





HP Ingredients 707 24th Ave W Bradenton, FL 34205 USA Tel: (941) 749-7088 www.hpingredients.com

### The Problem

Intensive swine production is fraught with health issues caused by high stock numbers, stress and poor diets, resulting in reduced performance and growth. A major issue is foot pathology, affecting 88% of swine in intensive production conditions which impacts several production parameters. Females affected by foot problems have significantly reduced milk production. Lower milk production causes lower weight of the offspring at the time of weaning. This is an important indicator for the performance in the fattening stage and the feed conversion efficiency

A study conducted in Germany reported lower milk production and a loss of 1.9 piglets in litter size in lame sows compared to non-lame sows. Higher piglet losses were reported for lame sows compared to healthy sows (27% vs. 12.4%). Another cohort study examining the relationship between lameness, reproductive performance and sow longevity showed that lame sows had smaller litters with less numbers of piglets born alive.

Lameness is the reason why a significant percentage of sows are removed from swine herds, including culling, death loss, and euthanasia. Studies indicate that 6 to 35% of sows are culled because of lameness. These production losses cause a financial burden estimated at US \$52 per sow.

# What is FeetControl<sup>TM</sup>?

FeetControl<sup>TM</sup> is scientifically formulated with a standardized extract of Maqui delphinidins, Turmeric curcuminoids, and eucalyptus oil. FeetControl<sup>TM</sup> is designed to be diluted in a water solution and used for aspersion or pediluvian applications to be applied directly onto the skin. FeetControl<sup>TM</sup> can be used as a preventive strategy for foot wounds, as well as controlling foot infections by acting as an antiseptic and an antibacterial, providing relief, and promoting faster wound healing.

## Benefits of FeetControl<sup>TM</sup>

- Natural solution for podal care
- Anti-inflammatory, antibacterial
- Natural wound healing properties
- Healthier production environment, better animal welfare
- Improved productive goals

# Mechanism of Action for FeetControl<sup>TM</sup>

Nuclear factor kappa B (NF- $\kappa$ B) is a key signaling molecule in the elaboration of the inflammatory response. FeetControl<sup>TM</sup> naturally inhibits NF- $\kappa$ b, thereby inhibiting IL-1 $\beta$  signaling. The active molecules in FeetControl<sup>TM</sup> reduce cartilage-degrading molecule PGE2 via inhibition of COX-2 expression, providing control of the inflammation and pain associated to foot lesions. FeetControl<sup>TM</sup> additionally has direct effect as an antibacterial, inhibiting the bacterial growth in foot lesions. FeetControl<sup>TM</sup> has lysosomal effects by triggering proteostasis renewal and has wound healing properties.

#### **Directions For Use:**

Treatment by aspersion and foot baths. Dilute 50 grams of FeetControl<sup>TM</sup> in one liter of water and apply directly over the lesions for 7 days.