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GEOGRAPHIC DIFFERENTIATION OF B CHROMOSOMES IN *APODEMUS PENINSULAE* (RODENTIA) FROM THE EAST ASIA

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A species *Apodemus peninsulae* Thomas, 1906 has a wide distribution range on the territory of Russia - from the Ob' river in Siberia to the Pacific coast in the Far East, as well as in the north of Mongolia, China, Korea, Hokkaido Island of Japan (Gromov, Yerbaeva, 1995). Karyotypes of this species have supernumerary (B) chromosomes in addition to chromosomes of the basic set.

We have previously studied karyotypes of *A. peninsulae* in the East Asia on a large material and described polymorphism in terms of the number and frequency of B chromosome morphotypes (Roslik, Kartavtseva, 2009; 2012; Roslik et al., 2016).

We performed a comparative analysis of different geographic populations of *A. peninsulae* in the East Asia, using a new parameter: the variability of rare B chromosome morphotypes. Both frequently occurred B chromosome morphotypes and rare ones were identified. Small and medium metacentric B chromosomes were prevalent. All other morphotypes: large meta-, submeta-, subtelocentric; medium and small submeta-, subtelocentric and mini B chromosomes were classified as rare (Roslik et al., 2016; Roslik, Kartavtseva, 2017). Moreover, clinal variability in frequency of rare B chromosome morphotypes was revealed from the East to the Northwest of the area. According to the revealed pattern in variability, from the East (South and East Primorskii Krai), with a maximum diversity of B chromosome morphotypes, to the Northwest (→ center → West Primorskii Krai → Khabarovsk Krai → Jewish Autonomous Oblast → Amur Oblast), there is a gradual loss of some rare B chromosome morphotypes. Only large morphotypes and/or very small mini B chromosomes remain in populations of *A. peninsulae* in Jewish Autonomous and Amur Oblasts. According to another characteristic: presence of individuals without B chromosomes, differences were also found between populations. Such animals have been recorded in the mainland populations in Primorskii Krai and Khabarovsk Krai; however, findings of specimens without B chromosomes are extremely rare in Jewish Autonomous and Amur Oblasts and further in Siberia (Kartavtseva, Roslik, 2004, etc.).

Therefore, we detected two parameters: frequency of rare B chromosome morphotypes and frequency of individuals without B chromosomes, which to a greater or lesser extent indicate differentiation between populations of *A. peninsulae* in the East Asia.