

ABSTRACT
THE INFLUENCE OF PROBIOTIC WITH EGG QUALITY
IN LAYING HENS

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The aim of this research was knowing the effect of probiotic with egg quality in laying hens. Materials used were laying hens (*Isa Brown strain*) 43 weeks old and ration using probiotics. This research was conducted by using Completely Randomized Design (CRD). Every treatment consists of 3 treatment, they are P0 (without probiotic), P1 (ration + 3% local probiotic) and P2 (ration + 3% commercial probiotic) with six time repetitions and every repetitions consists of 2 chicken. Variables that were observed in this research were egg yolk cholesterol and egg weight. The advanced research was done with testing the local probiotic with various concentration treatment, they are P0 (ration without probiotic), P1 (ration + 1% local probiotic), P2 (ration + 2% local probiotic) and P3 (ration + 3% local probiotic) with 5 time repetitions and in every repetitions consists of 2 chicken. Variables that were observed in the advance research were laying hens's blood cholesterol that consists of total cholesterol, HDL, LDL, and Triglycerides. Various analysis result showed that the using of local probiotic and commercial (3%) in ration had no significant ($P>0.05$) with egg yolk cholesterol and egg weight. Various analysis result in the advanced research also showed that the using of local probiotics 1%, 2%, and 3% in ration had no significant ($P>0.05$) with egg yolk fat, laying hens's blood cholesterol, HDL, LDL, and laying hens's triglycerides. The conclusion of this research was the using of local probiotics (1%, 2%, and 3%) and commercial probiotic (3%) in ration could not increased the egg quality.

Keywords: Local Probiotics, Commercial Probiotics, Egg Yolk Cholesterol, and Blood Cholesterol.