

Craniometric Characteristics and Differentiation of the Sibling Vole Species *Microtus arvalis* and *Microtus rossiaemeridionalis* (Mammalia: Rodentia)

Georgi G. Markov^{1*}, Maria A. Kocheva¹

¹Institute of Zoology, Bulgarian Academy of Sciences, 1 Tsar Osvoboditel Blvd., 1000 Sofia, Bulgaria

Abstract: The craniometric variation of the common vole *M. arvalis* and the sibling vole *M. rossiaemeridionalis* in the central and southeastern parts of Europe was studied on the basis of the karyologically determined adult individuals. The detailed analysis of intraspecific craniometric variation proved that nearly all characters did not reveal sexual dimorphism. A craniometric discriminant function for species differentiation of both sibling species was worked out. It consisted of only 4 craniometric parameters (alveolar length of upper molars, zygomatic width, occipital height, length of foramina incisiva) and 100% of a priori cytogenetically identified individuals were classified correctly to their respective species. This enables the analysis of the distribution of *M. rossiaemeridionalis* and *M. arvalis* and the description of their ranges on the continent.

Key words: *M. arvalis*, *M. rossiaemeridionalis*, craniometrical diagnostics, species determination