

Impact of Management System on Milk Performance and Lactation Curve of Camel (*Camelus dromedarius*)

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ABSTRACT

The main objective of this study is to determine the effect of management system on milk production performance and lactation curve of camel in Sudan. Records of 22 lactating she-camels covered the period between 2011- 2014 were obtained, of which 15 records from Camel Research Centre farm (semi intensive) and 7 records from Tumbool Camel Research Center farm (intensive). The lactation curve was estimated according to Wood function. T test was performed to assess the impact of the management system on the studied traits. The results revealed that overall averages total milk yield, daily milk yield and lactation length were 1378.00 liter, 3.89 liter and 347.45 days, respectively. The results indicated that the intensive system had significantly ($P<0.01$) higher total milk yield, daily milk yield and lactation length than semi intensive system. Moreover, the study determined the lactation curve parameters, α (initial milk yield) was 4.21 and 2.10 in intensive system and semi intensive system, respectively; the corresponding values of β (increasing slope) were 1.00 and 0.86; the corresponding values of γ (decreasing slope) were -0.08 and -0.08, mean of week peak yield was 11.72 ± 2.16 and 11.23 ± 4.56 and The persistency was 169.77 ± 84.00 and 128.90 ± 86.02 . The study concluded that the intensive system had greater milk performance than semi intensive system, and the lactation curve model (incomplete gamma) used in this study was suitable and appropriate.

Keywords: camel, milk, lactation, management, curve