

Average daily gain of female lambs under different environmental conditions in confinement.

Fernando Gonçalves Vieira (fernando.goncalve@ufvjm.edu.br) *1 Brasil
Iury de Aguiar Reis (reis.iury@ufvjm.edu.br) 2 Brasil
Darcilene Maria de Figueiredo (darcilenefigueiredo@ufvjm.edu.br) 1 Brasil
Talita Andrade Ferreira (talita.ferreira@ufvjm.edu.br) 1 Brasil
JULIÃO RIBEIRO LESSA COUTO (juliao.couto@ufvjm.edu.br) 1 Brasil
Matheus Oliveira Cardoso (matheus.cardoso@ufvjm.edu.br) 1 Brasil
Alan Araújo Vieira (alan.vieira@ufvjm.edu.br) 2 Brasil

INTRODUCTION & AIM

Meat sheep production has adopted confinement systems to improve nutritional management and environmental conditions, especially during winter. Average daily gain (ADG) is an important indicator of animal performance and productive efficiency. The objective of this study was to evaluate the effect of different confinement structures on the ADG of Dorper × Santa Inês crossbred ewe lambs.

METHOD

The experiment was conducted in Diamantina, Minas Gerais, at the Sheep Production Sector of the Federal University of the Jequitinhonha and Mucuri Valleys.

Twelve Dorper × Santa Inês ewes were used (40.0 ± 5.1 kg; 12–24 months of age).

The experimental design was completely randomized, with two treatments:

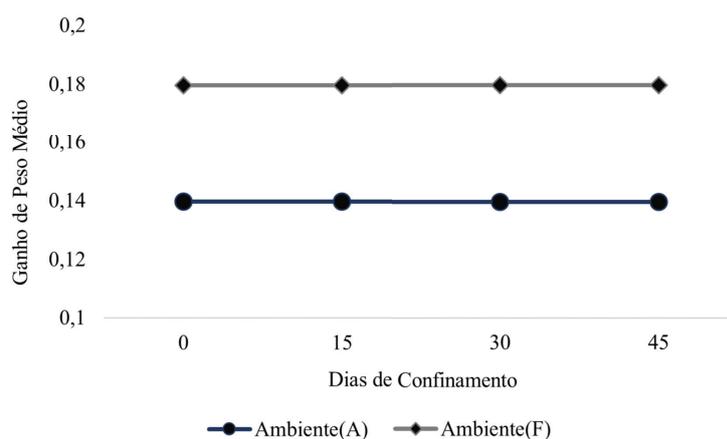
Closed confinement: walls of 1.5 m and metal roofing.

Open confinement: wire fence and shade cloth.

The diet was formulated to promote an expected gain of 0.100 kg/animal/day and was provided at 7:00 a.m. and 3:00 p.m. Body weight was recorded after 16 hours of fasting on days 0, 15, 30, and 45.

Data were analyzed using a Generalized Linear Model, with means compared by Tukey's test at a 5% significance level.

RESULTS & DISCUSSION



The average rectal temperature was 39.43 ± 0.45 °C, within the thermoneutral range, with no effect of the type of confinement.

There was a significant effect of confinement on ADG ($p = 0.0144$):

Closed confinement: 0.180 ± 0.064 kg/day

Open confinement: 0.140 ± 0.027 kg/day

CONCLUSION

Closed confinement provided higher average daily gain in female lambs during winter, indicating better environmental conditions for productive performance.

FUTURE WORK / REFERENCES

Andrade, I.S.; Souza, B.B.; Pereira Filho, J.M.; Silva, A.M.A.; Parâmetros fisiológicos e desempenho de ovinos Santa Inês submetidos a diferentes tipos de sombreamento e a suplementação em pastejo. *Ciência e Agrotecnologia*, v.31, n.2, p.540-547, 2007.