Influence of forage type and concentrate on non-carcass components of lambs

Gustavo Daniel Vega Britez^{*1}, Marciana Retore², Julianna Andrade Rossatti¹, Marcelo Corrêa da Silva¹, Luana Liz Medina Ledesma¹, Caroline Marques da Costa³, Adrielly Laís Alves da Silva³, Fernando Miranda de Vargas Junior¹

¹Post Graduate Program in Zootechny – Universidade Federal da Grande Dourados (UFGD) – Dourados/MS, Brazil.

²Researcher in Embrapa Agropecuária Oeste, Dourados – MS, Brazil.

³Graduate student in Zootechny – UFGD - Dourados – MS, Brazil.

* julianna_rossatti@yahoo.com.br

The modernization of livestock production and agribusiness requires efforts aiming towards greater productivity, profit and sustainability. Optimizing the usage of secondary products that come from the production system is one of the pathways to attend this issue. In this sense, non-carcass components of sheep have great potential because they can add up to 60% of an animals live weight. In this study, we evaluated the effect of two types of tropical forages (Brachiaria Brizantha cv. Marandu and Panicum Maximum cv. Aruana) and three levels of concentrate (0%, 1.5% and 3%, according to live weight) on the non-carcass components of 36 Suffolk lambs. The experiment was carried out in Embrapa Agropecuaria Oeste and the animals were slaughtered after seven months of age or when they achieved a 2.5 body score. The variables under evaluation were: blood, head, skin, wool, legs, total internal fat (mesenteric, pelvic, omental and perirenal fat), red viscera (heart, lungs, trachea, liver, vesicle, spleen and kidneys) and white viscera (reticulum, rumen, omasum, abomasum, small intestine and large intestine). All components were separated and weighed in order to obtain a value (%) based on the empty body weight. There was no evidence of interaction between forage type and concentrate. In general, the effects of forage type and the levels of concentrate were significant on the non-carcass components. The effects were stronger in carcasses coming from lambs treated with Marandu grass and with no concentrate (0%), especially regarding the gastrointestinal content, which is directly related to the empty body weight. There was no evidence of the effect of concentrate in the percentage of white and red viscera. Carcasses from lambs fed with Aruana grass showed less gastrointestinal content (smaller proportions of non-carcass components), probably due to lower amounts of fibre and more rapid transit of digesta.

Key-words: sheep, viscera, gut, carcass yield

Acknowledgements: we are grateful for the scholarships granted by CAPES.