ABSTRACT

The effect of treatment mixtures *Ipomea batatas* meal (prebiotic) with *Yeast* (probiotic) as a sinbiotic mixed with commercial broiler feed on performance and digestive organ of broiler chickens

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The effects of feeding different *Ipomea batatas* (prebiotic) and *Yeast* (probiotic) levels on performance and morphometry of the digestive tract in broiler chickens were evaluated in this trial. One hundred eighty broiler chickens were assigned to a complete randomized design with a 2 x 3 factorial (*I. batatas* and *Yeast* levels) for the periods from 2 to 5 weeks old. The experimental diets consisted of starter feeds and finisher feeds. Diets were added with different level of *I. batatas* and *Yeast* P1 (3% *I. batatas* meal + 0.5% *Yeast*), P2 (6% *I. batatas* meal + 0.5% *Yeast*), P3 (3% *I. batatas* + 1% *Yeast*), P4 (6% *I. batatas* + 1% *Yeast*), P5 (3% *I. batatas* + 1.5% *Yeast*), P6 (6% *I. batatas* + 1.5% *Yeast*). The performance in the period from 2 to 5 weeks and morphometry of the digestive tract were evaluated. Significant differences on body weight gain, feed conversion, final body weight and duodenum weight, but not significant differences on feed intake, water consumption, mortality, weight and length of jejunum, ileum, colon, and sekum. The diet with *I. batatas* level of 3% and *Yeast* 0.5% resulted in better performance and duodenum weight.

Keywords: *Ipomea batatas*, *Yeast*, performance, digestive tract, broiler chickens