

In-Feed Antibiotics Or Sodium Salt Of Coconut Fatty Acid Distillate On Performance In Post-Weaned Piglets

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1. INTRODUCTION

Medium chain fatty acids (MCFAs) are a family of saturated fatty acids that includes caproic acid (C6:0), caprylic acid (C8:0), capric acid (C10:0) and lauric acid (C12:0). MCFAs are naturally present in foods such as coconut oil and palm kernels

MCFAs have been established as alternatives to antibiotics as growth promoters. Several authors have described the antibacterial effect of MCFAs and their role as microbiota modulators in piglets (Zentek, 2012)

OBJECTIVE: To evaluate the effect of **DICOSAN** (sodium salt of coconut fatty acid distillate) on performance parameters in post-weaned piglets



2. MATERIAL AND METHODS

Animals:

240 piglets (28 days old) were distributed into 24 pens (10 piglets per pen) and 3 experimental groups (n=8)

Treatments:

CON -, control diet with no additives nor antibiotics

CON +, control diet plus 120 mg/kg of colistin and 3000 ppm of ZnO

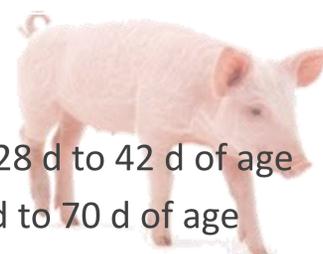
DIC, control diet plus **DICOSAN** at 3 kg/t in the pre-starter diet and 1 kg/t of feed in the starter diet

Experimental procedure:

Trial lasted 42 days

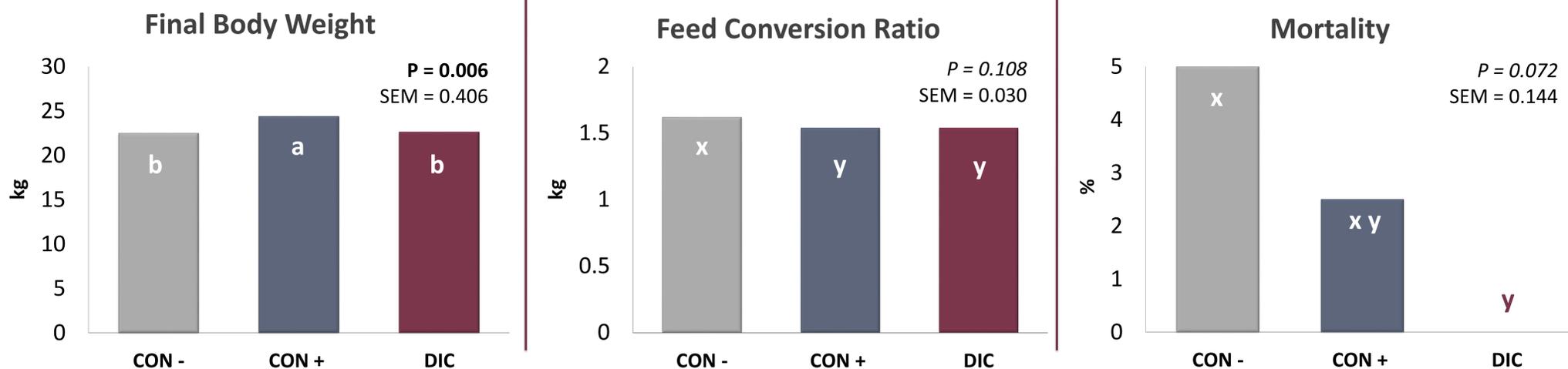
Pre-starter diets were offered from 28 d to 42 d of age

Starter diets were offered from 43 d to 70 d of age



3. RESULTS

1) Performance: 28 to 70 d



Results were analyzed by one way ANOVA using GLM procedure of SPSS v. 19.0, with the initial BW as a covariable. ^{a,b} different letters means statistical differences (P<0.05); ^{x,y} different letters indicates tendency (0.05 < P < 0.12)

- There were no differences in the productive parameters at 42 d
- At 70 d, piglets fed **CON+** diet were the heaviest (22.53, 24.42 and 22.63 kg, for **CON-**, **CON+** and **DIC**)
- FCR of piglets fed **DIC** diets did not differ from piglets fed **CON+** (1.62, 1.54 and 1.54, for **CON-**, **CON+** and **DIC**)
- Mortality of **DIC** group was the lowest (5.0, 2.5 and 0.0 for **CON-**, **CON+** and **DIC**)

4. CONCLUSIONS

It can be concluded that the best results achieved by medicated diets (CON+) can also be achieved by **DICOSAN** as demonstrated by the FCR results and the lower mortality. These results reinforce **DICOSAN** as a good alternative to antibiotics in pig diets