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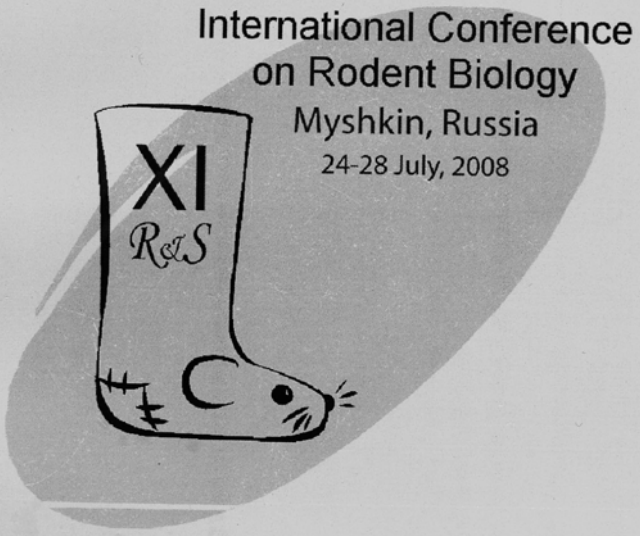

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Abstracts
List of Participants

Mosaicism, caused by B chromosomes variability, in the Korean field mouse *Apodemus peninsulae* (Rodentia)

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The standard chromosome set of the Korean field mouse, *Apodemus peninsulae* containes 48 acrocentric chromosomes and supernumerary chromosomes varying from 0 to 24 in number. The B chromosomes (Bs) also had variations in size (from big and small) and in morphology (more frequently meta-, submetacentrics and micro Bs and rare subtelo-, acrocentrics and mini Bs) (Kral, 1971; Hayata, 1973; Volobujev, 1979; Borisov, 1990a-d; Kartavtseva, Roslik, 2004; Rubtsov et al., 2004 et al.). Variations in Bs number are observed not only from one mouse to another, but also within the cells of the one individual in mosaics.

The wood mice have very frequent occurrence of B chromosomes. The frequency of intra individual mosaicism of Bs was study in 345 animals collected at 41 continental natural localities of the Russian Far East. It was found that 302 (87.5%) animals possessed B chromosomes. However, only 133 (38.6%) mice had stable karyotypes but among these 90 (26,1%) mice also possessed from 0 to 4 B chromosomes and remain 43 (12.5%) had no Bs. Among all animals 240 (61.4%) mice were mosaics with ranging from 0 to 7 Bs. It is evident that the spectrum of chromosomal variability is higher in mosaics. The frequency of mosaics differed between localities and ranged from 0 to 1.

Mosaics differed by number of cellular clones and their ratios. As a whole, the number of clones varied from 2 to 5 in mosaics from different localities. For example, from Amur and Jewish Regions near 40% animals had as prevailed three cellular clones and 30% had one clone (or stable karyotype). And from Khabarovsk and Primorsky Regions near 30% were specimens with two clones and near 40% ones had stable karyotypes.

More frequently was occurrence of cells in some chromosome classes (with 48, 49 and 50 chromosomes). Individuals with 0 Bs (near 50%) and 2 B chromosomes (near 35%) prevailed among stable B carriers in Khabarovsk Region but specimens with 1 Bs (above 30%) and 0 Bs (near 30%) were occurred more frequently in Primorsky Region. In mosaics above 20% specimens had variation 2-3 B chromosomes in Amur and Khabarovsk Regions and 1-2 Bs in Primorsky Region.

Even if the chromosome number and number of B chromosomes were the same in different animals, there were different combinations in the size and morphology of B chromosomes as well as in stable and mosaics. We revealed at all 76 cases of clone's combinations with different B chromosomes types. Almost all observed cases in animals with stable karyotypes we also revealed in mosaics. Thus, 21 cases were in stable carriers and 74 in mosaics. But the pattern of individual combinations of cellular clones in mosaics was very complicated and much more diverse than in stable carriers.

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