CHARACTERIZATION OF IMPROVED INDIGENOUS VILLAGE CHICKEN BASED ON THEIR PHYSICAL AND PRODUCTIVE TRAITS

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This study was carried out to characterize 3 classes of indigenous village chicken based on their physical and productive traits, since there is a need to find out the best cumulative body weight which fits into a specified Feed Resource Base.

A total of 345 female and 34 male adult birds were selected and grouped into 3 classes as small, medium and large based on their body weight. Artificial insemination was done within same groups and eggs were collected from each group. Chicks were taken from 10 hatches and selected as small, medium and large according to the pedigree. Individual body weight was measured weekly from 1st day up to 8th week, while body height 1 (from floor level to head), body height 2 (from floor level to back), body length and shank length were measured on 1st, 29th and 59th day. The feed consumption was measured weekly. Data were analyzed using SAS computer package with ANOVA procedure.

Results revealed that, mean body weights in the 3 classes at 8th week were significantly different ($p<0.05$). The mean body weights of small, medium and large were 469.08 $\pm$ 98.4 g, 481.10 $\pm$ 82.0 g and 506.79 $\pm$ 98.16 g respectively. The mean value of body height 1 & 2, body length and shank length of the classes differed significantly ($p<0.05$) at 8th week as compared to 1st and 29th day. Cumulative FCR among small, medium and large classes were 2.60, 3.81, and 3.39 respectively by 8th week and showed significant difference ($p<0.05$). Finally, it is possible to conclude that birds in the large class show highest mean body weight, body length, shank length and body height 2, at 8th week as compared to other groups.

Key words: Body weight, FCR, Height and length, Indigenous village chicken, Shank length