

rhininitis, but no total resolution. It is important to emphasize that all cited clinical cases were not self-limiting or acute diseases and therefore would continue to progress without therapeutic intervention.

Conclusion and implications

Homeopathic medicines can be integrated in sheep medicine, providing quality of life and well-being to patients with chronic and difficult-to-manage diseases, which makes it important to encourage further studies in this field of knowledge.

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Multivariate analysis of meat from non-pregnant ewes, light lambs of Merino breed

B. Panea^a, G. Ripoll^a, A. Granero^b, M.J. Alcalde^c

^a Centro de Investigación y Tecnología Agroalimentaria de Aragón, Zaragoza, Spain

^b Asociación Nacional de Criadores de Ganado Merino, Madrid, Spain

^c Universidad de Sevilla, Sevilla, Spain

Corresponding author: Begoña Panea.

E-mail: bpaneac@cita-aragon.es

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Introduction

The traditional product in Spanish ovine production systems are the light lambs but near the 2% of the herd are non-pregnant ewes, which represent great losses for the farmer. To value non-pregnant ewes' meat would be a viable market strategy but considering that the typical product is a light lamb and that the age and sex of the animal influence the quality of its meat, we aim to evaluate the meat quality of non-pregnant ewes and light lambs (males and females) of the Merino breed.

Material and methods

We used 10 ewes (in average, 26.7 Kg of Hot Carcass Weight), in and 20 lambs (half females, half, males; 10.9 Kg Hot Carcass Weight). After carcasses cooling (24h/4°C), 50 variables concerning pH, color, fatty acid profile, proximal composition, vitamins, minerals, and texture profile were recorded. We performed an ANOVA with the type of animal (thereafter, group) as fixed effect and a Discriminant Analysis (DA) with a stepwise procedure. The same statistics were repeated considering only light lambs but no ewes data.

Results and discussion

We found differences between groups in 22 of the 50 variables. Nevertheless, the DA selected only 7 variables: hot carcass weight, total MUFA, α - and δ -tocopherol, lutein content, collagen content and C* of muscle *Longissimus lumborum*. Factor 1 explained for the 98.9% of the variability. Centroid for males and females lambs are near between them (7.58 and 7.96, respectively) and far from ewes centroid (-15.54). The 100% of ewes and males are correctly classified whereas only the 80% of the females did. When repeated the statistics considering only the lambs, we found differences between males and females only in 8 of the 50 variables. The DA selected only 3 variables: MUFA, δ -tocopherol and b* of muscle *Longissimus lumborum*. All the animals were correctly classified. The usefulness of multivariate analysis to study the lamb meat quality was yet demonstrated by other authors [Caneque et al. \(2004\)](#).

Conclusion and implications

The sex and/or age of the animals can be discriminate based on few variables. Differences between meat quality from non-pregnant ewes and light lambs are feeble enough to consider the selling of the meat from non-pregnant ewes' as a viable marketing strategy.

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Reference

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