





CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

PERFORMANCE OF MEAT QUAILS AT 35 DAYS OF AGE SUBMITTED TO DIFFERENT LEVELS OF SUPPLEMENTATION OF SELENIUM AND VITAMIN E

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The elements selenium (Se) and vitamin E (VE), have antioxidant functions, protecting plasma membranes against the toxic action of lipid peroxides where their actions act in a complementary way. Se is an essential component of the antioxidant enzyme glutathione peroxidase, while the VE participates actively in the structure of organic compounds because it is situated at the membrane level, minimizing the peroxidation of fatty acids and phospholipid componentes. The aim of this study was evaluate the performance of meat quails from 14 to 35 days of age supplemented with different levels of supplementation of inorganic selenium and vitamin E. For this, 1,680 quails at 14 days of age, not sexed, were distributed in a completely randomized design in a factorial 4 x 4 (levels of inorganic selenium: 0.1125, 0.2250, 0.3375 and 0.4500 mg/kg of feed) x levels of vitamin E: 10, 23, 36 and 49 IU/kg of feed), totaling sixteen treatments with three replicates of thirty-five quails per experimental unit. Diets were formulated based on corn and soybean meal and formulated to meet the requirements of the birds, except for Se and VE. The quails were weighed weekly to evaluate performance, while the experimental diets were weighed to determine feed intake (g/bird), final weight (g), weight gain (g), feed conversion (g/g) and accumulated body biomass (ABB; %) obtained in relation to the gain of weight and initial weight. There was a linear effect of the interaction, SexVE, for FC (P=0.0150) and WG (P= 0.0266). FC (Se, P=0.0048 and VE, P=0.0019) and WG increased (Se, P=0.0049 and VE, P=0.0068) linearly as a function of the increased levels of Se and VE. However, FI (P= 0.0582) was linearly reduced as a function of VE levels. For the maximum performance of 14 to 35-day-old of quail are recommended maximum levels (0.4500 mg Se and 49 IU VE/kg diet).

Keywords: alpha-tocopherol, *coturnix coturnix*, feed conversion, microminerals

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