

LAYING PERFORMANCE OF JAPANESE QUAILS (*Coturnix
coturnix japonica* Temm. & Schl.g.) WITH FRESH BASIL
(*Ocimum basilicum* L.) FEED SUPPLEMENTATION

THESIS

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FEED SUPPLEMENTATION**

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ABSTRACT

Laying Performance of Japanese Quails (*Coturnix coturnix japonica* Temm. and Schle.) with Basil (*Ocimum basilicum* L.) Feed Supplementation. Undergraduate thesis, Bachelor of Science in Agriculture Major in Animal Science. Cavite State University, Indang Cavite. June 2018. Adviser: Henry I. Rivero, MSc.

The study on the laying performance of Japanese quail, *C. coturnix japonica* with inclusion of different levels of fresh Basil leaves (BLS) in commercial ration was conducted with the aim of evaluating the effects on the laying performance of Japanese quail. Specifically, this study: (1) identified the level of fresh basil leaves as inclusion to the commercial ration with the most effect on the laying performance of Japanese quails; (2) assessed the body weight gain, feed consumption, feed conversion ratio of quails fed varying levels of BLS; and; (3) compared the egg production of Japanese quails with or without the Basil leaves in the diet; and (4) evaluated the external and internal egg quality of the Japanese quails after feeding with fresh Basil leaves.

One hundred twenty quail pullets were used in the study, the supplementation of basil (*Ocimum basilicum*) started after the birds reached laying efficiency of 85%. The birds were randomly distributed into four treatments replicated three times with ten birds per replicate. The following treatments were used: T0 – pure commercial feeds; T1 – 5g BLS/kg of commercial feed; T2 – 10g BLS/kg of commercial feed; and T3 – 15g BLS/kg of commercial feed. All numerical data gathered were subjected to analysis of variance (ANOVA).

The results showed no significant differences on egg production, body weight gain, feed consumption, and on the FCR of the Japanese quail layers. However, the values of

egg production in T1 (5g BLS) and T2 (10g BLS) were slightly higher than T0 (0 % control) and T3 (15g BLS).

The overall egg quality analysis from all the groups also showed no significant differences ($P>0.05$) except on egg weight which was highly significant ($P<0.01$). However, in the weekly basis, significantly different ($P<0.05$) results were obtained for egg shell thickness, yolk weight, and yolk color, on the first, second, fifth and sixth week. There were no mortalities recorded during the entire experimental period that may indicate low toxicity of the Basil leaves to the birds.

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INTRODUCTION

Quails are known for producing good quality meat and eggs, though having a small size, several farmers or poultry raisers have tried this specific field for business due to the products it can produce, they are known for their fast-growing characteristics. A broiler quail can be sold at 5 weeks of age and starts laying eggs at the age of six weeks and continue laying eggs up to 24 weeks of age. It only requires a limited space for production.

Although commercial feeds for quail production are already available, some raisers especially backyard raisers or small-scale farmers can possibly not meet the needed feeds of their quails due to high cost of feeds, affecting the nutrients needed that will also affect meat, egg quality and the growth and performance of the quails. One of the most common problems in quail production, is the case of vitamin and mineral-