Effect of litter type on productive performance of growing and laying Dandarawi chicken.

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Abstract:

A total number of 540, sexed 4 weeks old Dandarawi chicks were wing-banded, individually weighed, divided into 270 males (M) and 270 females (F) and then randomly assorted into three equal groups, each of 90 M and 90 F, the first was considered the control (C), while the second and the third groups were the treatments L1 and L2, respectively. Birds per group were also divided into three replicates, each of 30 M and 30 F, which were separately kept in two partitions, each of 5 square meters and provided with deep litter of 8 cm height. Females were raised till 40 weeks of age, while the males continued up to sexual maturity at 24 weeks of age. Birds in the control group (C) were placed on 100% chopped wheat straw litter, while those of the treatments L1 and L2 were raised on mixed litter of: 25% chopped rice hulls, 25 % wheat straw, 25% wood sawdust and 25% clay and of 20 % chopped rice hulls, 20 % wheat straw, 20 % wood sawdust and 40 % clay, respectively. All experimental birds were raised under similar environmental and managerial conditions. The results of the productive traits were almost similar for the Dandarawi birds of C and L1, since they had better productivity on economical basis; higher body weight and body weight gain; better egg production; improved feed conversion and lower mortality percentages as compared to those of L2. In addition, L1 decreased the suspended airborne dust particulates as well as the bacterial count inside the poultry house, which positively reflected on the immunity and health condition of the birds. Therefore, it could be concluded that, using clay as a component of the litter at a level of 25% for growing and laying Dandarawi chicken is highly recommended.

Keywords:

litter type, Productive performance, Dandarawi

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