



# Safely reduce *E. coli* with pre-harvest hide wash.

**90%**  
OF FECAL  
SAMPLES

**&**

**100%**  
OF HIDE  
SAMPLES

**POSITIVE FOR *E. COLI*  
ALSO TESTED POSITIVE IN  
PRE-EVICERATION SAMPLES.<sup>1</sup>**

## ***E. COLI* ON HIDES MEANS CONTAMINATION IN YOUR PLANT.**

Dangerous *E. coli* 0157:H7 is entering your plant on animal hides, indicating a need for control of *E. coli* in live cattle.

In a study of multiple meat processing plants, the prevalence of *E. coli* 0157 in fecal and hide samples was significantly correlated with carcass contamination. 90% of lots with positive fecal samples also had positive pre-evisceration samples, while 100% of lots that had positive hide samples also had positive pre-evisceration samples.<sup>1</sup>

### **WHAT IF YOU COULD SAFELY REDUCE *E. COLI* FROM HIDES PRE-HARVEST IN JUST FIVE MINUTES?**



#### **REDUCE PATHOGENS.**

What if you could reduce *E. coli* in a pre-harvest hide wash?



#### **MAINTAIN WORKER SAFETY.**

What if there were interventions that didn't expose workers to harmful chemicals?



#### **PROTECT EQUIPMENT.**

What if you had a microbial solution that was safe on equipment?

## THE PROOF IS IN THE RESEARCH.

Finalyse™ effectively reduced *E. coli* O157:H7 by  $>1.8_{\text{Log}}$  CFU/g at an exposure time of five minutes.

Finalyse reduced *E. coli* prevalence by 44% compared to the previous year and 37.4% compared to the 3-year average.

Finalyse uses naturally occurring phages to weaken the *E. coli* cell wall and replicate, destroying additional bacteria on cattle hides. In just five minutes, Finalyse will have adequately incubated for a  $>1.8_{\text{Log}}$  log reduction.<sup>2</sup>

## EASY APPLICATION.

Applied as an overhead spray system in holding pens or lairage area, Finalyse and the Finalyse Application System™ can easily configure to current pre-harvest, hide-on spaces.

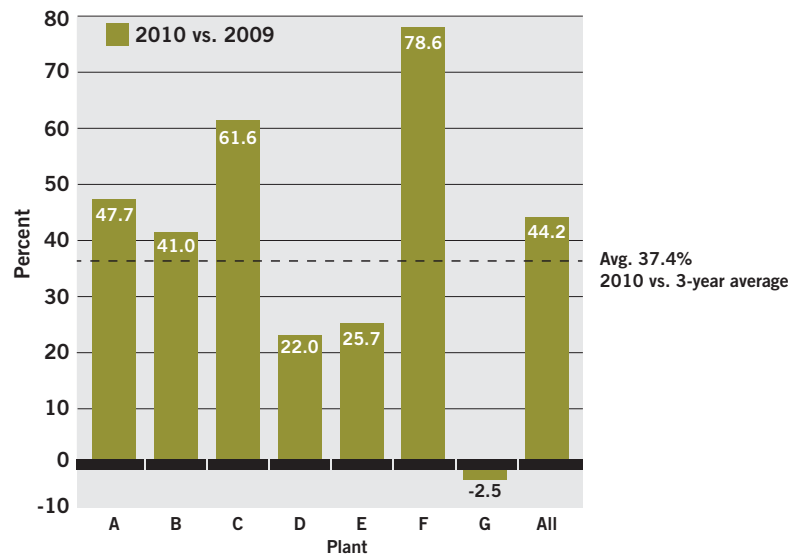
**Table 1:** Hide patch results  $10^8$  PFU with  $10^5$  surrogate Log CFU/Patch



<sup>1</sup> $P \geq 0.05$

<sup>2</sup>Based on internal customer data. Data not analyzed for statistical significance.

**Table 2:** Prevalence of *E. coli* on variety meats<sup>3\*\*</sup>



<sup>\*\*</sup>Based on internal customer data. Data not analyzed for statistical significance.



To learn more about Finalyse contact your ARM & HAMMER™ representative or visit AHfoodchain.com.

<sup>1</sup> Elder RO, Keen JE, Siragusa GR, Barkocy-Gallagher GA, Koohmaraie M, Laegreid WW. *Proc Natl Acad Sci U S A*. 2000; 97[?]: 2999–3003. Published online 2000 Mar 21. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC16181/>

<sup>2</sup> Pillai S, Rambo C, and McReynolds J. "Finalyse Surrogate Research Model." 2013. Data on file.

<sup>3</sup> Weekly VM-EC 7% Update 2007-2010 ytd. 2012. Data on file.