Research Notes

Prevalence of clostridial challenges on Texas dairies.

BACKGROUND

Clostridia are normal inhabitants of the soil and intestinal tracts of dairy cows and calves. Many species are also commonly found in haylage, corn silage, straw, manure, colostrum and bedding.

More than 100 species of Clostridium are recognized, some of which are known to cause necrotic enteritis, hemorrhagic bowel syndrome and abomasal disease. Other Clostridium species produce high levels of acetone, butanol and butyric acid, which can negatively affect rumen function.

TRIAL OVERVIEW

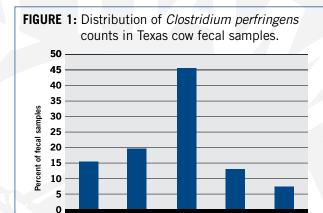
A survey was conducted across 11 dairy farms and a large calf ranch to assess the prevalence and distribution of clostridial challenges on Texas dairies.

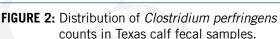
Fecal samples were collected from cows across all stages of production from each farm and from calves if raised on the dairy. Feed components from each farm were also collected.

Samples were shipped to the ARM & HAMMER[™] lab for assessment, and *C. perfringens* and total clostridial counts were measured.

RESULTS

- Among animals sampled, *C. perfringens* prevalence was measured at 86% in cows and 60% in calves (Figs. 1, 2)
- Total clostridia levels ranged from <10 cfu/g to 3.6 x 10⁷ cfu/g
- Total *C. perfringens* levels ranged from <10 cfu/g to 3.6 x 10⁷ cfu/g





Clostridium perfringens levels (cfu/g)

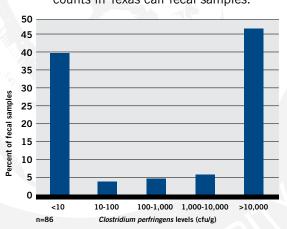
100-1.000 1.000-10.000

>10.000

10-100

<10

n=735







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Data on file, 2017.