

**EFFECT OF PROBIOTICS SUPPLEMENTATION TO ALTERNATE  
ANTIBIOTIC GROWTH PROMOTER (AGP) ON FEED CONSUMPTION,  
EGG PRODUCTION AND ECONOMICS ANALYSIS OF Quail  
(*Coturnix coturnix japonica*)**

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**ABSTRACT**

The purpose of this study was to know the economics analysis in quail which used probiotic *Lactobacillus casei* and *Lactobacillus rhamnosus* supplementation to alternate Antibiotic Growth Promoter (AGP) to feed consumption and quail egg production. About 240 quails of *Coturnix coturnix japonica* at 10 weeks of age were completely randomized into six treatments, each treatment consisted of four replications and each replication consisted by ten heads. The treatment 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 were significant differences among the treatments ( $p < 0.05$ ). The lowest feed consumption was T4 which not different from T2, respectively 21,65 and 21,75 gram/head/day and the highest feed consumption were T0 and T1 which showed no differences, respectively 23,01 and 23,20 gram/head/day. The highest egg production also at T4 with 69,67% and the lowest egg production were T0 and T1 which showed no differences, respectively 55,16% and 55,57%. T4 also showed the most profitable economics analysis, which had the best result in Break Even Point, Return Cost Ratio and Return on Investment. It could be conclude that could be better to give 0,025 gram probiotic/liter drinking water to get the best egg production and profit.

**Keywords:** Probiotic, Antibiotic Growth Promoter, quail, feed consumption, egg production