MORPHO-STRUCTURAL AND ANATOMICAL DIFFERENCES OF THE ORAL CAVITY IN THE WILD BOAR (SUS SCROFA FESUS)

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Abstract

The present study examines morpho-structural and anatomical variations in wild boar (Sus scrofa), with particular emphasis on dentition, tongue morphology, and cranial features, across different sexes, age classes, and ecological conditions. All individuals analyzed displayed the complete suid dental formula (I 3/3, C 1/1, P 4/4, M 3/3 = 44 teeth). Adult males developed strongly curved and elongated tusks (17–22 cm), contrasting with the shorter and thinner tusks of females (7-10 cm), while juveniles showed incomplete eruption of permanent dentition. Tongue morphology revealed sexual and ontogenetic differences: adult males had longer tongues (24-26 cm) with denser filiform papillae and slight apical keratinization, whereas females displayed shorter tongues (21-23 cm) with more flattened fungiform papillae. Cranial and skeletal traits highlighted a pronounced sexual dimorphism, with males presenting more robust skulls and reinforced mandibles. Juveniles, by contrast, exhibited underdeveloped cranial ossification and papillae in early growth stages. These morpho-anatomical differences reflect functional adaptations related to feeding ecology, reproductive behavior, and environmental pressures, with ecological conditions (e.g., diet hardness, mineral content of soils) influencing the degree of dental wear and papillary keratinization. The findings underline the importance of integrating morphological assessments into wildlife management and ecological monitoring of wild boar populations.

Key words: wild boar, morphology, dentition, tongue, sexual dimorphism