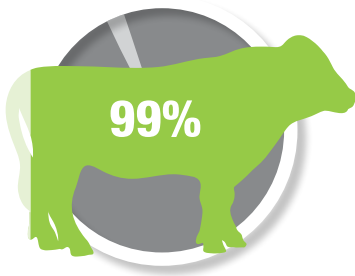




# You have a Clostridia problem.

**CLOSTRIDIUM PERFRINGENS IS EVERYWHERE AND IT'S CREATING PROBLEMS. AMONG MORE THAN 7,500 TESTED FECAL SAMPLES<sup>1</sup>:**



**99% OF ANIMALS TESTED POSITIVE FOR CLOSTRIDIA.**

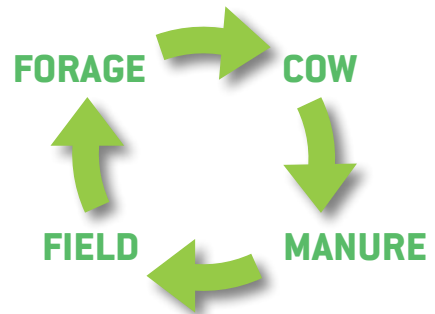


**TESTED POSITIVE FOR PATHOGENIC CLOSTRIDIUM PERFRINGENS.**

Clostridia are prevalent in feed, soil and even the cow's digestive tract. In a pathogenic form, they are a known cause of Hemorrhagic Bowel Syndrome (HBS)<sup>2</sup>; while non-pathogenic strains silently kill productivity efficiency in the rumen even when clinical signs aren't present.

### IT DOESN'T STOP THERE:

Clostridia exist throughout the animal's life cycle. From forages fed to the cow, to manure that is applied to the fields, the cycle starts all over again when new forages are fed.



### WHAT IF YOU COULD?



#### REDUCE IMPACT.

What if you could reduce the impact of pathogenic *Clostridium perfringens*?



#### KEEP CATTLE HEALTHY.

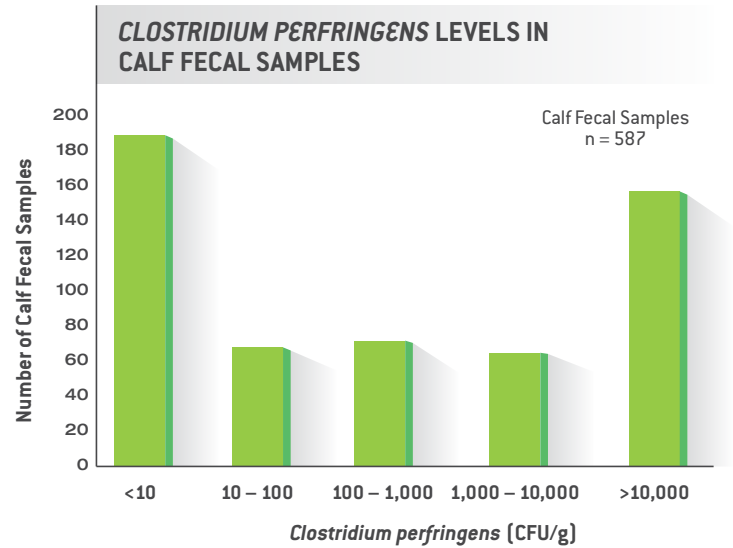
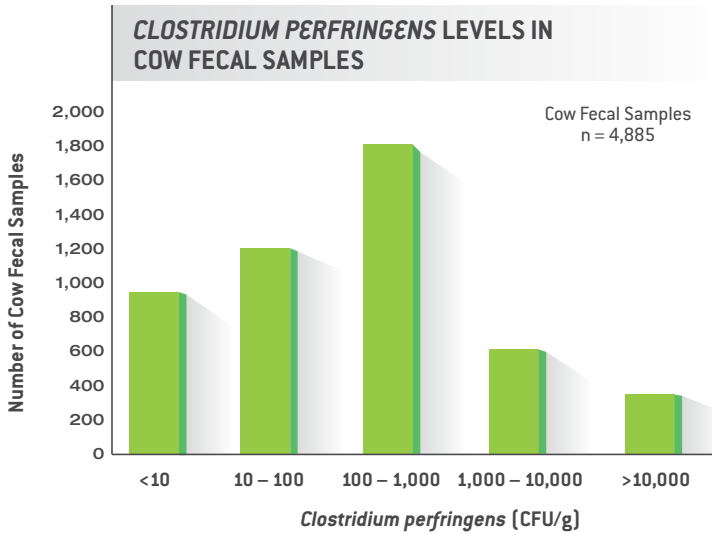
What if you had a way to reduce the negative effects of non-pathogenic *Clostridium* even though it is ever present?



#### INCREASE PRODUCTIVITY.

What would fewer digestive issues and increased productivity mean to your operation?

## MAKE YOUR UNCERTAIN CERTAIN.

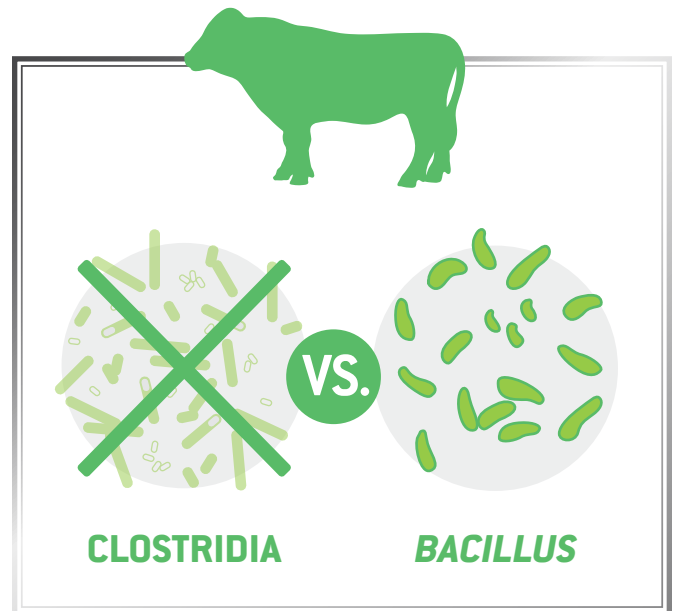


## ONLY ARM & HAMMER USES YOUR MICROBIAL TERROIR TO DETERMINE YOUR CHALLENGES.

Clostridia and bacilli have existed in nature for thousands of years. By selecting the best *Bacillus* strains we can help combat this pathogen. With CERTILLUS™ you can now harness the power of these naturally occurring bacilli to combat the effects of *Clostridium perfringens* on your herd's productivity.

## CERTILLUS DELIVERS TARGETED MICROBIAL SOLUTIONS.

Targeted Microbial Solutions™ are proprietary strains of *Bacillus* selected to combat the specific challenges in your Microbial Terroir™—which includes the environment, soil and animals on a specific farm location. The good strains of bacteria help combat harmful pathogens that are impacting animals' performance.



## GETTING STARTED

Contact your ARM & HAMMER™ representative to have your farm's samples tested to uncover the unique clostridia challenges you face.



To learn more about CERTILLUS contact your nutritionist, veterinarian or ARM & HAMMER representative or visit [AHfoodchain.com](http://AHfoodchain.com).

Powered By  
**Microbial Terroir**

1 Data collected and analyzed by ARM & HAMMER. Data on file, 2017.

2 McGuirk, S. "Managing Clostridial Disease in Cattle." Univ of Wisconsin School of Veterinary Medicine. Report on file.