

VII. SUMMARY

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In Argentina, goat meat production is based mainly in the supply of suckling animals / young kids, the traditionally commercialized product which is consumed. This is an animal raised mostly by maternal milk that between 60 to 90 days reaches a slaughter weight of 10 to 15 kg, with a carcass weight of 4 to 6 kg.

At the official is lacking level a methodology for carcass evaluation. The characterization of kid's carcasses will allow their differentiation quality. This implies that the farmers will receive a differential price for the offered products, therefore obtaining an advantageous commercialization value.

The objective of this study is the characterization and evaluation of the carcass and the meat from regional Creole kids.

Carcasses from 60 Criollo argentino kids were analysed, 30 males and 30 females, with 60 to 90 days of age and between 10 to 15 kg of weight. These animals were from herds close to the Río Cuarto region in Córdoba Province, Argentina. The carcass was evaluated at two levels: objective and subjective. While meat quality was analysed instrumentally.

The objective evaluation was carried out by taking into account the following carcass characteristics: weight, dressing percentages, body measurements and conformational indices; joint, primal cuts, shoulder dissection and fifth quarter. In the subjective evaluation were analysed the fatness degree, the fat cover colour, the *Rectus abdominis* muscle colour and the kidney fat quantity. About meat instrumental analysis were determined: pH, muscle colour, water holding capacity, cooking loss and tenderness in *Longissimus dorsi* muscle. Fatty acid composition was determining in *Longissimus dorsi* and *Semimembranosus* muscles. The data obtained were analysed by SAS statistical package (SAS, 1982).

The mean fasted live weight was 11,8 kg and the empty body weight was 10,2 kg, while the average of hot and cold carcass weight were 5,79 and 5,65 kg, respectively, with 2,5% of refrigeration losses. The average dressing percentages were: at slaughterhouse 48,99 %; real 56,68%; commercial 47,78% y biological 52,55%. These variables did not

show statistical differences between sexes and the slaughter weight influence positively the carcass dressing percentage.

The fifth quarter is made up by 26,5% of caídos, 6% of red stripping, 8,1% of white stripping and 2,4% of fat depots. The fat depots percentages were affected by sex, which were higher in females, while the slaughter weight affected the percentages of caídos and white stripping, which were smaller in the heaviest animals.

The carcasses from Creole kids showed a medium-low conformation, rounded ribs and legs with intermediate length. The female's carcasses were slightly less compact and significantly longer than male's carcasses. With a higher slaughter weight was observed an increased value of the carcass measurements and an improvement of the conformational indices.

The partition/primal cuts of the left half carcass showed that the leg represents the 32,2% of its weight, shoulder 21,2%, ribs 15,1%, flank 10,4%, neck 9,3%, badal 7,6%, kidney 1%, kidney fat 0,9% and tail 0,6%. The females showed higher proportion of kidney fat than males; the slaughter weight only affected the ribs percentages, which was higher in heavier kids.

The shoulder dissection demonstrated that it was composed by 68% of muscle, 25,7% of bone and a 2,5% of fat tissue. There were significant differences between sexes, females had higher percentages of fat than males; and males had higher proportions of muscle and bone than females. The shoulder tissue composition was not affected significantly by slaughter weight.

The subjective evaluation showed that Criollo argentino kids had lean carcasses, especially in males and light kids. The muscle colour was pink, darker in females and in heavier kids. The cover fat was colour cream, darker in females and the quantity of kidney fat was from low to normal, higher in males and in heavier animals.

Meat from Criollo argentino kids showed to be clear, with scarce water holding capacity and medium tenderness. Sex and slaughter weight affected the meat lightness, water holding capacity and tenderness. Meat was darker in females and heavier animals, and it was more exudative and less tender in males and in heavier kids.

The fatty acid profile from Criollo argentino meat showed a high proportion of PUFA, a favourable proportion of CLA and appropriate ratio of PUFA, n-6/n3 and PUFA/SFA, therefore constitute a kind of meat healthy for human nutrition.