

T-HEXX.com



# Dragonhyde®

*Hoof Bath Concentrate Program*

## ARE YOU RUNNING YOUR HOOV BATH PROPERLY?

*Or are you throwing your  
money away?*



*...combining quality with innovation*



## Which category does your dairy fit in?

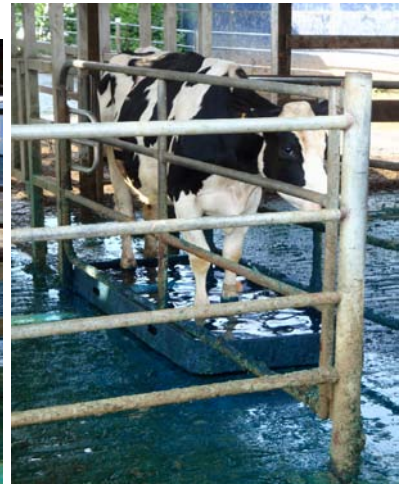
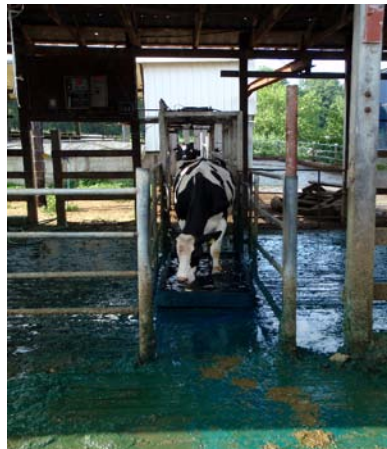
### *Excellent condition*

Optimal conditions for excellent hoof bath results, extremely high success rate



### *Fair condition*

OK condition for hoof bath results, good success rate



### *Semi-poor condition*

Less than optimal condition for hoof bath results, low success rate



### *Poor condition*

Hoof bath will have very LOW success rate



## Dragonhyde HBC's Gold Rule: If the hooves are no longer blue, then it isn't working!

Producers must keep the hoof bath clean in order for it to work to its highest potential. Changing it frequently with proper cleaning procedures can save the producer thousands of dollars per year. Greater than 30% of dairy cows are affected by lameness each year. Lameness of any kind can cost the farmer up to \$300 per animal making the disease more costly than the preventive treatments. Losses can accumulate to an astronomical \$9000 per 100 infected cows (3).

### WHEN THE BATH IS WORKING PROPERLY

*Full blue color,  
clean and ready to use*



*Excellent blue color on the hooves indicates  
the bath is performing*



### WHEN TO CHANGE THE HOOF BATH

*No blue color, heavy manure  
load, bath change is required*



*When the hoof is no longer blue after the cow  
walks through the bath, it needs to be changed*



