



DIGITAL DERMATITIS IN ORGANIC CATTLE

Guidance

Digital Dermatitis (also known as heel warts, hairy foot warts, strawberry foot disease, raspberry heel, digital papillomatosis, and Mortellaro disease) is a highly contagious, erosive infection usually affecting the skin on the bulbs of the heel but it can also be found between the digits or in the area of the coronary band. It can affect any breed or age group, although young animals with a poor immune response are most susceptible. It spreads rapidly from newly acquired animals, or it may be introduced by any mechanical vector, e.g., boots or hoof trimming instruments. Digital Dermatitis can cause varying degrees of discomfort and may give rise to severe lameness.

Digital dermatitis is a bacterial disease. Contact with slurry is essential for the development of digital dermatitis. The disease is more prevalent in housed herds with poor hygiene and wet conditions. The incidence is highest in loose-housed herds that are not kept clean. The prevalence is highest in the fall and winter and is lowest if the animals are pastured.

NOP REGULATIONS AND PCO POLICY

The National Organic Program (NOP) regulations require that livestock producers establish and maintain preventive livestock health care practices. When preventive practices and veterinary biologics are inadequate to prevent a sickness, such as digital dermatitis, a producer may administer synthetic medications, provided that such medications are allowed according to the NOP regulations. If allowed medications fail, you must not withhold a medical treatment from a sick animal in an effort to preserve its organic status. All appropriate medications must be used to restore an animal to health when methods acceptable to organic production fail. Livestock treated with a prohibited substance must be clearly identified and shall not be sold, labeled, or represented as organically produced. §205.238

ADDITIONAL INFORMATION

SYMPTOMS OF DIGITAL DERMATITIS

Symptoms of Digital Dermatitis include:

- Two main types of lesions – (1) erosive/reactive and (2) proliferative or wart-like
- Lesions – may vary from a few matted hairs, to loss of hair and skin damage, white keratin plugs produced on skin and scabs
- Cow appears to be shaking foot
- Cow shifts weight from one foot to another
- Cow walks on toes

BEST MANAGEMENT PRACTICES

Digital dermatitis thrives in damp dirty conditions, so keeping passageways clean and minimizing cow contact with slurry reduces the risk of infection. Keep feet clean and dry, and use foot baths. Stock coming onto the farm should be treated with a footbath and kept separated for two weeks before being foot bathed again and mixed with the existing herd. All possible hygiene measures should be taken to ensure against cross contamination. Managing nutrition and stress levels is important for prevention of digital dermatitis.

TREATMENT PRACTICES

Footbaths containing antibiotics cannot be used without removing the cow from organic production. Non-antibiotic treatments include footbaths containing copper sulfate, zinc sulfate, or limestone. For optimal effect, the heels of the cows should be washed thoroughly before entering the footbath. Repeat treatments may be needed after four to six weeks.

In advanced cases, individual treatment may be needed. The foot, especially the interdigital area, should be thoroughly cleansed to remove the prolific population of spirochetes. A single dressing containing an approved treatment can be applied carefully to the infected tissue and protected by a waterproof bandage.

APPROVED INPUTS

All inputs must be reviewed and approved by PCO prior to use, so be sure to check with us or consult a current PCO Approved Materials List, OMRI, or WSDA list prior to purchasing or using a product. PCO does not endorse any of the products listed in this guidance document. This is not an all-inclusive list and other inputs may be allowed. Please contact PCO if you have any questions on materials or restrictions.

- **Copper sulfate foot bath**
- **Zinc sulfate**
- **Hydrated lime**
- **Hoof Healer Cream** by Dr. Sarah's Essentials must not be administered in the absence of illness. Records must be kept documenting specific animal treated, treatment/dosage used, and duration of treatment. §205.238(b)
- **Organic Copper Advanced** by IBA

PCO is not endorsing the efficacy of any of the approved treatments, and producers should work with a trained professional to treat any distressed animals.

RESOURCES

- <http://articles.extension.org/pages/67229/organic-dairy-herd-health:-hoof-health-and-lameness>
- <http://articles.extension.org/pages/11201/prevention-and-control-of-foot-problems-in-dairy-cows>