

Sarda female lambs bred at pasture: growth rate from weaning to reproductive activity

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ABSTRACT

The traditional dairy sheep system in Sardinia presents 2 lambing seasons: in November-December for mature ewes and in February-March for primiparous. Replacement (20-25% of female lambs) usually came from mature ewes whereas all lambs born in January-February are slaughtered when their market price is low. These lambs could represent part of flock replacement that can integrate the traditional lamb breeding system, and also a flock replacement of ewes that are planned to lamb in late winter to have a continuous milk production all over the year. The aim of the present work, that represent an aspect of a wider trial, was to determine the suitability to breed this lambs under grazing condition monitoring their growth rate from weaning to the beginning of reproductive activity. At the "Bonassai" research farm an experiment was carried out from March 2004 to May 2005. 51 female Sarda lambs born from 19/01/2004 to 07/02/2004 (live weight 3.24 ± 0.51 kg; mean \pm standard deviation) were weaned on average of 45 days (live weight 12.02 ± 1.52 kg) and weighted monthly. After weaning feeding regimen was based on grazed forage crops (*Lolium multiflorum* Lam., *Hedysarum coronarium* L. and *Cichorium intybus* L.) and on natural pasture with an average stocking rate of 5.5 head/ha. The supplementation ranged between 0 - 1200 g/head/d of Lucerne and Italian ryegrass hay and 0 - 400 g/head/d of commercial concentrate, depending on herbage on offer. The amount of hay and concentrate offered during the trial represented 51% of total energetic requirements of lambs. Average lamb daily gain (ADG) during the experimental period resulted 74 ± 11 g head/day. The ADG pattern showed a maximum value 30 days after weaning (139 ± 33 g head/day) and a minimum value in January when herbage availability was low. At the beginning of reproductive activity lambs weighed on average 40.5 ± 3.5 kg and their average body condition score was 3.03 ± 0.12 . The trial showed that is possible to breed lambs born in late winter at pasture. However an economic and technical evaluation of differences of these lambs compared to those bred in the traditional system is under evaluation.