Effect of Genotype and Sex on Morphometric Traits of Turkey

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Abstract : This study was carried out to determine the effect of sex and genotype on morphometric traits of turkey (Meleagris gallopavo) in a turkey population. Linear body measurements were taken on 150 turkeys. 70 exotic turkeys which include both males (20) and Females (50) and 80 locally adapted turkeys which include males (30) and females (50). The study was conducted at the Turkey Unit of the Teaching and Research Farm, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria. The linear body measurements taken and recorded were the beak length, head length, neck length, body length, keel length, wingspan, wing length, drumstick, Shank length, toe length, tail length and body girth all taken in centimetres (cm). The recorded variables were analyzed with SAS (2008). Duncan multiple range test was used to detect differences among means. Variation was noted between male and female turkeys in favour of the male turkeys as an expression of sexual dimorphism for all studied traits. The male is found to be significantly higher (p <0.05) than the females for all the morphometric traits measured both for the local and exotic type. The exotic type is found to be significantly higher (p <0.05) than the local type for all the morphometric traits measured. The interaction is higher significantly (p <0.05) in the exotic genotype and in the male sex in relation with the morphometric trait especially in the beak length, neck length, body length, keel length, drumstick, shank length and the toe length.

Keywords: exotic type, linear measurement, local type, morphometric traits, Meleagris gallopavo

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