

FREQUENCY AND EFFECT OF SPUR GENE ON METRIC PARAMETERS IN THE NIGERIAN LOCAL CHICKEN IN NIGER STATE

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Abstract

A study on the frequency and effect of spur gene (sI) on some metric parameters in the Nigerian local chicken was conducted on 750 adult free range indigenous chickens brought to the market for sale in the three administrative zones of Niger state, Nigeria. The parameters measured were body weight (BL), body length (BL), body girth (BG), wing length (WL), shank length (SL) and shank thickness (ST). The result shows that the calculated gene frequencies of 0.87, 0.89 and 0.90 were significantly ($P < 0.05$) higher than the expected Mendelian frequency of 0.75 for dominant alleles. Spurred (sI) birds in zone C were significantly ($P < 0.01$) heavier (2.19kg) than those in zone A (1.58kg) and zone B (1.50kg). Spurred birds from zone C were also significantly ($P < 0.01$) longer (43.8cm), had better body girth (26.1cm), wing length (24.5cm), shank length (11.7cm) and shank thickness (1.23cm) respectively. It was concluded that spurred (sI) birds in zone C performed relatively better in most of the parameters measured.

Keywords: *Spur, metric parameters, Nigerian local chicken, frequency.*

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