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ABSTRACT (Poult. Sci. 96 (E-Suppl. 1)):

T157 Effects of a commercial xylanase supplemented to reduced energy, corn-soy-based diets on live performance of broilers raised in SE Asia

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A study was conducted to evaluate the effects of a single, thermostable xylanase (Xylamax®, BioResource International Inc.), supplemented to reduced-energy, corn-soy-based diets, on the performance of broilers raised to 42 days. A total of 576 Arbor Acres+ broiler chicks were assigned to 36 floor pens with 16 birds per pen. A 3x2 factorial arrangement of three levels of ME: breed-standard ME (Control), -65 kcal/kg, and -130 kcal/kg, and two levels of xylanase: 0 or 15 XU/g of feed (0, -65, and -130 kcal/kg) and two levels of xylanase (0, 15 XU/g of feed) were used in the starter (0-14 d), grower (15-28 d), and finisher (29-42 d) phases. Data were analyzed as randomized complete block design. The BW and feed intake were not affected by the dietary treatments. Both energy levels and inclusion of xylanase had significant effect on FCR at 14, 28, and 42 d. At 14d, FCR was better ($P \leq 0.05$) in birds fed control diet compared to -65 and -130 kcal/kg; values were 1.09, 1.12, and 1.13 for 0, -65, and -130 kcal/kg, respectively. Same trend for FCR improvement continued at 28 and 42 d. Adding xylanase to diets improved ($P \leq 0.05$) FCR at 14, 28, and 42d. Adding xylanase improved FCR by 2 points at each age period; values were 1.10 vs 1.12, 1.34 vs 1.36, and 1.60 vs 1.62 for diets with vs without xylanase at 14, 28, and 42 d, respectively. No interaction between xylanase and ME levels. Results indicate that xylanase, provided at 15 XU/g of feed, can improve broiler performance in a broad range of dietary ME levels, especially during the finisher phase.

Key Words: Broiler, Xylanase, FCR, ME