

**EFFECT OF PROBIOTICS SUPPLEMENTATION TO ALTERNATE
ANTIBIOTIC GROWTH PROMOTER ON
ECONOMICS ANALYSIS OF QUAIL**

Anisah Fathinah

ABSTRACT

The purpose of this study was to know the economic analysis in quail which used probiotic *Lactobacillus casei* and *Lactobacillus rhamnosus* supplementation to alternate Antibiotic Growth Promoter (AGP) to feed conversion and quail egg weight. About 240 quails of *Coturnix coturnix japonica* at 14 weeks of age were completely randomized into six treatments, each treatment consisted of four replications and each replication consisted by ten heads. The treatments were T0, T1, T2, T3, T4 and T5 contained with standard feed, standard feed with 0.01 gram AGP/kg feed, standard feed with 0.05 gram probiotic/kg feed, standard feed with 0.1 gram probiotic/kg feed, standard feed with 0.025 gram probiotic/liter drinking water and standard feed with 0.05 gram probiotic/liter drinking water. The results showed that there was a significant difference among the treatments ($p < 0.05$). The highest egg production also at T4 with 69.14% and the lowest egg production were T2 and T5 which showed no difference, respectively 55.37% and 53.8%. The lowest feed conversion was T4 3.23 and the highest feed conversion were T5 which showed, respectively 4.24. T4 also showed the most profitable economic analysis, which had the best results in Net Profit Margin, Gross Profit Margin, Return on Equity, Return on Investment and Benefit Cost Ratio. It could be concluded that could be better to give 0.025 gram probiotic/liter dringking water to get the best egg production and profit.

Keywords: Probiotics, Antibiotic Growth Promoter, quail, feed conversion, egg production