

Effect of alfalfa hay supplementation on grazing time and milk parameters in a rationed dairy sheep grazing system

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Framework: feeding management of Latxa sheep in spring = part-time grazing (PTG) + indoor supplementation (forage and concentrate)

Objective: to assess the effect of alfalfa hay supplementation (AR) on grazing behaviour and lactation performance



MATERIAL AND METHODS

Experiment monitored over 4 weeks.

48 Latxa dairy ewes. Blocked on the basis of:

- ✓ Lactation day and milk yield
- ✓ Milk protein and fat
- ✓ Body weight

◆ Access to pasture: 4 h/d

◆ Treatments

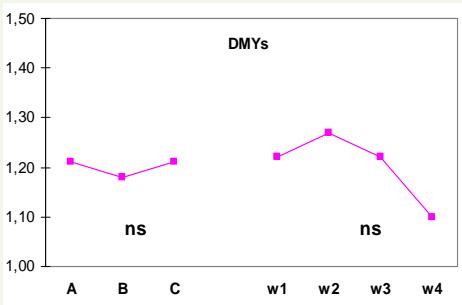
Group	AR (g/ewe/d)
A	300
B	600
C	900

◆ Measurements

- ✓ Standardized milk yield (DMYs)
- ✓ Milk fat and protein (CF, CP)
- ✓ Body live-weight (LW)
- ✓ Grazing time (GT)

◆ Statistics

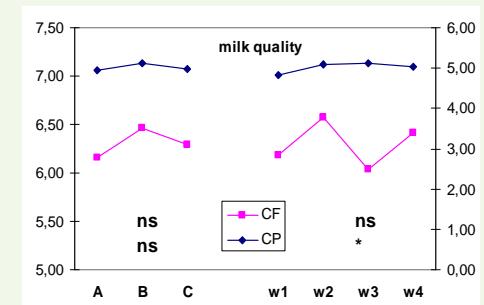
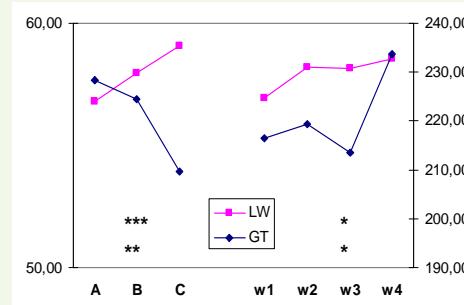
- ✓ Fixed effects: AR, week and interaction.



RESULTS

DMYs and quality: no significant differences due to AR.

Low-middle AR ewes had higher grazing time which could be to cover milk production needs.



High AR ewes spent less time grazing and used excess energy to increase LW.

CONCLUSIONS

- ✓ In this system no productive advantage is achieved when offering more than 600g alfalfa/day.
- ✓ Results show the possibility to manage grazing in a PTG system by reducing indoor feeding to increase the use of locally available resources, without compromising milk yield and quality.
- ✓ This management could be interesting in areas with enough pasture availability due to its positive effects on the milk conjugated linoleic acid isomer content (Amores et al., 2009) and costs reduction.