

Physical Features of Camels in Bahr-El Gazal region of Chad

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ABSTRACT

A total of 420 mature camels (123 males and 297 females) were sampled from August to September 2014 in order to assess genetic variability of native camelids in Bahr El-Gazal region. Based on visible coat polymorphisms, it appeared that 81% of the sampled animals had tan or fawn coat, where as cream, black and grey-ash coats were respectively 8, 5 and 6% of the total. Mean body measurements were: height at withers 183.95 ± 7.16 cm; body length 150.62 ± 8.27 cm; heart girth 177.58 ± 7.83 cm. But when considering distant communal districts, there a clear significant differences for these above parameters. The variation coefficient was around 12%. The correlation between height at withers and live body weight was 0.97. Multivariate analysis using components analysis demonstrated that there are at least 4 genetic clusters in the region. This variability may be linked to specific communitarian selection patterns developed by pastoral herders and which are related to ecological adaptation to harsh conditions. Our findings may be useful for selection purposes in this native camel population.

Keywords: Measurements, Camels, Arid region, Chad