

Post-shearing management and milk production and quality in Sarda ewes

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ABSTRACT

The aim of this research was to evaluate the effect of ewes management during the post-shearing period on milk production and quality.

Forty-eight 2-4-year-old Sarda ewes, in mid-late lactation, were used. The trial lasted from 30th May to 9th June 2006. The pre-experimental period was from 30th May to 5th June (shearing day), followed by the experimental period until 9th June. On shearing day, the flock was divided in two groups (24 ewes each) which then received a different management: non confined group (NCG) and confined group (CG) kept in a sheepfold during the night. Four samplings during pre-shearing (PrS) and other four during post-shearing (PoS) periods were performed. During the trial, ewes were fed 1000 g/head/d of concentrated food, provided during the two daily milking, and hay *ad libitum*, and grazed on green clover (3 h/day). Daily milk production was recorded and daily milk samples were collected for fat, total nitrogen, SCC, casein and urea analyses. Data were analysed by PROC MIXED of SAS software, using management (M), shearing (S) and their interaction as fixed factors, ewes within group as random factor and the first sampling of the PrS period as covariate. Environmental conditions during the trial were variable, especially during PrS when rainfall occurred 2 days before shearing. Maximum and minimum temperatures were, on average, 23±3.3 °C and 9±1.6 °C, respectively. Sheep confinement after shearing did not influence milk yield and quality. On the contrary, shearing influenced fat, casein and urea content within each management group. Indeed, fat and casein were higher (P<0.01) and urea was lower (P<0.01) during the PoS than during the PrS period: for NCG, fat (%) 7.32 vs 6.90, casein (%) 4.29 vs 4.14, urea (mg/dl) 53 vs 61; for CG, fat (%) 7.36 vs 6.97, casein (%) 4.24 vs 4.17, urea (mg/dl) 52 vs 59. In conclusion, late-Spring shearing has positive effects on milk quality in dairy sheep, as observed in meat breed. Differently, sheep confinement after shearing has not effect on milk traits, in spite of highly variable environmental conditions. The fact that shearing can improve milk quality of Sarda ewes encourages further studies on the effects of shearing earlier than usual, i.e. in mid Spring.

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