

**PROCEEDINGS OF
INTERNATIONAL SYMPOSIUM**

***MODERN ACHIEVEMENTS IN POPULATION,
EVOLUTIONARY AND ECOLOGICAL GENETICS
(MAPEEG - 1998)***

ABSTRACTS

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estimates with a finite upper limit of N_e .

**DOT-LIKE B-CHROMOSOMES
IN KOREAN FIELD MICE
(*APODEMUS PENINSULAE*,
RODENTIA) ORIGINATED FROM
A FEMALE ARTIFICIALLY
INFECTED WITH TICK-BORNE
ENCEPHALITIS VIRUS**

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Korean field mouse *Apodemus peninsulae* (AP) plays an important role in circulation of some pathogenic viruses, such as tick-borne encephalitis virus (TBE) and hantavirus. Karyotype of AP in Far East of Russia includes 48 A-chromosomes (A's) and from 0 to 5 B-chromosomes (B's). Experimental TBE infection has been reproduced on a pregnant female of AP captured from the central part of Primorsky region (Ussuri Reserve) by inoculation with excessive amount of TBE virus. Information about karyotype of the infected female is not available. Ten offsprings have been obtained from

this infected female and her progeny on inbreeding basis (up to F_6) from 1984 to 1987. Karyotypes of mice originated from this female have been analyzed. In addition to 48 A's, from 0 to 6 B's, including 0 - 2 small metacentrics and 0 - 4 dot-like (minute) B's and besides two of the mice had 0-2 small acrocentrics. Dot-like B's are usually rare among AP in Primorye and their number did not exceed 3 in natural population AP from this region. A hypothesis has been proposed that inoculation of artificial amount of TBE may cause some chromosomal alteration increasing dot-like B's in AP.

**GENETIC AND
MORPHOBIOLOGICAL
EXAMINATION OF PACIFIC
HERRING *CLUPEA PALLASI*
POPULATIONS FROM THE SEA
OF JAPAN AND OKHOTSK SEA**

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Pacific herring *Clupea pallasii* is one of most important commercial fish species. Population genetic research covered now many herring stocks from the shores of Korea and Japan (Grant, Zhang, 1983, Kobayashi et al., 1990, Kijima et al., 1992), Primorye, Sakhalin and Magadan regions of Russia (Bogdanov et al., 1979,