**BIOMETRIC ASSESSMENT OF BODY WEIGHT AND BODY CONDITION SCORE IN YANKASA SHEEP**

**By**

**MAARUF BASHIR SANI**

Department of Animal Science

Federal University, Kashere, Gombe State

**ABSTRACT**

The study was conducted to assess body weight, body condition score (BCS) and linear body measurements in Yankasa sheep in some selected local government areas of Kano State, namely, Bebeji (BBJ), Dawakin Kudu (DKD), Wudil (WDL), Shanono (SNN) and Dambatta (DBT). The animals were aged by dentition, weighed using a scale while linear body measurements were taken using measuring tape. Body condition score was determined twice a day based on a scale of 0-5 by two assessors. Variation in the traits and their relationships were analyzed using analysis of variance, Pearson correlation and step-wise regression analyses. For BCS, the experiment was conducted using a cross factor design and model III analysis of variance was carried out to determine the between sheep, and inter and intra assessor variation in the trait. The study revealed significant (p<0.05) variations across location, age group, physiological status and sex for all variables except for body length between locations, and BCS, tail length, head length and hind leg length across the sexes, as well as BCS across all physiological status. Bebeji recorded the highest average sheep weight of 26.27±0.80 kg while the lowest (22.80±0.84 kg) was observed in DBT. The highest BCS was also recorded in BBJ (2.37±0.10) while the least (1.60±0.11) was observed in DKD. There were strong positive correlations between live body weight and most of the linear body measurements as well as between the former and BCS. Repeatability and reproducibility of BCS were very high (0.828-0.982 and 0.791-0.939 respectively). Regression method of weight determination was second to weighing scale in terms of accuracy. Linear body measurements could serve as predictors and used in selection criteria to increase body weight. The use of regression procedure to estimate body weight is also Name of

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**SUPERVISORS:** 1. Prof. T. Ibrahim

2. Dr. A. M. Abdussamad

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