

**THE EFFECT OF ADDING CHITIN PROCESSING WASTE PREMIX
FROM THE HEADS OF SHRIMP (*Crustacea*) ON THE CHEMICAL
QUALITY OF CHICKEN EGG**

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ABSTRACT

The research was conducted to determine the effect of adding chitin processing waste premix from shrimp heads to laying hen feed on the chemical quality of eggs. The research was carried out from June to July 2023 in the Microbiology Laboratory of the Jember State Polytechnic Animal Husbandry building and at the Family Farm in Kaliurang Village, Summersari District, Jember Regency. The research used a Completely Randomized Design (CRD) by administering chitin processing waste from shrimp heads with 4 treatments, namely factors P0 (without the addition of chitin processing waste premix), P1 (adding 0.1% chitin processing waste premix), P2 (addition of processing waste premix chitin 0.2%), P3 (addition of 0.3% chitin processing waste premix) given to 40 chickens aged 74 weeks with 5 repetitions, each repetition consisting of 2 chickens. The observation parameters are protein content, fat content and egg cholesterol. Research data were analyzed using the Duncan Multiple Range Test (DMRT) if there were significant differences ($P < 0.05$) between treatments. The results showed that the addition of chitin processing waste premix had a significant effect ($P < 0.05$) on fat and cholesterol levels in chicken eggs, but had no significant effect ($P > 0.05$) on protein levels in chicken eggs. The conclusion of this research is that the addition of chitin waste premix to feed up to 0.1% reduces the fat and cholesterol levels of chicken eggs.

Keywords : *Laying chickens, Premix, Chitin Processing Waste, Egg Cholesterol, Egg Fat.*