The Effect of Restaurant Residuals on Performance of Japanese Quail

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Abstract: The restaurant residuals reasons such as competition between human and animal consumption of cereals, increasing environmental pollution and the high cost of production of livestock products is important. Therefore, in this restaurant residuals have a high nutritional value (protein and high energy) that it is possible can replace some of the poultry diets are especially Japanese quail. Today, the challenges of processing and consumption of these lesions occurring in modern industry would be confronting. Increasing costs, pressures, and problems associated with waste excretion, the need for reevaluation and utilization of waste to livestock and poultry feed fortifies. This study aimed to investigate the effects of different levels of restaurant residuals on performance of 300 layer Japanese quails. This experiment included 5 treatments, 4 replicates, and 15 quails in each from 10 to 18 weeks age in a completely randomized design (CRD). The treatments consist of basal diet including corn and soybean meal (without residual restaurants), and treatments 2, 3, 4 and 5, includes a basal diet containing 5, 10, 15 and 20% of restaurant residuals, respectively. There were no significant effect of restaurant residuals levels on body weight (BW), feed conversion ratio (FCR), percentage of egg production (EP), egg mass (EM) between treatments (P > 0/05). However, feed intake (FI) of 5% restaurant residual was significantly higher than 20% treatment (P < 0.05). Egg weight (EW) was also higher by receiving 20% restaurant residuals compared with 10% in this respect (P < 0/05). Yolk weight (YW) of treatments containing 10 and 20% of the residual restaurant were significantly higher than control (P < 0/05). Eggs white weight (EWW) of 20 and 5% restaurants residual treatments were significantly increased compared by 10% (P < 0/05). Furthermore, EW, egg weight to shell surface area and egg surface area in 20% treatment were significantly higher than control and 10% treatment (P < 0/05). The overall results of this study have shown that restaurant residuals for laying quail diets in levels of 10 and 15 percent could be replaced with a part of the quail ration without any adverse effect.

Keywords: by-product, laying quail, performance, restaurant residuals

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