

**POTENTIAL OF PROBIOTICS *lactococcus lactis* AND *lactobacillus casei*  
ON THE LAYING HENS INFECTED WITH BACTERIA *escherichia coli*  
ON PERFORMANCES AND BUSINESS ANALYSIS OF LAYING HENS**

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**ABSTRACT**

The purpose of this study was to find the effect combination probiotics *lactococcus lactis* and *lactobacillus casei* on the laying hens infected with bacteria *Escherichia coli* on performance and business analysis. The materials used in this experiment were 120 laying hens aged 25 weeks. The variables measured were feed consumption, hen day production (HDP), feed conversion ratio (FCR), weight egg, business analysis. Data were analyzed statistically using Analysis of Variance (ANOVA), if between treatment showed significant effect were analysed by Duncan's Multiple Range Test (DMRT). The result of this research shows that the use of probiotics *Lactococcus lactis* and *Lactobacillus casei* on the laying hens infected with bacteria *Escherichia coli* give a real distinction ( $P < 0.05$ ) towards feed consumption, showed a real distinction ( $P < 0.05$ ) towards HDP, showed a real distinction ( $P < 0.05$ ) towards FCR, showed a real distinction ( $P < 0.05$ ) towards weight egg, showed a real distinction ( $P < 0.05$ ) towards business analysis. Based on the results of this research, it can be concluded that the addition of probiotic *Lactococcus lactis* and *Lactobacillus casei* on the laying hens infected with bacteria *Escherichia coli* can improve performances of laying hens.

Keywords: probiotic *Lactococcus lactis*, probiotic *Lactobacillus casei*, Antibiotic Growth Promoter (AGP)