

Feeding of *Lactobacillus acidophilus* and Inulin From Chicory Root in Microparticle Protein and Calcium Feed on Ileum Growth of Broiler

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Abstract. The research aims to the effect of feeding with protein and calcium sources microparticles with *Lactobacillus acidophilus* (LA) and chicory root inulin on broiler ileum growth. The animal were 8 day old broiler strain CP 707 unsexed as many as 200 birds with 387.64 ±12.40 g . The feed consisted of yellow corn, rice bran, fish meal, egg shell, lysine and premix. Inulin of Chicory root and LA treatment. The study was arranged in a completely randomized design (CRD) with 5 treatment and 4 replications (each 10 birds). The parameters measure T0: Feed of non-microparticle 18% protein, T1: Feed of microparticle 18% protein, T2: T1+1.2% inulin, T3: T1+1.2% LA, and T4: T1+1.2% inulin and 1.2% LA. The parameters include the length and relative weight of the ileum, height villi and lactic acid bacteria (LAB). The results showed that the treatment of microparticles protein and calcium with LA and inulin had a significant effect (P<0.05) on the length and relative weight of the ileum, height villi and LAB. The conclusion is feeding of microparticles protein and calcium with 1.2% LA and 1.2% inulin (T4) can increase the ileum length, ileum relative weight, length of jejunum villi and LAB of broiler.

Keywords : broiler, ileum growth, inulin of chicory root, *Lactobacillus acidophilus*, microparticle