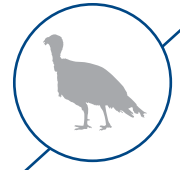


Research Notes

Arm & Hammer Animal and Food Production



CERTILLUS reduced avian pathogenic *E. coli* and *Clostridium perfringens* in a commercial turkey operation

CERTILLUS™ Targeted Microbial Solutions™ use proprietary strains of *Bacillus* selected to combat specific pathogenic challenges.

STUDY OVERVIEW

A recent study¹ conducted at a commercial U.S. turkey production facility evaluated the effect of CERTILLUS on avian pathogenic *E. coli* (APEC) and *Clostridium perfringens* (CP) in turkey gastrointestinal tracts (GITs). Historical data was used to compare pathogen levels after CERTILLUS was added to the diet.

Baseline Sampling

- A total of 30 turkey GITs were sampled in birds ages 2 – 12 weeks.
- APEC levels: 7.5E+04 CFU/g
- CP levels: 3.1E+03 CFU/g

On-Product Sampling

- A follow-up sampling was completed to analyze the effect of CERTILLUS.
- A total of 30 turkey GITs were sampled in birds ages 2 – 12 weeks.
- APEC levels: 5.7E+03 CFU/g
- CP levels: 1.1E+01 CFU/g

SUMMARY

- **APEC:** Among turkeys fed CERTILLUS, APEC levels decreased (Figure 1) and fewer birds demonstrated high APEC levels (>100,000 CFU/g), compared to birds not fed CERTILLUS (Figure 2).
- **CP:** CP levels decreased when CERTILLUS was fed (Figure 3) compared to the baseline sample.

CONCLUSION

Feeding CERTILLUS in commercial turkey diets helped to reduce APEC and CP levels in turkey GITs.

FIGURE 1: APEC Levels (CFU/g) by Sampling Session

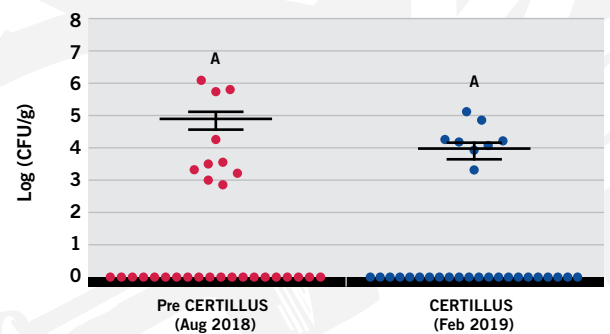


FIGURE 2: Categorical Frequency of APEC Levels by Quantitative Log CFU/g

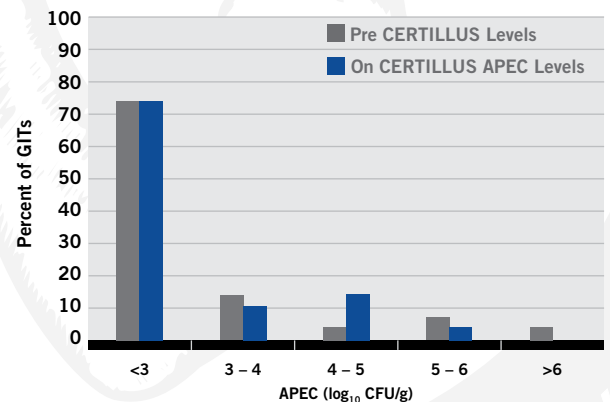
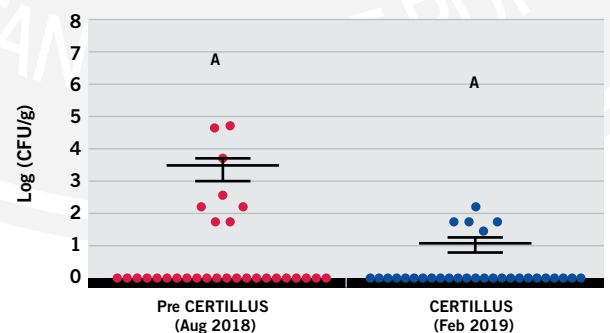


FIGURE 3: CP Levels (CFU/g) by Sampling Session





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AHfoodchain.com

Anderson S, Delago J, Vang E, Wujek R. ARM & HAMMER Internal Review. 2019. Data on file.

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