The Effect of Okra (Abelmoschus esculentus L. Moench) Flour in Feed on the Performance of the Reproductive Organs of Laying Quail at Different Cage Temperatures

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ABSTRACT

This study aimed to determine the effect of okra flour supplementation on the reproductive performance of laying quails at different housing temperatures. This study was conducted using 192 day-old quail (DOQ) employing a completely randomized factorial design with two factors: Factor A and Factor B. Factor A (temperature) consisted of two treatments: A1 (room temperature) and A2 (heat stress temperature). Factor B (diet) consisted of 4 treatments: B0 (control), B1 (diet containing 1% okra flour), B2 (diet containing 2% okra flour), and B3 (diet containing 3% okra flour), with 3 replicates, each containing 8 quails. The data obtained were analyzed using Analysis of Variance (ANOVA) if significant differences were found, they were followed by Duncan's Multiple Range Test (DMRT). The parameters observed were the weight and length of the reproductive tract, the weight and number of ovaries, the weight and number of large yellow follicles, the weight and number of medium yellow follicles, the weight and number of small yellow follicles, the percentage of reproductive organs, and the percentage of the reproductive tract. The results of this study showed that the addition of okra flour at 1%, 2% and 3% had a significant effect on the reproductive organ performance parameters of laying quails and at a temperature of 31o it was not able to provide a significant effect on the performance of laying quails' reproductive organs. The conclusion of this study is that the addition of okra flour up to 3% in the feed ration has the potential to maintain and improve the performance of laying quails' reproductive organs. Meanwhile, the cage temperature conditions up to 31o are still within the physiological tolerance limits of quails.

Keywords: *Laying quail, okra, quail reproductive organs*