Effects of Monensin Sodium and Xylanase on Corn and Wheat Based Diets

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Introduction

- Due to increase in consumer concern about the use of antibiotics in broiler chick feed, Xylanase was tested against Coban to observe if the Xylanase had better growth performance in broiler chicks. By comparing the growth performance between the two, it could provide an alternative to the use of Coban in boiler feed products and lessen the concerns of the consumer while decreasing economical cost

Objectives

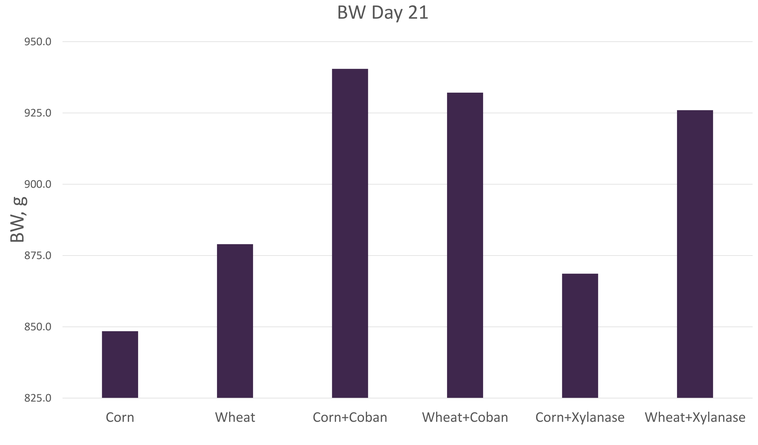
- To determine if the addition of Xylanase to the diet effects the growth of a broiler chick in comparison to Coban

Methods and Materials

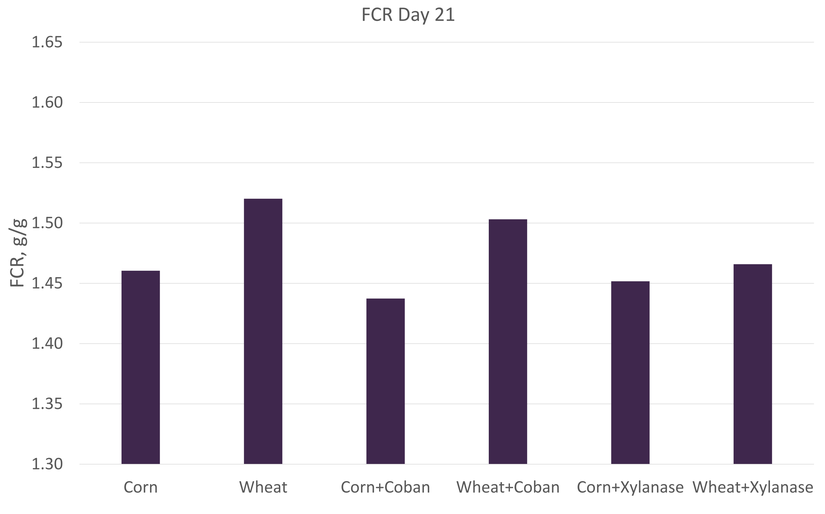
- Over a 21 day period, feed broiler chicks a random assortment of six diets to see the effects of xylanasa on BW gain, total Feed intake, and FCR of the birds.
- 216 birds with six birds per cage, and six replications for each treatment

- Six types of treatments
  - Corn
  - Wheat
  - Corn plus Coban
  - Wheat plus Coban
  - Corn plus Xylanasa
  - Wheat plus Xylanasa
- After data collection, the data was analyzed through GLIMMIX procedure of SAS with cages as the experimental units and the treatments were the fixed unit in the study

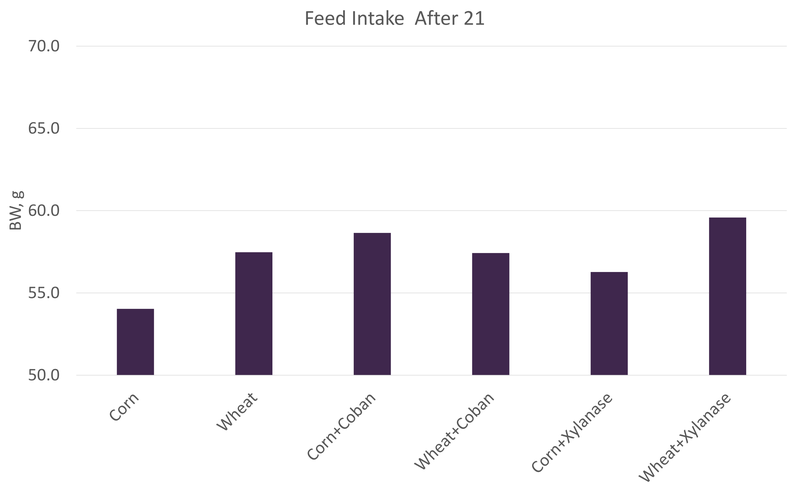
Effects on BW



Effects on FCR



Effects on Feed Intake



Conclusions

- Based of the results (P<0.01) off of BW gain, total feed intake, FCR, the controlled corn-based diet had improved (P<0.05) FCR in comparison to the control wheat based diet. The wheat-based diets, xylanase (P<0.05) while the Monensin sodium (P>0.05) which improved FCR compared the control wheat diet. The corn-based diet with xylanase nor monensin sodium improved (P>0.05) FCR in comparison to the corn control group.
- To conclude, although there was minimal impact on antimicrobials in this experiment, the research suggests that xylanase can improve the digestibility of wheat-based diets and restore it to the FCR of that of a corn-based diet

Support

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