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## Effects of parity and type of kidding on the quantitative and qualitative milk characteristics of "Rossa Mediterranea" goats

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#### ABSTRACT

The "Rossa Mediterranea" goat, also called "Derivata di Siria" has become much more widespread in Sicily over the last ten years. It is a goat characterised by its robustness and ability to adapt readily to new environments and in addition it has a high milk yield and is a prolific animal. The aim of this study was to examine the quantitative and qualitative characteristics of milk in 60 lactating "Rossa Mediterranea" goats with a different number of parity and type of kidding. For six months individual daily yields were recorded and individual milk samples were taken to determine fat, protein and lactose content, somatic cell count (SCC), pH, titration acidity (°SH) and clotting properties, using the parameters r (rennet clotting time),  $k_{20}$  (rate of firming at 20mm) and  $a_{30}$  (curd firmness at 30 min). Data obtained was analyzed using the general linear model procedure of SAS (2001). Correlation coefficients were also calculated to asses the relationships between variables. The results show that daily milk yield and SCC of the terziparous goats was significantly higher (P<0.01 and P<0.05 respectively) compared to the primiparous goats. On the contrary, the protein and fat levels of the primiparous goats were higher than those of the terziparous ones. Goats with multiple kids showed a significantly higher daily milk yield (1691 vs. 1518 g, P<0.01) and SCC ( $\log_{10} 2.62 \ vs.$   $\log_{10} 2.53$ , P<0.01) compared to the goats with a single kid. Milk coagulation parameters of terziparous goats showed higher r-values compared to those of the other goats. Rennet clotting time (r) and curd firmness ( $a_{30}$ ) of the milk were not affected by kidding effect. A negative correlation was found between quantity and quality of the milk, particularly between daily milk production and fat (r = -0.27; P<0.01) and protein content (r = -0.18; P<0.05). The results of this research extended the studies on the milk production and quality of this particular goat.