

44. Effects of different modified atmosphere packages on oxidation and myofibril fragment index on goat kid meat

Morales-delaNuez, A.¹, Castro, N.¹, Capote, J.², C. Rodríguez¹, Sanchez-Macias, D.¹, Moreno-Indias, I.¹, Argüello, A.¹

¹Department of Animal Science, Las Palmas de Gran Canaria University, Arucas 35413, Spain.

²Canary Agronomic Science Institute, La Laguna, Tenerife, Spa. Email: aarquello@dpat.ulpgc.es

80 goat kid ribcages were used to determine the effects of four different packaging methods (atmospheric air, vacuum, modified atmosphere –MAP1- 30:30:40 mixture of N₂:O₂:CO₂ and –MAP2- 10:70:20 mixture of N₂:O₂:CO₂) on meat quality which were held for 7 d in storage conditions (4°C). Oxidation (TBA) and myofibril fragment index (MFI) were recorded at 1, 3, 5 and 7 days. Two experiments were performed. In the first experiment three packaging methods were used (atmospheric air, vacuum and modified atmosphere –MAP1- 30:30:40 mixture of N₂:O₂:CO₂). No effects of packaging method were observed on TBA and MFI. TBA at day 3 was statistically lower than at day 1, 5 and 7. Storage time did not affect MFI values. In the second experiment three packaging methods were used (atmospheric air, vacuum and modified atmosphere MAP2- 10:70:20 mixture of N₂:O₂:CO₂). No effects of packaging method were observed on TBA and MFI. TBA at day 3 was statistically lower than at day 1, 5 and 7. Storage time did not affect MFI values.