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095 Evaluation of a xylanase and an emulsifier in broilers fed different levels of dried yeast.

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The objective was to determine whether broiler performance is improved by adding xylanase alone (XY) or in combination with an emulsifier (XY+EM) in diets with different levels of dried yeast (DY). Six-day-old male Ross 708 broilers were used in a completely randomized design with 9 dietary treatments. Treatments were the inclusion of dietary DY at 0, 4, or 8% alone (None) and in combination with XY or XY+EM. Each treatment was replicated with 7 floor pens with 4 chickens/pen. Inclusion of DY (48% CP; 3280 kcal ME/kg) mainly replaced SBM. Xylanase was used without considering energy or nutrient contribution and was added at 27.5 g of net enzyme per ton of feed. The emulsifier (liquid form) was added at 1% of the diet replacing soy oil; it was given the energy value of lecithin. The feeding program consisted of phases 1 (7 d, crumble), 2 (14 d, pellet), and 3 (21 d, meal). All diets within phase were formulated to have similar ME and nutrients. Performance was measured at d 0, 7, 21, and 42. Data were analyzed using the MIXED procedure of SAS. No outliers were identified in model residuals. Pairwise comparisons were used for means separation. Linear polynomials were used to assess DY inclusion. Overall results are shown in Table 095. At 0% DY, no effects were detected. At 4% DY, XY and XY+EM improved ($P < 0.05$) ADG by 10 and 12%, respectively, but only XY+EM improved ($P < 0.05$) ADFI. At 8% DY, only XY+EM improved ($P < 0.05$) ADG and ADFI, 11% each. No effects were detected on G:F. In conclusion, XY alone was enough to improve performance at 4% DY, but XY+EM was needed to improve performance at 8% DY.

Key Words: broilers, emulsifier, xylanase
