

**Effect of Using Edamame Isoflavone Concentrate and Lemuru Fish Oil in
Feed on Production Performance Laying
Quail (*Coturnix coturnix japonica*)**

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ABSTRACT

*This research aims to determine the effect of using edamame isoflavone concentrate and lemuru fish oil in feed on the production performance of laying quail (*Coturnix coturnix japonica*) and to determine the best level of production performance for laying quail. The research was carried out using the experimental method Completely Randomized Design (CRD) and Analysis of Variance (ANOVA), if the analysis shows real differences then it will be tested further using the Duncan Multiple Range Test (DMRT) using 140 quail divided into 5 treatments and 4 replications with Levels of use of edamame isoflavone concentrate and lemuru fish oil are P0 (control), P1 (feed contains 2% MIL and 0.5% edamame isoflavone concentrate), P2 (feed contains 2% MIL and 1% edamame isoflavone concentrate), P3 (feed contains 4% MIL and 0.5% edamame isoflavone concentrate, P4 (Feed contains 4% MIL and 1% edamame isoflavone concentrate). Treatment is carried out at the age of 14 weeks to 20 weeks. The parameters observed were feed consumption, egg weight, egg production, feed conversion/Feed Egg Ratio (FER), Income Over Feed Cost (IOFC). The results of the study showed that the use of edamame isoflavone concentrate and lemuru fish oil had a significant effect ($P < 0.05$) on feed consumption and feed conversion but had no effect on egg weight, egg production and IOFC. It can be concluded that giving edamame isoflavones and lemuru fish oil in feed reduces feed consumption and feed conversion but does not reduce egg weight, egg production and IOFC.*

Keywords: *Laying Quail, Edamame Isoflavone Concentrate, Lemuru Fish Oil, Quail Performance*