madridge
CONFERENCES

3rd **International**

BIOTECHNOLOGY & RESEARCH CONFERENCE

October 23, 2020 | Virtual Conference

Differentiation between Three Indigenous Goat Types using Multivariate Analysis of Morphometric Traits in the Arganeraie of Agadir Region from Morocco

Houda El Kheyyat and Said El Madidi

Biometrics and Bio Resources, Laboratory BVRN, Faculty of Sciences, University Ibn Zohr, Morocco

The present study was carried out in the Arganeraie of Agadir in Morocco and consists of evaluating the differentiation between three goat type using multivariate analysis of morpho-biometric traits. The study involved 595 adult animals (539 females and 56 males) from 3 local goat breeds: Atlas, Barcha and Ghazalia. 14 Morphometric traits were used (9 quantitative variables and 6 qualitative variables). The results obtained showed the existence of a differentiation between the 3 local goat breeds with highly significant differences for CD,PW, LWandCR. The coefficient of variation of all characters in all 3 breeds ranged from 7% to 42% (CV between 6.39% for height at withers and 28.75% for length of horns). Principal component analysis (PCA) and discriminant factor analysis (DFA) shows a very significant difference between the three goat breeds and a high degree of intra-breed heterogeneity. The greatest Mahalanobis distance (17.21) was observed between the Atlas and Ghazalia, while the smallest distance (2.63) was recorded for the Atlas and Barcha. The cross-validation procedure assigned 67.1% of the Ghazalia animals to their genetic group, while the percentages of animals well classified in their original group for Atlas and Barchawere 100%.

Keywords: Arganeraie, local goat breeds, morpho-biometric traits, multivariate analysis, Morocco

Biography:

Houda El Kheyyat, is pursuing her higher studies at the Faculty of Sciences, Ibn Zohr Agadir.