every winter, producers from across the country have to deal with lice infestations in their cattle herds. Large populations of lice cause severe itching, which results in cattle rubbing and scratching on feed bunks, fence posts and fences. Major losses can occur due to equipment and facility damage and reduced feed efficiency. Heavily infested cattle will produce less milk and wean lighter calves.

Lice are most prevalent during the late fall, winter and early spring months with peak populations occurring during December and January. Lice are most prevalent on calves and unthrifty or improperly fed animals. Some animals may be particularly prone to lice infestations and are continuously infested throughout the year.

Five species of lice infest beef cattle. All species belong to one of two types, sucking or biting. Four species are sucking lice. They feed by piercing the animal's skin with their sharp mouthparts and withdrawing blood. Sucking lice may be found on the head, neck, withers, around the base of the tail, brisket and along the inner surfaces of the legs. The "long-nosed" cattle louse is generally a pest of young cattle. The "short-nosed" cattle louse is more often a pest of older cattle. The "little blue louse" is generally a pest of older animals and is more common around the animal's head. The loss of blood stunts growth and reduces weight gain. The irritation caused by lice also hinders the animal's feeding activities and may reduce growth rate. Continued heavy infestations weaken the animal to the point where stress from disease or extreme cold weather may cause death.

The only species of biting louse that infests cattle is the "cattle biting louse," or "little red louse." It's a pest of both young and mature cattle. Biting lice have mouthparts that are adapted for biting and chewing. They feed on hair, scabs and excretions from the animal's skin. They irritate the skin with their sharp claws and jaws. Biting lice infestations weaken the animal, interrupt normal feeding activities and make the animal more susceptible to diseases.

Cattle may be infested with one or more of these species at any one time. All lice spend their entire life cycle on an animal and are transferred from animal to animal by close contact. Generally, cattle lice are species-specific and complete their life cycles on cattle hosts only. The eggs (nits) are glued to the hair and hatch in one to two weeks. The nymphs that hatch from these eggs become full-grown and start to lay eggs in about two weeks.

Diagnosis

Lice infestation isn't the only cause of cattle scratching or rubbing against solid objects during the winter and early spring; therefore, producers should examine them closely before applying control measures. To look for lice and for eggs attached to the hair, part the animal's hair where lice are most likely to be.

Organophosphate and pyrethroid chemical control

Cattle lice may be controlled with insecticides applied by sprayer, back rubber, dust bag, pour-on or injection. Insecticides won't affect the eggs; therefore, if treating with an insecticide spray or pour-on, a second treatment in 14-18 days will be necessary to kill the nymphs that hatch following the first treatment. The advent of products with sustained killing properties over the 14-18 day period allows single treatments with these products to be effective.

Sprays—The species of lice present and the area of body infested will determine the amount of coverage needed. For complete body coverage, apply 1-2 gallons of spray per animal depending upon size of animal and density of hair coat. Use a sprayer that will produce at least 200 pounds of pressure so as to wet the skin, not just the hair. The first spray should be applied mid-fall. Make a second application 14-18 days after the first application. Use smaller amounts of spray on calves 3-6 months old and don't treat calves less than 3 months old.

Back rubber—If a back rubber is used all year for horn-fly control the cattle shouldn't become lousy enough to need spraying. If necessary due to heavy exposure, relocate the back rubber to where cattle loaf during the winter.

Dust bag—Lice shouldn't build up on cattle using dust bags if the bags are located where cattle will use them regularly. Place the bags near salt and mineral blocks, in alleyways, feedlots and loafing sheds. Keep the bags as dry as possible.

Pour-ons—Starting at the shoulders, pour the required amount of insecticide along the backline. Some products can be used any month of the year because they don't control cattle grubs. Other products (systemic organophosphates) will kill grubs and, therefore, shouldn't be used to treat lice if there is a risk of negative side effects in the event of grub kill. Many pour-on insecticides have relatively prolonged withdrawal times; therefore, read label directions carefully and don't violate the withdrawal times. In addition, pour-ons shouldn't be used at the same time as other insecticides and even some oral dewormers (phenothiazine dewormers labeled for horses).

Precautions

Brahman and Brahman-cross cattle are sensitive to most organic phosphate insecticides. Read and heed label restrictions when using any form of organophosphate insecticides (pour-on, spray, back rubber) on Brahman cattle.

Don't contaminate feed, water or feed and water utensils. Don't locate back rubbers where excess insecticide or spillage will contaminate water supplies. Observe the required time interval between application of any insecticide and slaughter of treated animals. Read and follow all restrictions and precautions printed on the container label.

Avermectin control

Injectable avermectins are effective against many internal parasites as well as several external parasites, including sucking lice (but not biting lice). A pour-on formulation of an avermectin is also available that is effective against the biting as well as sucking lice species. Caution should be exercised when treating lice in the fall to avoid times in which the grub-killing activity of avermectins could cause negative side effects. Label withdrawal times should be observed.

Biosecurity

Proper biosecurity practices will limit the spread of lice among cattle. Inspect and isolate all newly purchased cattle. If they are infested with lice, treat them with a nonsystemic insecticide and keep them isolated for at least three days before turning them in with clean cattle. Don't allow noninfested animals to come in contact with feed bunks, sheds or equipment that have been contaminated by lousy cattle for at least seven days. The isolation time (seven days) allows eggs that are attached to broken hairs time to dry out and die.

