First Osteometric Study of Sheep Skulls (Ovis aries, L. 1758): Ouled Djellal Breed (Algeria)

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Introduction

The native Algerian sheep breed (Ouled Djellal) has been very little studied and this study aims to achieve for the first time an osteometric approach of skull bones. A previous study of the metapodial bones of this breed was published (Guinard C. and Tekkouk-Zemmouchi F., 2010), but the morphometry of the skull is unknown.

Method

30 sheep skulls were sampled (15 males and 15 females aged from less than one year to more than 8 years old).

For each animal, age and sex were recorded. Once prepared by boiling, each skull was measured (24 linear measurements) and 4 indices were calculated.

For the dorsal part of the skull (and the mandible), 7 (1) measurements of width were performed, 7 (3) of length and 2 (4) of height.

Sexual dimorphism is much more relevant on height (8% more for males than for females) and width (5.5% more for males than for females) measurements (and on the indexes calculated with these parameters) than on the length (2% more for males than for females) of the skull.

Comparing the Ouled Djellal skulls to a previous study on 10 recent breeds (Guinard C. and Fouché S., 2008), with CB19 = f(CL10), we can conclude that this breed is placed into the variability of the “rustic breeds” group.

Results

Conclusion

These preliminary results must be confirmed by further analysis. A publication of these first results will be proposed next year to a scientific review.


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