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## Controlling Cattle Lice

*Rev.*

Lice are costly freeloaders on dairy and beef cattle. Their bloodsucking and irritating actions result in reduced milk flow and lowered weight gains, meaning inefficient use of feed. Heavy infestations of sucking lice may cause anemia which can contribute to the death of an animal.

The most common of the four kinds of lice commonly found on cattle in Minnesota is the little red louse, pale colored with lateral banding on its abdomen. It does not suck blood but feeds by chewing on skin scales and body exudates. It can become so abundant and irritating that the animal will actually rub until the hair is removed and the skin damaged.

The other three kinds of cattle lice which often occur here are sucking lice; that is they are blood feeders and are dark in color as a result. These are the long-nosed cattle louse, the short-nosed cattle louse, and the head louse. Members of this group are capable of causing anemia in severely infested animals.

Lice are present and active on some animals at all times of the year. Individual animals will have high populations year after year and are termed "carriers." Infestations on all animals decline during the summer and increase as the winter progresses. The spring loss of hair coat apparently leads to a sharp drop in numbers at that season.

As the hair coat on the animal begins to thicken with the approach of cold weather—the lice spread over the animal and reproduction increases. The female louse fastens its eggs or "nits" to the animal's hair. About 15 days later the eggs hatch into young lice, which immediately begin to feed.

Different kinds of lice appear to prefer different locations on the host's body. When you examine an animal for the presence of lice check the face, top of the neck, and the dewlap. Gross symptoms of lousiness include rubbing, animal irritability, loss of hair or "tagging" and "greasy" appearance of light-colored areas.

A number of insecticides provide good louse control. However, some are more likely to result in residues in the milk, meat, and fat than others. Thus the producer should be fully aware of the waiting period: the time the treated animal must be held off the market following a given treatment. The following summary includes insecticides, dosages, methods, and waiting periods. Always be sure you read the labels before any application.

### FOR MILK COWS OR BEEF ANIMALS

Choose one of the following chemicals:

- **Ciodrin** — Apply a 0.25 to 0.5 percent emulsion spray (2 to 4 gals. 10.0 percent emulsion per 100 gallons water). The 1 percent Ciodrin in oil prepared mixtures at 2 ounces per animal will also provide excellent louse control.

- **Ciodrin-Vapona (CioVap)** — Apply a 0.25 to 0.5 percent emulsion spray (2 to 4 gallons 10.0 percent emulsion per 100 gallons water). The 1 percent Ciodrin ¼ percent Vapona prepared mixtures at 2 ounces per animal will also provide excellent louse control.

- **Pyrethrins** — Use a 0.025 percent synergized pyrethrin spray. Repeat treatment in 2 weeks.

### FOR BEEF CATTLE ONLY

Choose one of the following chemicals:

- **Coumaphos (Co-Ral)** — Use a 0.03 to 0.06 spray (1 to 2 pounds 25 percent wettable powder or 1 to 2 quarts 11 percent emulsion concentrate per 100 gallons water).

- **Dioxathion (Delnav)** — Apply a 0.15 percent spray (½ gallon 30 percent emulsion concentrate per 100 gallons water). Do not use more often than once every 2 weeks.

- **Malathion** — Apply a 0.5 percent spray (16 pounds 25 percent wettable powder per 100 gallons water or 3 quarts 50-57 percent emulsion concentrate per 100 gallons water).

- **Methoxychlor** — Use a 0.5 percent spray (8 pounds 50 percent wettable powder per 100 gallons water).

- **Ronnel (Korlan)** — Apply a 0.25 percent spray (1 gallon 24 percent emulsion concentrate per 100 gallons water).

- **Toxaphene** — Use a 0.5 percent spray (8 pounds of 50 percent wettable powder per 100 gallon water or 5 pints 60-66 percent emulsion concentrate per 100 gallons). Do not treat within 28 days of slaughter.

All of these treatments can be used as dips. Dipping provides complete coverage, yet thorough spray application can be equally effective.

Low volume oil sprays using Ciodrin, malathion, methoxychlor, or pyrethrins can be used in warm or cold weather for louse control. In dairy animals a good summer fly control program using Ciodrin or pyrethrins in low volume will eradicate lice in the herd. One to two fluid ounces of material per animal per treatment is suggested.

### GRUB TREATMENTS AND LOUSE CONTROL

When sprays of coumaphos (Co-Ral), fenthion (Tiguvon), Ruelene, or trichlorfon (Neguvon) are used for grub control—good season—long louse control can be expected, provided coverage has been good. Although cutoff dates have been dropped for most of these compounds it is wise to use these before November 1.

Pour-ons for grub control using coumaphos (Co-Ral), famphur (Warbex), fenthion, Ruelene, or trichlorfon also provide suppression of louse populations. However, the producer should not expect season-long louse control from such treatments.

Recently a formulation of ronnel, Korlan-2, has been labeled for use as a pour-on later in the louse season. However, good early season louse control should make such a treatment unnecessary.

### BACKRUBBERS AND LOUSE CONTROL

Table 1 lists compounds that can be applied using an oil solution in a backrubber.

**Table 1. Oil solutions for louse control using backrubbers**

<u>Insecticide</u>	<u>Percent insecticide in oil</u>
Ciodrin	1.0
Coumaphos	1.0
Dioxathion	1.5
Fenthion	1.0
Malathion	2.0
Methoxychlor	5.0
Ronnel	1.0
Toxaphene	5.0

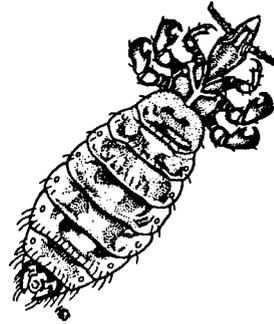
Insecticides applied with backrubbers generally suppress buildup of louse populations. Thus adequate numbers of backrubbers and placement so that animal use is continuous is important.

### DUSTS AND LOUSE CONTROL

Several dusts can be used for louse suppression, including Ciodrin, coumaphos, malathion, methoxychlor, and toxaphene. Only Ciodrin and coumaphos dust can be used to treat lice on dairy animals. When using dusts on lactating dairy animals, be sure to observe limitations stated on the labels.

#### How and when to treat

The best method of spraying cattle is with a high pressure hydraulic sprayer. Confine the cattle in a spray pen or chute. You can use low pressure sprayers satisfactorily if you make sure every animal is covered completely. To increase the effectiveness of low pressure sprays, add detergent to the spray mix.



Long-nosed cattle louse

Regardless of the method used, you will obtain complete control only by thoroughly treating every animal in the herd. Don't forget to treat the ears, face, switch of the tail, and underline, especially areas under and between legs.

Since lice begin their buildup in fall and winter, the ideal time to delouse herds is early fall. If you put off the job, the lice may get established. Then you must face the task of treating cattle during cold weather.

Treat all cattle every fall so they go into the winter louse-free. If you include this job as an essential part of your regular management program, you will eliminate losses due to lice and the resulting inefficient production.

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