

40. Effect of sex and carcass weight (4, 6, 8 kg) on carcass and meat quality of "Cabrito Transmontano" (PDO)

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The objective of the study was to contribute to the characterization of the Serrana breed on the meat production aspects. The study was carried out in 60 (Cabrito Transmontano) milk-fed kid carcasses (31 males and 29 females) to evaluate the effects of sex and carcass weight (4, 6 and 8 kg) on some carcass conformation measurements; on longissimus dorsi muscle thickness and fat thickness measurements; on regional joint carcass composition and finally on meat pH and color. Furthermore a study on the relative growth of the carcass joints and its tissue composition, by means of logarithmic transformation of the Huxley equation ($\text{Log } y = \text{Log } a + b \text{ Log } x$) was undertaken. Finally, prediction equations of the carcass composition were estimated by using both conformation and the longissimus dorsi measurements. An analysis of linear association was carried out and those measurements which were significant were included in the linear regression model applying a stepwise regression method. Results showed that sex did not affect the carcass conformation measurements, as well as on the meat pH and color, but there were some differences on the carcass regional and tissue composition, being the proportion of chump and breast joints, which contains more fat, higher in females than in males (0.3% and 0.9% respectively). A significant effect of carcass weight was observed on the carcass yield, the conformation, longissimus muscle thickness, fat thickness measurements, and regional and tissue compositions. In general, it can be indicated that values of all measurements increased with the increment of carcass weight. Furthermore, it was seen that pH was higher in the lighter carcasses than in the 6 kg and 8 kg carcasses. The red index and the saturation were higher in 8 kg carcasses than in the lighter carcasses. The allometry study indicated that limbs were precocious in growth in relation with the rest of the carcass and that the tissue that presented a more precocious growth was the bone ($b=0.79$), whereas the muscle showed an isometric growth ($b=1.05$) and the fat a later growth ($b=1.32$).

41 Carcass characteristics of indigenous goats of Zimbabwe

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Data from 537 indigenous goats (females and males) collected over a period of four years were analyzed to determine carcass characteristics of different age groups: 0-19, 20-33, and 34+ months. Live weights ranged from 20.4 to 38.4 kg for females and for males from 22.1 to 41.2kg, hot carcass weights from 7.9 to 15.6kg, and 9.6 to 17.6kg, and cold carcass weights from 7.6 to 14.9 and 9.2 to 17kg, for females and males respectively. Carcass length increased with age, ranging from 43.6 to 52 cm and 44.9 to 53.8cm for females and males respectively. Dressing out percentages of goats varied between 41% and 49%. Regression equation indicated live weight as a predictor ($r^2=0.88$) of cold carcass weight. Age at slaughter and sex significantly affected ($P<0.05$) live weights, carcass components, and dressing percentages both on live weight as well as on empty live weight basis. The edible and non-edible carcass components were significantly affected by age and sex. Results indicate the potential of indigenous goats in their contribution to red meat production. Indigenous goats are unselected, and a large percentage of the goat population is raised under subsistence management. The meat quality from young and old goats needs investigation so as to influence the marketing of goat products.