MORPHO-ANATOMICAL DIFFERENTIATIONS OF THE ACCESSORY GLANDS OF THE DIGESTIVE SYSTEM IN THE WILD BOAR (SUS SCROFA FERUS)

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Abstract

Research on the accessory glands of the digestive system in the wild boar (Sus scrofa) occupies a central position in the integrated understanding of the biology and ecology of this species. Beyond their strictly physiological role, these structures – the liver, pancreas, as well as the major and minor salivary glands – represent a fundamental benchmark for analyzing trophic adaptation mechanisms and for interpreting the relationships between the morphology of internal organs and environmental pressures. The importance of such studies lies in the fact that the accessory digestive glands do not merely function as secretory organs, but as interaction nodes between diet, metabolism, and ecological adaptability. They directly reflect the complexity of the nutritional strategies of the wild boar, a species characterized by a markedly omnivorous diet and remarkable trophic plasticity. Thus, the morpho-functional analysis of these glands becomes indispensable for explaining how wild boars exploit a wide range of trophic resources - from spontaneous vegetation and forest food to agricultural crops – and how these resources translate into adaptive anatomical and histological features. The objectives of these investigations are manifold. On the one hand, they aim to describe and compare the morphometric and histological parameters of the accessory glands in specimens originating from different hunting grounds, with distinct trophic regimes and habitat conditions. On the other hand, they contribute to identifying correlations between ecological environment, predominant diet, and the degree of structural development of these organs, thereby highlighting the adaptive dynamics of the species. Moreover, these studies have undeniable applied value. The results obtained may serve as a scientific basis for more efficient wildlife management strategies, designed to maintain a balance between the conservation of wild boar populations and the mitigation of their negative impact on ecosystems and agricultural land. In addition, through comparative analysis, research on the accessory glands of the digestive system can provide significant insights in the field of comparative biology and animal science, illustrating the differences between wild boars and their domesticated counterparts. In conclusion, the systematic exploration of the morphology and histology of the accessory digestive glands in wild boars is not merely a descriptive endeavor, but a scientific undertaking with major theoretical and practical implications, capable of highlighting adaptive plasticity, the interplay between morphology and ecology, and the role of this swine species in ecosystem dynamics.

Key words: accessory digestive glands, pancreas, salivary glands, liver