

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

EFFECT OF SELENIUM AND MONENSIN ON MEAT SHELF LIFE OF FEEDLOT FINISHED LAMBS

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High concentrate finishing diets for lambs increases the production of sheep meat with pleasing color and taste, but it is necessary that these characteristics remain stable throughout the shelf life, since sheep meat is susceptible to lipid oxidation and is highly perishable. Oxidation of lipids results in unpleasant taste, color and odor, affecting consumer preference, and selenium and vitamin E are conventional antioxidants that promote changes that increase shelf life of the meat. Therefore, the aim of this study was to evaluate the shelf life of meat from twenty four lambs fed a diet with 10% of grass hay (*Cynodon sp.*) and 90% concentrate, and submitted to three treatments in a randomized block design, a control diet (CTL), without additives, the same diet with 15 ppm monensin added (MON) and the same diet with 0.26 mg / kg of selenium and 100 IU / kg vitamin E added (SeE). After 60 days of feeding, the lambs were slaughtered and carcass traits measured. After the deboning (24h *post mortem*), steaks with approximately 1.5 cm from the *Longissimus dorsi* muscle were taken between 12 and 13th ribs and accommodated in Styrofoam trays with absorbent paper and wrapped in PVC film and randomly placed on the refrigerated display panel (4°C; 1,000 lx). The samples were analyzed for TBARS before and after the exposure on days 1, 3 and 5. There was no difference between treatments for warm and cold carcass weight (19.8 kg and 19.2 kg, respectively), carcass dressing (48.3% and 46.9%, respectively) as well as for pH after 1 and 24h of chilling (6.4 and 5.5, respectively). As expected, time influenced L*a*b* color values (P<0.001), being similar at times 1 and 3, compared to times 0 and 5. There were no differences in TBARS values between treatments in the initial evaluation (24 hours after slaughter). After 1, 3 and 5 days, there was no difference between the CTL and MON (2.41 and 1.76 mg MDA kg tissue, respectively). However, the SeE showed the lowest values (P = 0.005) of lipid oxidation at all times of evaluation (0.198 mg MDA kg tissue). Selenium and vitamin E were effective against lipid oxidation, maintaining low levels throughout the time of exposure on the display.

Keywords: carcass traits, lipid peroxidation, malondialdehyde, off-flavour

Promoção e Realização:



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