

External Parasite Control

Lice are one of the most common and persistent parasites in wintered cattle in western Canada. There are 4 species of lice that are associated with cattle: 1 type of biting louse and 3 species of sucking lice.

Biting lice (*Damalinia bovis*)

- Feeds on skin cells
- Cause severe skin irritation and scratching
- Are barely visible and are a yellow color
- These lice move around to feed, so they can be the most difficult kind of louse to treat as they actually need to walk through the product to be killed.
- Life cycle = 21-30 days

Sucking Lice : 3 species of note:

Long nosed sucking louse (*Linognathus vituli*)

Short nosed sucking louse (*Haematopinus eurysternus*)

Small blue sucking louse (*Solenopotes capillatus*)

- Feed on blood
- Are visible to the naked eye—adhere to the skin and are bluish color
- These lice tend to stay in one spot and feed on blood, thus they are relatively easy to kill compared to biting lice
- Cause anemia and weight loss
- Life cycle = 25- 30 days

Lice can be found in the folds of skin around the head, neck, withers, armpits, tail head, udder folds.

Lice infestations cause cattle to itch excessively---remember though that there are other causes of scratching in cattle!

Lice can only live for a few days off of cattle—sucking lice a few hours, while biting lice can last for a few days if not exposed to direct sunlight or cold weather.

Lice are species specific, meaning that cow lice cannot live on people/horses/dogs. They may hang out there for a bit, but are unable to complete their life cycles! Lice are species specific

Points to Consider For Successful Lice Treatment:

1. *Timing of administration is important for a couple of reasons:*

- Biting lice are most active when the day length is short and the temperature is cool. Because they need to walk through the product to be killed, you want to apply the product at a time of high activity. When it is too bright or warm, biting lice (and sucking lice, to some degree) tend to hide in the armpits/along the belly.
- Lice levels tend to start rising in September/October, and peak in February, then start to decrease as spring and summer approaches. By applying the product in late October/November/December, you will maximize the number of lice killed, and the persistency of the product means that there will not be enough time for the population of lice to re-establish itself before it warms up.
- A general guideline for when to apply external parasite product is when the temperature falls to -5 to -10°C average temperature.

2. *Effect of Precipitation on Application of Product*

- A rainfall study done to examine the effect of application in wet conditions on internal parasite levels showed no effect—that is, the product killed internal worms just as well if put on when raining
- What about external parasites, like lice? If it is wet snow that is not accumulating on the animal's back, it should not be a problem, as the skin temperature is fairly constant and the wet seems not to interfere with distribution of the product.
- If snow is present on the animal's back when applying the product, some of the product might get caught up in the snow, thereby decreasing the dose received by the animal and possibly making the product less effective
- Most of the companies still recommend that application of the product be delayed if expecting heavy rainfall/snowfall within 2 hours

3. *Placement of Product on Back*

- Pour-on products should be applied along the entire backline of the animal, from withers to tailhead.
- Product poured only 6 inches along midline may not be adequate to reach all biting lice, which need to be in contact with drug

4. *Appropriate Dosing*

- Appropriate dosing for the right cattle weight is critically important
- Always dose towards the heaviest animal in the processing group

Product Comparison Between Ivomec, Dectomax and Cylence

	Dectomax (Doramectin)		Ivomec (Ivermectin)		Cylence (Cyfluthrin 1%)	
	Treatment	Control	Treatment	Control	Treatment	Control
External Parasites						
Biting lice (<i>Damalinia bovis</i>)	•	42 days	•	49 days	•	21 days
Long-nosed sucking louse (<i>Linognathus vituli</i>)	•	42 days	•	49 days		
Small blue sucking louse (<i>Solonoptes capillatus</i>)	•	35 days				
Short nosed sucking louse (<i>Haemotopinus eurytenuis</i>)	•		•			
Internal Parasites						
Lungworm (<i>Dictylocaulus viviparus</i>)	•	42 days	•	28 days		
Brown Stomach Worm (<i>Ostertagia ostertagi</i>)	•	28 days	•	14 days		
Nodular Worm (<i>Oesophagostomum radiatum</i>)	•	28 days	•	28 days		
Hairworm (<i>Trichostrongylus axei</i>)	•	28 days	•			
Small Intestinal Worm (<i>Cooperia oncophora</i>)	•	21 days	•	14 days		
Fly Control						
Horn Fly (<i>Haematobia irritans</i>)	•	7 days	•	35 days	•	21 days
Withdrawal Times (meat)	55 days		49 days		1 day	

Cylence (Cyfluthrin 1%)

Doseage: 1 cc/100 lbs (pour on the back)

Animal Wt (pounds)	Dose (mL)	Animals Treated	
		500 mL	3 L
100-200	2	250	1500
200-400	4	125	750
400-600	6	83	500
600-800	8	62	375
800-1000	10	50	300
1000+	12	41	250

Product can be repeated in 3 weeks, with a maximum recommended administration of no more than 3 times per year.

Cylence Use In a Back Scratcher

Cylence has been used (off label) as a mix that is placed in a back scratcher, thus providing fly control for the duration of the time the cattle are at pasture. Because this is an off label use, talk to your veterinarian first about this option, and remember---the 1 day withdrawal time no longer applies!

Mix 50 parts oil : 1 part Cylence

Take a small amount of oil (ie) coke bottle size, put 2cc of Cylence in it, shake it up and let it sit for 24 hours to make sure that it doesn't settle out. Then mix up desired amount using the formula listed above.