EFFECT OF CINNAMON POWDER ON THE PERFORMANCE OF JAPANESE QUAILS

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The Coturniculture has been gaining a lot of emphasis in the poultry industry scenario. Along with this growth, the awareness of the consumer regarding the product that is being purchased is highlighted. Such awareness has given room to the utilization of phytogenic additives in feed, aiming to maintain animal productivity and improve the quality of the final product. Cinnamon powder has cinnamaldehyde as active principle, and this possess action antiseptic, antimicrobial, antioxidant and digestion stimulator properties. The present study was conducted to investigate the effect of dietary supplementation with cinnamon powder on the productive performance of Japanese quails. A total 360 Japanese quails were utilized, 18 weeks-old, and then distributed in a completely randomized design, with five treatments and six repetitions of 12 birds per experimental unit. The experiment was divided in three cycles of 28 days. Feed and water were provided ad libitum throughout the experimental period. The treatments consisted in the inclusion of 0, 0.3, 0.6, 0.9 and 1.2% of cinnamon powder in of quails diets replacing the inert material. All of the experimental diets were isocaloric and isonitrogenous. The eggs were collected per experimental unit, twice a day, then accounted and weighed. Weekly, the feed offered and its leftovers were quantified for feed intake records. Using the data obtained, the following variables were determined: Egg production (%), egg weight (g), egg mass (g), feed intake (g/bird/day), feed conversion per dozen of eggs (g/dz) and feed conversion per egg mass (g/g). The results obtained were submitted to a regression analysis, at 5% level of probability. There was no significant effect (p>0.05) for any of the variables evaluated and the following averages were obtained: egg production of 92.80%, egg weight of 10.68 g, egg mass of 9.91 g, feed intake of 24.75 g/bird/day, feed conversion per dozen of eggs of 3.83 g/dz and feed conversion per egg mass of 2.507 g/g. Based on the data obtained, we can conclude that cinnamon powder may be included in levels of up to 1.2% in the diets of Japanese quails during the laying phase without affecting the performance.

Keywords: Additives, cinnamaldehyde, egg production, nutrition, weight gain.