Effect of Okra Waste Flour as a Source of Natural Antioxidants in Feed on Production Performance Quail Laying Starter Phase

Aprilleo Indra Kurniawan
Study Program of Poultry Business Mangement
Department of Animal Science

ABSTRACT

Increased ambient temperature is one of the factors that can trigger oxidative stress in laying quail, which ultimately results in a decrease in production performance. One way to overcome stress in quail is to utilize feed supplements from okra waste flour (Abelmoschus esculentus L. Moench) which contains natural antioxidant compounds, namely flavonoids, which play a role in counteracting free radicals and stress due to heat stress. The objective of this study was to examine the correlation between the feeding of okra waste flour as a source of natural antioxidants on the production performance of laying quail in the starter phase. This study was conducted using DOQ (Day Old Quail) as many as 192 birds using the Factorial Completely Randomized Design method using 2 factors, namely Factors A and B. Factor A (temperature) consisting of 2 treatments A1 (room temperature) and A2 (heat stress temperature). Factor B (feed) consisted of 4 treatments, namely B0 (control), B1 (feed containing 1% okra waste flour), B2 (feed containing 2% okra waste flour), B3 (feed containing 3% okra waste flour) with 3 replicates and each replicate contained 8 quails. The data obtained were analyzed using Analysis of Variance (ANOVA), and if there were significant differences, then continued with further tests using Duncan's Multiple Range Test (DMRT). Parameters observed included feed consumption, feed conversion, body weight gain, and mortality. The results of the analysis of variance of the addition of okra waste flour feed at a cage temperature of 28 ° C and a heat stress temperature of 31 ° C on the production performance of starter phase laying quails obtained results that were not significantly different and there was no significant interaction (P>0.05). The level of feeding okra waste flour up to 3% at heat stress temperature (31oC) has not been able to affect the production performance of laying quails in the starter phase.

Keywords: *Okra, Antioxidant, Cage Temperature, Quail Performance*