COMPARATIVE MORPHOLOGY OF THE CEREBELLUM OF THE COMMON NOCTULE (*NYCTALUS NOCTULA*) AND THE BARN SWALLOW (*HIRUNDO RUSTICA*)

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The cerebellum of *Nyctalus noctula* and *Hirundo rustica* was studied according to generally accepted methods. It was found that the weight of the cerebellum of the common noctule is 16.2% of the brain weight, and that of the barn swallow is 15%. The relative volume of the cerebellum (in % of the cerebral volume) of the swallow is larger than that of the noctule (14.9% and 11%, respectively). Also, the relative area of the cerebellar cortex (as a percentage of the cerebral area) is larger in the bird than in the noctule, 31% and 23.6%, respectively. At the same time, the average absolute and relative thickness of the cerebellar cortex and its individual layers in the common noctule (366±18.7 μm; 522) significantly exceeds that of the barn swallow

(285±15.9 μm; 274). Also, the bat has a higher CFI index, than the bird (23.55 and 3.28, respectively), which indicates a larger number of cerebellum lobes and is explained by the presence of hemispheres. Thus, the swallow's cerebellum is characterized by more complex worm differentiation, larger relative area and volume, and less cortical thickness than that of the common noctule.

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