Development of Small Intestine and Growth of Native Chicken Given Synbiotics in The Feed

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ABSTRACT

This research aims to determine the effect of adding synbiotics to feed on the development of the small intestine and growth of native chicken. This research was carried out from June to August 2023. The design used in this research was a Completely Randomized Design (CRD) with 4 treatments and 5 replications, each unit containing 10 native chickens so there were 200 native chickens. Synbiotic supplementation in feed consists of P0 (control), P1 (5 ml/kg), P2 (10 ml/kg), P3 (15 ml/kg). The parameters observed were the weight and length of the small intestine which includes the duodenum, jejunum and ileum, as well as final body weight. The research data were analyzed using Analysis of Variance (ANOVA), then followed by an honest real difference test (tukey) to find out how big the difference was. The results of the study showed that the treatment of adding synbiotics to feed as a protein substitute had a significant effect (P < 0.05) on duodenum weight and final body weight and had no significant effect on the weight of the jejunum, ileum, or the length of the duodenum, jejunum, ileum. Synbiotics are able to increase duodenal weight by 10 ml/kg. The final body weight given the addition of 5 ml/kg synbiotics could balance the final body weight of the control treatment.

Keywords : native chicken, synbiotic, small intestine, final body weight, protein