EFFECT OF SELENIUM-YEAST ADDITION ON THE PERFORMANCE OF LAYING QUAIL IN HEAT STRESS CONDITION

M. Hanif Poultry Business Management Study Program Department of Animal Husbandry

ABSTRACT

This study aims to determine the effect of selenium-yeast feeding on the performance of laying quail under heat stress conditions. The research method used an experimental model with a completely randomized design (CRD), consisting of two factors normal temperature conditions and heat stress. Each factor has 4 treatments P0 (0 g/kg), P1 (0,5 g/kg), P2 (1 g/kg), P3 (1,5 g/kg) with 5 replicates, each consisting of 10 quails. Data were analyzed using analysis of variance (ANOVA), and if there were significant differences (P < 0.05), followed by Tukey test. Parameters observed included feed consumption, egg production, feed egg ratio (FER) and egg weight. The results showed that the addition of selenium-yeast had no significant effect on feed consumption and feed egg ratio (FER) in both temperature conditions (P > 0.05). However, under heat stress conditions, there was an increasing trend in daily egg production. In addition, the addition of seleniumyeast had a significant effect on the average egg weight of quail under normal temperature conditions, while under heat stress conditions it did not show a significant effect. The conclusion of this study is that the addition of selenium-yeast at a dose of $0.5 \, \text{g/kg}$ to $1.5 \, \text{g/kg}$ does not have a significant effect on the performance of laying quail, both at normal temperature and heat stress, furthermore, the addition of selenium-yeast is proven to have a significant effect on increasing the average egg weight under normal temperature conditions. So there are indications that selenium-yeast has the potential to help quail in dealing with heat stress, especially in maintaining egg production and can help increase egg weight at optimal temperature conditions for quail.

Key words: Selenium-yeast, Laying quail, Quail performance, Heat stress