

Some factors affecting milk production of sheep under the Egyptian conditions

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Abstract

This study was carried out at the experimental farm, Faculty of Agriculture at Moshtohor, Banha University, Egypt, on 27 ewes of different ages and weights to investigate the effect of genetic group (Ossimi and 1/2 Ossimi-1/2 Chios crossbred ewes), parity, type of birth and lambing season on weekly and total milk production (during 16 weeks) of ewes. And also, the study investigated the linear and quadratic regressions of week of lactation and udder circumference on milk production of ewes. The results showed that the differences among means of weekly milk yield due to genetic group effect, parity and type of birth were significant ($P < 0.001$) for lambing season, however not significant for what effect?. The differences among means of total milk yield due to the effect of genetic group and lambing season were not significant, but those of total milk yield due to parity and type of birth were significant ($P < 0.01$ and $P < 0.05$, respectively). Crossbred ewes had a higher weekly milk production than Ossimi ewes. Crossbred ewes at third parity had a higher weekly and total milk production than ewes at first and second parity. Ewes gave twin lambs had higher weekly and total milk production than ewes had single lambs. Ewes that lambed at February season had higher weekly milk production than those lambed at October season. In addition the, linear and quadratic regressions of weekly milk production of ewes on both week of lactation and udder circumference were significant ($P < 0.001$), but linear regression of total milk production of ewes on udder circumference was not significant.

Key words: Sheep, Milk production, Season, Parity, Linear and quadratic regression.