

SHEEP SWEAT GLANDS CHARACTERISTICS FROM DIFFERENT GENETIC GROUPS

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Work funded by FAPESP. Process: 2014/12229-5

Under stress conditions due to the heat, increased respiratory rate has been the most widely used thermolysis mechanism for sheep, especially wool-ewe breeds. However, in woolless or semi-wool-ewe animals, with higher possibility of heat exchange through the skin by increasing the sweating rate, the latter mechanism may be more important. Thus, the goal of this work is to evaluate the amount and type of sweat glands of female sheep from the breeds Santa Inês (S); Dorper (D); Texel (T); Ile de France (I) e crossbreed $\frac{1}{2}$ D + $\frac{1}{2}$ S; $\frac{1}{2}$ T + $\frac{1}{2}$ S; $\frac{1}{2}$ I + $\frac{1}{2}$ S, and identify those with the greatest number of glandular types. The experiment was conducted at Embrapa Pecuária Sudeste, located in the Southeast of Brazil, (22°01'S and 47°53'W). The average amounts of sweat glands (meTotal), reeled glands (meEnov) and saculiform glands (meSacul) and their respective percentages (PercEnov and PercSacul) from histological analysis of 1-cm diameter skin samples. The variables were subjected to variance analysis through GLM procedure, considering the genetic group (GG) as fixed effects. The averages were compared by Tukey Test at 5% probability. The genetic group did not present a significant effect on the number of glands, and the animals presented an average of 13.72 glands/0.785cm². All genetic groups presented saculiform- and coiled-type sweat glands, however the percentage of enovelada-type glands was much higher (88%) compared to saculiform glands (12%). Thus, in the sheep genetic groups studied herein, the sweat glands, both type and number, do not contribute to a differential mechanism of thermolysis between the GG.

Key-words: Adaptability, reeled, histology, saculiform, sweating