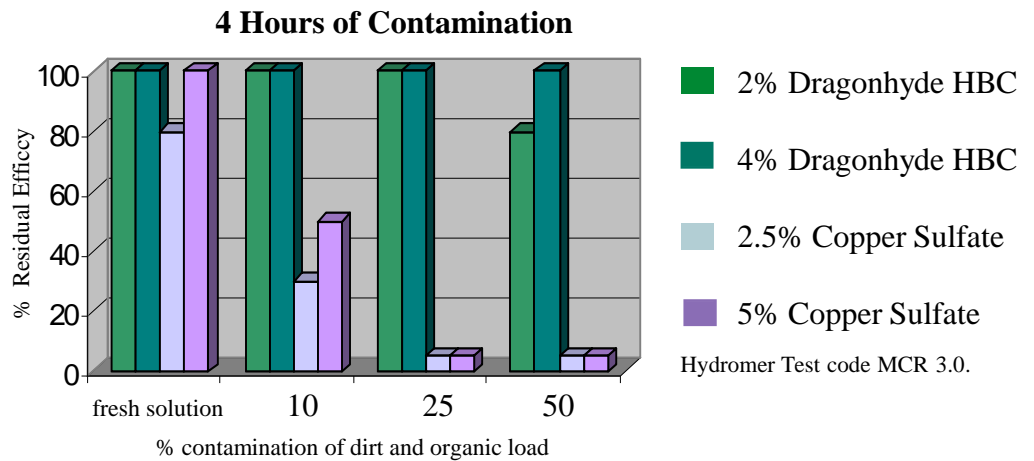


**This laboratory study demonstrates:**

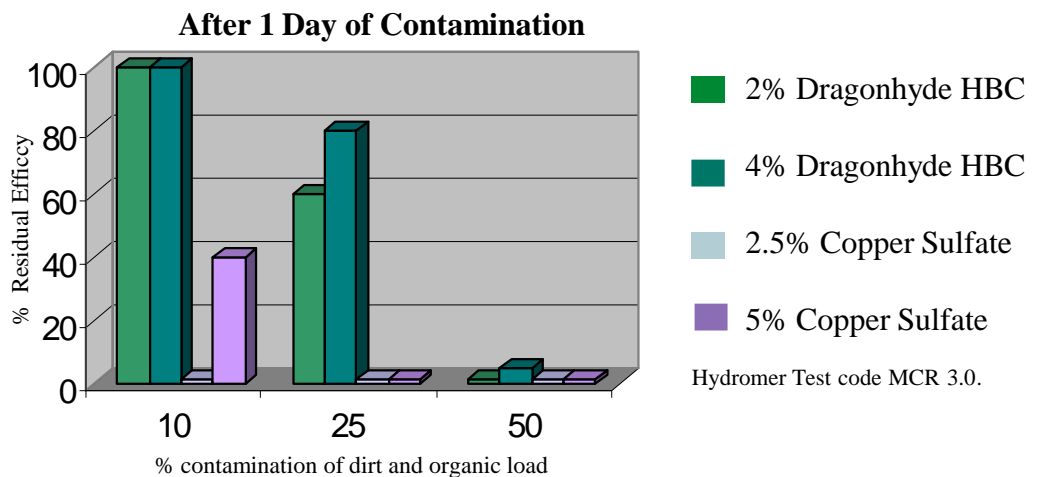
The effects that dirt and organic load have on a bath solution over a pre-determined amount of time.



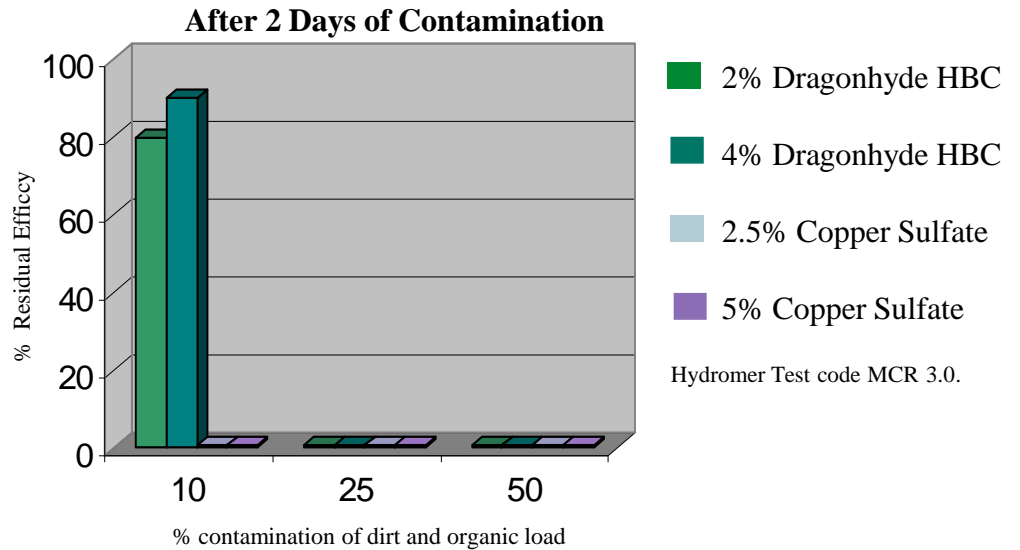
Dragonhyde HBC (green bars) efficacy at 2% and 4% remain high over a 4 hour period with contamination of organic load and dirt, while 2.5% and 5% Copper Sulfate (purple and blue bars) quickly drops in efficacy at 10% organic load and dirt contamination.



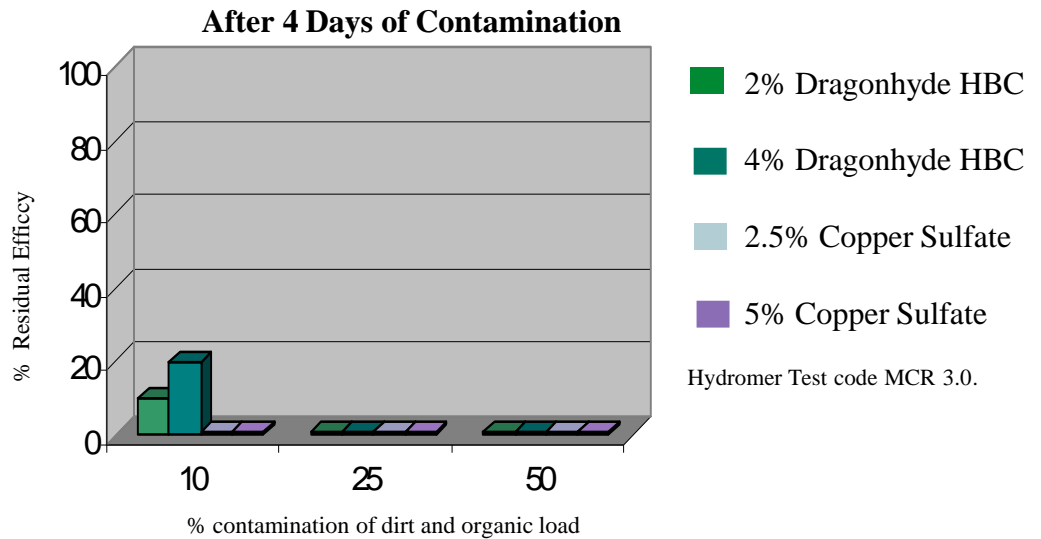
After day 1 and 10% organic load and dirt contamination, Dragonhyde HBC's (green bars) efficacy remains at almost 100% while all other products have dropped significantly and require a change in solution.



