

COMPARISON OF PRODUCTION AND REPRODUCTION PERFORMANCE OF DIFFERENT CHICKEN GENOTYPES

Subalini E, David L.S, Lavanya S and M.M.

A study was formulated to evaluate the performance of different chicken genotypes such as village chicken, naked neck, cross bred and exotic chicken. Total number of 75 birds of each type was randomly selected from 150 poultry farms in Batticaloa (Kaluvankeni, Mylavaddan and Kiran) and Ampara (Malwatta, Sammandurai, Valathapittiya and Nintavur) districts in order to gather the information on production and reproduction performance. The parameters measured were live weight, age at first laying, monthly egg production, egg weight, productive period, hatchability and life time. Collected data were analyzed using Statistical Analysis Software (Version 6.1). The results of the study revealed that the live weights of hen and cockerel were significantly higher in ($P < 0.05$) exotic type (1.37 ± 0.05 kg and 2.25 ± 0.09 kg respectively) while lower value was observed in both sexes of village chicken for body weight (1.09 ± 0.10 kg for hen and 1.78 ± 0.17 kg for cock). Age at first lay was found to be longer ($P < 0.05$) in naked neck chicken (7.62 ± 0.71 months) while shorter ($P < 0.05$) age at first lay was found in exotic and village chickens (5.00 ± 0.00 and 5.12 ± 0.72 respectively). The monthly egg production (23.75 ± 0.49) and egg weight (54.75 ± 0.65 g) were significantly higher ($P > 0.05$) in exotic chickens compared to others. Furthermore, the productive period was not significantly varied ($P < 0.05$) among different genotypes. However, the mean production period was comparatively higher in village chicken (14.25 ± 3.6 months). The egg hatchability was significantly higher ($P < 0.05$) in naked neck (91.87 ± 2.69) and exotic chicken (91.25 ± 4.74) while low hatchability was recorded in village chicken (76.87 ± 5.13). The life time was concluded that the village chickens and naked neck showed fairly good production qualities (lesser age at first laying, longer productive period and life time) even though they are rearing under harsh management conditions and they will remain as valuable source of nutrition and income among rural people. Further, it was understood that the village chicken and naked neck industry has a great potential to be expanded.

Key words: Crossbred, Exotic, Genotype, Naked-neck, Village chicken

Department of Animal Science, EUSL. Email: subalinit23@yahoo.com