

***Effect of Addition of Edamame Isoflavone Concentrate and Lemuru
Fish Oil in Feed on Reproductive organs of Laying Quail
(coturnix coturnix japonica)***

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ABSTRACT

This study aims to determine the effect of the addition of edamame isoflavone concentrate and lemuru fish oil in feed on the reproductive organs of laying quail (Coturnix coturnix japonica) and can determine the best level of provision of reproductive organs of laying quail. The study used the method of Completely Randomized Design (CRD) and Analysis of Variance (ANOVA), using 140 quails divided into 5 treatments and 4 replicates with the level of addition of edamame isoflavone concentrate and lemuru fish oil, namely P0 (Control Feed) P1 (Feed containing 0 isoflavone concentrate edamame, 5% and 2% Lemuru fish oil), P2 (feed containing 1% isoflavone concentrate and 2% Lemuru fish oil) P3 (feed containing 0.5% isoflavone concentrate and 4% Lemuru fish oil) P4 (feed containing 1% edamame isoflavone concentrate and feed containing 4% Lemuru fish oil). Data from the study were analyzed by Duncan Multiple Range Test (DMRT) if there were significant differences ($P > 0.05$) between treatments. The results showed that the provision of edamame isoflavone concentrate and lemuru fish oil had an effect on oviduct length and oviduct weight but had no significant effect on ovary weight and the number of small yolk follicle, medium yolk follicle, large yolk follicle. In conclusion, the addition of edamame isoflavone concentrate and lemuru fish oil at 0.5% and 4% can increase oviduct weight and oviduct length of laying quail.

Keywords: *quail, Edamame isoflavone concentrate, Lemuru fish oil quail reproductive tract*