

Research Notes

ARM & HAMMER



CELMANAX reduced cecal *Salmonella* levels in turkeys on commercial farms

CELMANAX™ is a multicomponent, all-natural feed supplement containing Refined Functional Carbohydrates™ (RFC™) that has Generally Recognized as Safe (GRAS) status as a feed ingredient.

STUDY OVERVIEW

- This study was designed to determine the effect of CELMANAX on levels of *Salmonella* in ceca of turkeys on commercial farms.
- Baseline *Salmonella* enumeration (MPN/g) was determined for two turkey farms. Twenty-five ceca were sampled per farm.
- CELMANAX SCP (50 g/MT) was fed from placement to processing to the next two or three flocks placed at each of the farms.
- At processing, 25 ceca were sampled from each flock for determination of *Salmonella* enumeration (MPN/g).

RESULTS

- For turkey farm 1 (Figure 1), baseline *Salmonella* MPN/g was $9.07E+04$, while the first sampled flock on CELMANAX averaged $4.36E+00$ and the second flock average was $1.17E+01$.
- For turkey farm 2 (Figure 2), baseline and the first and third sampled flocks on CELMANAX were at non-detectable levels of *Salmonella*. In the second sampled flock on CELMANAX, *Salmonella* was detected in one ($1.74E+00$ MPN/g) of the 25 turkeys.¹

CONCLUSION

Inclusion of CELMANAX in turkey diets throughout the production cycle may reduce or maintain low levels of *Salmonella* in ceca.

FIGURE 1: CECAL *SALMONELLA* (MPN/G), TURKEY FARM 1

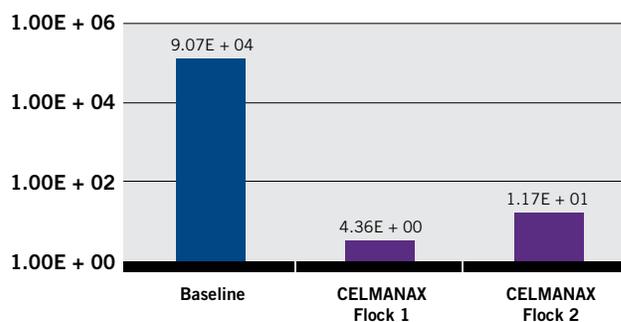
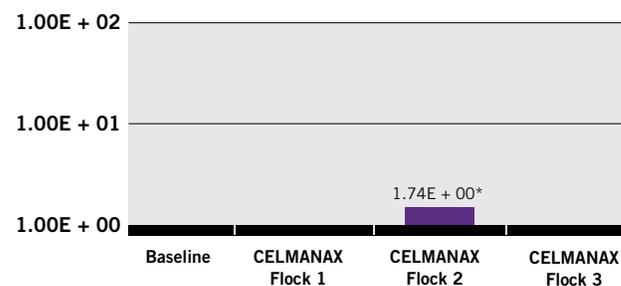


FIGURE 2: CECAL *SALMONELLA* (MPN/G), TURKEY FARM 2



Baseline, Flock 1 and Flock 3 were at non-detectable levels of *Salmonella*.
*In Flock 2, one bird out of the 25 sampled had a detectable level of *Salmonella*.

¹ Data on file, ARM & HAMMER, 2019.

