Characterization of Weaner Donkeys in North West Nigeria using Morphometric Traits

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Abstract

Biometric traits were used to determine the relationship among Red (Auraki), Black (Duni), White (Fari), Brown (Idabari) and Brown-white (Idabari-fari) for weaners donkeys. A total of 210 weaners donkeys were used for the study. Morphometric measures taken were head length, head width, ear length, neck length, neck circumference, shoulder width, height at withers, heart girth, body length and tail length. Data obtained were subjected to statistical analysis to determine the distribution of phenotypic traits across classes based on morphometric traits. The effect of strain, sex, location and interaction on certain linear body measurements were estimated using the GLM procedure of the statistics analysis software SAS statistical package. The weaner body size measures of donkeys in Northwestern Nigeria were body weight (114.3kg), Body length (92.0cm), Heart girth (94.3), Height at withers (92.8cm), Shoulder width (17.5cm), Neck circumference (50.0cm), Neck length (38.6cm), Head length (39.9cm), Head width (12.3cm), Ear length (22.9cm) and Tail length (45.9cm). All the growth measures were positively and significantly correlated (P<0.05, 0.01). The zoometric phenotypic differentiations that exist among strains of donkeys in Northwest Nigeria should be exploited for genetic improvement of the species.

Keywords: Morphometric, characterization, Donkey, weaner, bodymeasurement and traits

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Target Audience: Animal conservationists; Animal Breeders; Geneticists; Extension Agencies