Evaluation of Growth Performance of Two Selected Genotypes of Fayoumi Chicks Under Assiut Conditions.


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Abstract
This study was carried out to evaluate the growth performance of selected genotypes of Fayoumi raised under Assiut conditions. Eight hundred and eighty, unsexed, one day old Fayoumi chicks representing three genotypes were used in this experiment. The two genotypes were obtained from Fayoumi chickens selected for high (HBW) and light (LBW) body weight, respectively. Where, the third genotype represented the original population (without selection) as a control group. Chicks were wing banded, kept in floor pens and maintained under the prevailing conditions throughout the experiment time. Feed and water were available ad libitum. Body weight (BW) and feed consumption (FC) were measured and recorded monthly. Body weight gain (BWG), relative growth rate (R%) and feed to gain ratio (F:G ratio) were monthly calculated and analyzed.

The results showed that the effect of genotype and sex on (BW) and (BWG) were highly significant (P≤0.01) from hatch to 16 weeks of age. Body weight of different genotypes during the experiment period (0-16 weeks of age) increased in cubic manner with a positive increase in relation to age. The males relative growth rates in general increased significantly than females, but it decreased with the progress of chicks age. The interactions between genotype and sex for BW, BWG and relative growth rate were not significant. Also, analysis of variance showed no significant effect of genotype on monthly feed consumption (FC) (gram/chick/day) and F: G ratio during the first and second months of age, but it was significant (P≤0.05) during the third and fourth months of age for (FC) and during fourth month for F: G Ratio. The control group had an efficient in feed conversion during the fourth months of the growing period. The HBW genotype had significant higher BW, BWG and FC than the LBW genotype. It was noticed that, actual body weight of all studied genotypes over all studied ages were in general LBW and HBW chicks could be used in the future breeding programs strategy.

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