

The Physical Quality of Quail Eggs (*Coturnix coturnix japonica*) with the Addition of Golden Apple Snail Meal (*Pomacea canaliculata* L) and *Azolla pinnata*

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ABSTRACT

*This study aimed to evaluate the extent to which the supplementation of golden apple snail meal and *Azolla pinnata* meal could improve the physical quality of quail eggs. A total of 80 quails were used in this study, arranged in a Completely Randomized Design (CRD) consisting of four treatments and five replications. The treatments were P0 = without golden apple snail meal and *Azolla pinnata* meal, P1 = 10% *Azolla pinnata* meal, P2 = 10% golden apple snail meal, and P3 = a combination of 10% golden apple snail meal and *Azolla pinnata* meal. The parameters observed in this study included egg weight, egg index, albumen index, yolk index, Haugh Unit (HU), and yolk color. To evaluate the effects of different treatments of golden apple snail meal and *Azolla pinnata* meal, the obtained data were analyzed using Analysis of Variance (ANOVA). If significant differences were detected, the analysis was followed by Duncan's Multiple Range Test (DMRT) at a 5% significance level. The results showed that the supplementation of golden apple snail meal and *Azolla pinnata* meal up to 10% had no significant effect ($P > 0.05$) on egg weight, egg index, albumen index, yolk index, and Haugh Unit (HU), but had a significant effect ($P < 0.05$) on yolk color, particularly with the supplementation of 10% *Azolla pinnata*. In conclusion, the supplementation of *Azolla pinnata* meal up to 10% significantly affected yolk color due to its high carotenoid content.*

Keywords: *Azolla pinnata, Golden apple snail, Physical quality of eggs, Quail.*