After day 2 and 10% organic load and dirt contamination Dragonhyde HBC's (green bars) efficacy remains at 80%, while all other products have 0% efficacy and require a change in solution.



After day 4, Dragonhyde HBC (green bars) has less than 20% efficacy and a solution change is necessary.



**Results**

**If a hoof bath is not changed and left for hours or even days, the efficacy of the product will decrease. Organic load and dirt contamination play a major role in decreasing the effectiveness of the bath (as demonstrated above).**





## ***Why hoof health should be important to every producer***

Hoof disease is a major concern in the dairy industry. Heel erosion, ulcers, hemorrhages and digital dermatitis can lead to lameness and a rise in Somatic Cell Count which increases the chances of mastitis outbreaks and higher incidences of culling. Poor living environment, dirty bedding, lockup space, and overcrowding are main contributors as well. One of the foremost problems concerning hoof diseases is their high rate of re-occurrence, especially with hairy hoof warts (2). Dairy size can also contribute to the increased amount of hoof disease due to the large number of new cattle introduced to the population from all different agricultural regions (2). More animals on the farm can cause more stress for the herd. Unfortunately that can be a breeding ground for all types of diseases.

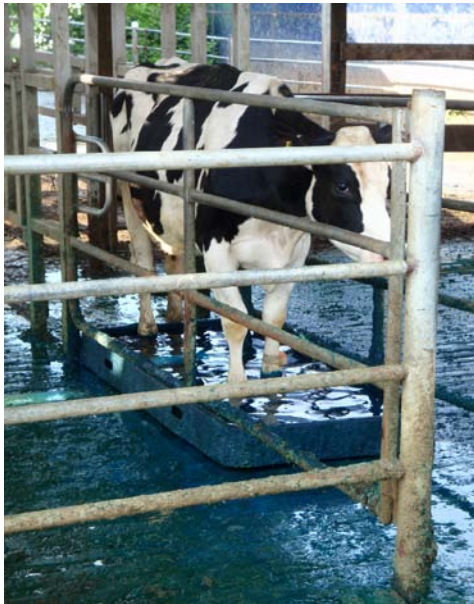
The microorganism mainly responsible for Digital Dermatitis (DD) or Hairy Hoof Warts have been identified as *Treponema sp.*, and may be caused by up to five different strains of bacteria. DD causes lesions, stubbed toes, and long heels on the animal which can lead to severe infection and lameness (1). A typical response by the hoof is to grow at a much faster rate than usual - causing an increase in irritation, skin thickening and extra keratin build up which is responsible for the hairy appearance on the hoof (2).

Another costly disease is Foot Rot which occurs after a trauma or abrasion to the hoof itself. Once infection occurs, the organisms *Fusobacterium necrophorum* alone or along with *Bacteriodes melaninogenicus* penetrate the infection causing severe lesions and lameness (2). Studies show 65% of lameness is caused by sole ulcers and white line disease (or separation of the hoof), 20% by DD, and 17% by Foot Rot (3).

The treatments of hoof diseases vary depending on the severity of infection. Foot baths are regularly used and highly recommended in the dairy industry as a form of prevention (1). Other therapies include surgical excision, cryosurgery, burning, topical treatments with or without a bandage, and antibiotic therapy (2).



Without proper farm management, diseases such as hairy hoof warts and hoof rot (seen in the above pictures) can become an issue in your herd.



### **Factors to consider when using hoof baths (2):**

- a) The disinfectant should help eliminate hoof hygiene issues.**
- b) Hooves must be completely immersed in solution in order to work properly.**
- c) The correct concentration of the product MUST be used in order to be most effective.**
- d) The disinfectant must remain active in solution until the contamination of the baths demands that it be changed.**

### **The Bottom Line**

No matter how good a product is, if the producer is not taking care of the hoof bath properly, NO product will work!



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## References

- 1) J.K. Shearer, DVM, MS. Professor and Dairy Extension Veterinarian, *Foot Rot, Foot Warts and Footbaths*; University of Florida.
- 2) Hilary M. Sullivan, *Hairy Hoof Warts*, Guide B-122 Cooperative Extension Service; College of Agriculture and Home Economics; New Mexico State University.
- 3) Dairy-cattle blog spot; *Dairy Management-Hoof Care*, February 10, 2006.
- 4) Zinpro Corporation, *Foot Baths-Key Points*, D-4046, August 24, 2004

