***THE EFFECT OF ADDING EDAMAME ISOFLAVON CONCENTRATE AND LEMURU FISH OIL ONPHYSICAL QUALITY OF QUAIL EGGS* (*Coturnix coturnix japonica*)**

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ABSTRACK

This study was conducted to determine the physical quality of quail eggs fed with edamame isoflavone concentrate and lemuru fish oil. This study used 140 laying quails aged 14-20 weeks with the provision of edamame isoflavone concentrate and different lemuru fish oil, namely P0 (without the addition of edamame isoflavone concentrate and lemuru fish oil) P1 (the addition of 0, 5% and 2% lemuru oil) P2 (addition of 1% edamame isoflavone concentrate and 2% lemuru oil) P3 (addition of 0.5% edamame isoflavone concentrate and 4% lemuru oil) P4 (addition of 1% edamame isoflavone concentrate and 4% lemuru oil). Each treatment was repeated 4 times to get 20 units with 7 laying quails per unit. Parameters observed were egg weight, egg white index, yolk index, yolk color, and haugh unit. Data from the study used a complete randomized design (RAL) and Analysis of Variance (ANOVA), if the analysis showed significant differences, it would be further tested using the Duncan Multiple Range Test (DMRT). The results showed that the provision of edamame isoflavone concentrate and lemuru fish oil had a significant effect ($P<0.05$) on egg white index, yolk index, and yolk color but had no effect on egg weight and haugh unit. It can be concluded that the addition of 1% edamame isoflavone concentrate and 4% lemuru fish oil can increase egg white index, yolk index and yolk color but not egg weight and haugh unit.

***Keywords**: Edamame Isoflavon Concentrate, Physical Quality, Lemuru Fish Oil Laying Quail, Quail Eggs*