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Comparative Efficacy of LincoMix® and Tylan® for the Control Of Ileitis in a Commercial Swine Farm
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² Leading Edge Advanced Research, Carroll, IA, U.S.A..

INTRODUCTION

Ileitis caused by Lawsonia intracellularis, (LI) is the most common cause of diarrhea in grow/finish swine in North America¹. The disease is characterized by infections that result in clinical and subclinical symptoms. It is the subclinical form that often remains undetected but which negatively impacts performance, specifically average daily feed intake, (ADFI), average daily gain, (ADG), and feed efficiency, (FE).
The objective of the study was to evaluate performance and economic impact of strategic feed medication compared to non-medicated control pigs in a commercial swine operation.

MATERIALS AND METHODS

A total of 898 pigs approximately 11 weeks of age, (65 lbs) were sourced from 2 farms. Pigs were allotted to one of 3 treatments based on Day 0 wt. and serologic profile in a randomized complete block design:

Treatments were assigned at random to pens and all treatments appeared in each of the 12 blocks of 3 pens.
Significance was tested at the 10% level for all measures

T01, non medicated controls,

T02, Lincomix Feed Additive pulse dosing for 1 wk. at 40g/ton at 16 and 20 wks. of age followed by no medication followed by continuous dosing at 20g/ton for the final 3 wks of the in life phase of the study,

T03, Tylan Feed Additive at 100g/ton for 3 wks at 16 wks of age followed by continuous dosing at 40g/ton for the remainder of the in life phase -per label

RESULTS

ADG

T01, (Non-Med), pigs gained 1.79 lbs/d, T02, (Linco) gained 1.87 lbs/d, and T03, (Tylan) gained 1.87 lbs/d. There were no significant differences between T02 and T03 in ADG, (p=0.9734), however both medicated treatment groups were significantly greater than controls in terms of ADG, (p =0.0140 and p=0.0150 ), respectively for T02 and T03 compared to controls.

ADFI There was no treatment effect on ADFI: T01 ADFI, (5.94), T02 ADFI, (5.99), T03 ADFI, (6.02), p-value for all comparisons > 0.10.

F:G T02-Lincomix (3.20) experienced a significantly lower F:G when compared with T01-Controls (3.33) p= 0.0162, similarly F:G was significantly different between T01-Controls, (3.33) and T03-Tylan treatment, (3.22), p=0.0259. There were no statistically significant differences between Lincomix and Tylan on F:G, p= 0.8308.

TOTAL GAIN: T02-Lincomix, (150.4), experienced significantly more gain than T01-Controls,(145.5), p=0.0354. Likewise, T03-Tylan, (151.7) experienced significantly more gain than T0, p=0.0096. However there was no significant differences when T02 and T03 were compared, p=0.5574

Discussion: The results demonstrate that Lincomix results in performance equal to Tylan for the control of enteric disease in a herd with known exposure to L.I.. The total input cost for Lincomix in T02 of this study was $0.76/pig while the total input cost for the Tylan used in T03 was $2.11/pig. The return on investment, (R.O.I) was calculated at 2.18:1 for Lincomix and 0.22:1 for Tylan based on the results observed in this study

REFERENCES

1. NAHMS Survey 2006