

Effect of HiZox® on intestinal bacterial counts of piglets

Place

Ghent University (Belgium)

Objective

To evaluate the effect of HiZox® at low dosage on gut bacteria of weaned piglets, compared to regular zinc oxide.

Material and method

Animals: 32 piglets weaned at 21 days, 2 piglets/pen, 4 pens/treatment, allocated on basis of age, weight and sex ratio.

Diet composition: Wheat, barley, corn SBM; CP 18 %

Experimental diets: NC – 110 ppm of Zn from ZnO

PC – 2400 ppm of Zn from ZnO

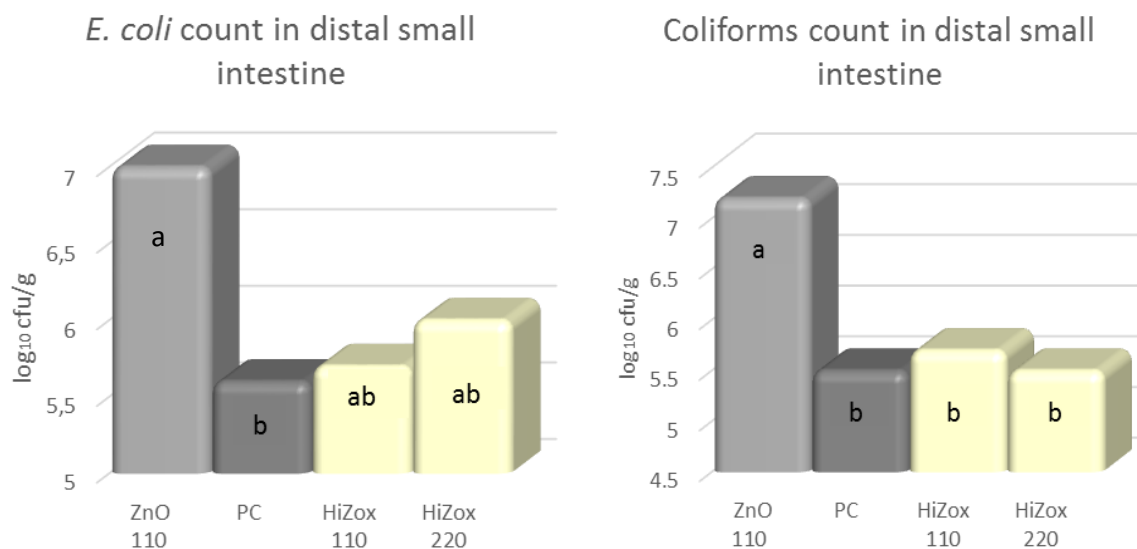
110 ppm of Zn from HiZox®

220 ppm of Zn from HiZox®

Measurements: Intestinal bacterial count, for *E. coli* and coliforms (selective media plates) after 14 days (35-days-old piglets)

Results

Intestinal bacterial counts decreased in the groups fed HiZox® or standard zinc oxide at pharmacological dosage, compared to the negative control.



p < 0.05

Conclusions

In the small intestine, the effect of HiZox® on the bacterial count was similar to the result obtained with a standard zinc oxide at pharmacological dosage, and numerically or significantly better than the result obtained with a standard zinc oxide at nutritional level.