

The Potential Effect of Lactic Acid Bacteria (LAB) from Snails (*Achatina fulica*) Hidrolysate in Feed on the Quality of Layer Chicken Egg Yolks During 14 Days of Storage

Achmad Syafiq Mudhofar
Poultry Business Management Study Program
Department of Animal Husbandry

ABSTRACT

This study aimed to evaluate the potential effect of lactic acid bacteria (LAB) from snail (*Achatina fulica*) hydrolysate supplementation in feed on the yolk quality of layer chicken eggs stored for 14 days at room temperature. The research employed a Completely Randomized Design (CRD) with three treatments and six replications, using 90 Lohman Brown laying hens aged 68 weeks. The treatments consisted of P0 (control, without LAB from snail hydrolysate), P1 (10 mL of LAB from snail hydrolysate/kg feed), and P2 (20 mL of LAB from snail hydrolysate/kg feed). The parameters observed included yolk weight, yolk color score based on the Yolk Color Fan scale, and the Yolk Index (YI) after 14 days of storage. Data were analyzed using analysis of variance (ANOVA) at a 5% significance level. The results showed that LAB from snail hydrolysate supplementation up to a level of 20 mL/kg feed did not have a significant effect ($P>0.05$) on the three parameters observed. The average yolk weight ranged from 16.75 g (P0) to 17.83 g (P1 and P2); the average yolk color score ranged from 8.75 (P0) to 9.42 (P1); and the average Yolk Index value ranged from 0.1931 (P2) to 0.2138 (P0).

Keywords: *Laying hens, Lactic acid bacteria, Snail hidrolysate, Yolk index, Storage period, Yolk color*