

GENETIC & BREEDING

LIFETIME PERFORMANCE TRAITS AND ESTIMATE OF THEIR GENETIC PARAMETER IN ZARAIBI GOATS

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SUMMARY

This study includes data of 587 Zaraibi does, raised at El-Serw Station (Domiatta Governorate), Ministry of Agriculture and Agrarian Reform during the period 1991-2005. Estimates of least squares means per doe of total number of kids born (TNKB), total number of kids weaned (TNKW), total kilograms born (TKGB), total kilograms weaned (TKGW), total milk yield (TMY) and weaning (WW) and yearling weights (YW) of kids were 6.50, 4.85, 10.07, 50.64, 865.95, 10.7 kg and 23.7kg, respectively. The differences between years were significant in TNKB, TKGB, WW and YW. Season of birth had non significant effect on all lifetime production traits and significant effect on WW and YW, while, type of birth affected TNKB, TNKW, TKGB and WW. The effect of age of dam was not significant on all studied traits. Partial correlation coefficients between all presented traits in this study are positive and ranged from 0.06 to 0.94. Heritability estimates for TNKB, TKGW, TMY and WW ranged from 0.09 to 0.12, from 0.08 to 0.12, 0.20 to 0.22 and 0.11 to 0.30, respectively, while heritability of YW was estimated as 0.21. Genetic correlations between the studied traits were positive except that between WW and TMY and ranged from high estimate (0.92) between TNKB and TMY to low estimate (-0.29) between TMY and WW.

Keywords: , Birth weight, weaning weight, yearling weight, milk production, doe performance , phenotypic and genetic parameters.