

1st B-CHROMOSOME CONFERENCE

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B-chromosomes of wood mice genus *Apodemus*.

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The karyotypes of 292 individuals of 8 wood mice species of the genus *Apodemus* (*A. sylvaticus*, *A. flavicollis*, *A. agrarius*, *A. microps*, *A. speciosus*, *A. faltspheini*, *A. ponticus*, *A. peninsulae*) collected from natural populations of former USSR were investigated. B-chromosomes were found in three species: one individual of *A. sylvaticus* from North-Eastern Moldova, presented one acrocentric B-chromosome ($2n = 48 + 1B$); two individuals from the South of the Russian Far East of *A. agrarius*, presented one heterochromatic acrocentric and one dot B-chromosome ($2n = 48 + 0-1B$ and $2n = 48 + 1B$, consequently). B-chromosomes of these species were unknown before. In *A. peninsulae*, new variants in morphology and size of B-chromosomes were found at Prymorie district of Russia. In all the 24 studied populations of these species, geographic and between year variabilities of the clone frequency of supernumerary chromosomes were found. For *A. peninsulae* from Altay, Tuva and Chita regions number of B-chromosomes in the karyotype vary from 3 to 9. Maximal number of B-chromosomes (=17) and double microchromosomes (=2) were observed at Tuva region. In these regions the microchromosomes, which prevail among B-chromosomes, were found in cell clones. From Khabarovsk and Prymorie regions B-chromosome number varies from 0 to 5. B-chromosomes in these regions are medium and small-sized metacentrics. Microchromosomes, acrocentrics and large metacentrics of B-chromosomes are rare. B-chromosomes were not found in the Sakhalin Island.

The analysis of macro- and micro-geographic B-chromosome variability of *Apodemus* species suggests that the appearance of supernumerary chromosomes are related with certain living conditions, when morphological variations and B-chromosomes assembles are specific individual gain.