This Book of Abstracts is the main publication of the 53rd Annual Meeting of the European Association for Animal Production (EAAP) held in Cairo, Egypt, on 1-4 September 2002. It contains abstracts of the invited papers and contributed presentations. The meeting addressed subjects relating to science and innovation, but in particular time has been used to discuss the difficulties of animal production in harsh environments: for the systems approach, the physiological adaptation and the maintenance of farm animals in such environments are sessions offered. Also, important problems were discussed during the sessions of EAAP's eight Commissions: Animal Genetics, Animal Nutrition, Animal Management and Health, Animal Physiology, Cattle Production, Sheep and Goat Production, Pig Production and Horse Production. In addition, joint sessions on topics interesting several disciplines and species were included in the programme. A total of 1225 authors (542 abstracts) contributed to this publication.
Conformation and joint carcass composition of Galega Bragança and crossbred lambs by Suffolk and Merino Prococe sire breeds
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A total of 151 male and female lambs were slaughtered to obtain the carcass weight range of 8 to 14 kg according the normal weight requirements for lamb consumption in Portugal. Following slaughter, carcasses were cooled at 6°C for 24 h and external carcass measurements were recorded. The left side was divided into eight standardised commercial joints. During the jointing procedure using a metal ruler, a number of measurements were made on the surface of longissimus muscle at 12th-13th rib.

Lambs from Bragança sire breed presented lower leg (P<0.01) and shoulder (P<0.01) proportion than lambs from Merino and Suffolk sire breeds.

Lambs from Suffolk sire breed presented lower (P<0.05) muscle proportion on Anterior Rib, however, no differences were found in all others carcass joints. Male lambs presented higher (P<0.05) muscle proportion in all carcass joints than the female lambs, except for the Anterior Rib joint where no differences (P>0.05) were found.

The results indicate clearly that female lambs should be slaughtered at lower carcass weight than male lambs in order to produce leaner carcasses, according Portuguese consumer requirements.

The quality of meat obtained from Pomeranian Sheep and their crossbreds with meat race rams, stored in modified gas atmosphere
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The fresh and stored in modified gas atmosphere (80% of nitrogen and 20% of carbon dioxide) meat quality was examined in fifty days old ram lambs singles of Pomeranian Sheep breed (P) and cross-breds F1 of Pomeranian ewes with Suffolk (PS) and Texel (PT) rams (8 in each group). In the meat quality evaluation of quadriceps thigh muscle samples (m. quadriceps femoris) the following data were determined: the chemical content, physical and sensory properties, as well as the fatty acid composition in the intramuscular fat. The meat quality of the fresh (48 hours after slaughtering) and stored in modified gas atmosphere at +2°C, during 10-, 20- and 30-days long period samples was studied.

Results of the present study have shown that meat from PS and PT cross-breds F1 had higher dry mass and crude protein content, lower pH and worse juiciness than the meat obtained from P lambs. Furthermore, the meat of PT lambs had the highest intramuscular fat content (significant difference compared to PS lambs).

Storage of meat in the modified gas atmosphere increased dry mass, protein and ash content as well as the pH value, lightened the color and improved the sensory evaluation marks, especially juiciness.

The genotype of animals as well as the storage period did not influence the fatty acid composition in the intramuscular fat.