

Modern Achievements in Population, Evolutionary, and Ecological Genetics: International Symposium, Vladivostok – Vostok Marine Biological Station, September 8–13, 2019: Program & Abstracts. – Vladivostok, 2019. – 70 p. – Engl. ISBN 978-5-7444-4607-9.

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SPONSORS:

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Editors: Yuri Ph. Kartavtsev, Oleg N. Katugin

Современные достижения в популяционной, эволюционной и экологической генетике: Международный симпозиум, Владивосток – Морская биологическая станция «Восток», 8–13 сентября 2019: Программа и тезисы докладов. – Владивосток, 2019. – 70 с. – Англ. ISBN 978-5-7444-4607-9.

ОРГАНИЗАТОРЫ:

*Дальневосточное отделение РАН (ДВО РАН),
Национальный научный центр морской биологии им. А.В. Жирмунского ДВО РАН,
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ФИНАНСОВАЯ ПОДДЕРЖКА:

ООО «СкайДжин»

Ответственные редакторы: Ю.Ф. Картавец, О.Н. Катугин

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ISBN 978-5-7444-4607-9

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VARIABILITY VARIANTS OF UPPER MOLARS OF THE KOREAN FIELD MOUSE

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The Korean field mouse *Apodemus peninsulae* Thomas, 1906 inhabits deciduous forests in the Asian Palaearctic. Nine subspecies can be distinguished based on differences in dimensional characteristics of the body and skull; however, that differentiation is ambiguous. It is known that the structure and morphology of teeth are genetically inherited traits (Jernvall et al., 2000). Morphology of occlusal surfaces of molars is sometimes used as a diagnostic feature in many species of *Apodemus* s. str. That feature is frequently used in paleontological studies.

A study of the fossil and modern material of island populations in Japan: *A. speciosus* Temminck, 1894 and *A. argenteus* Temminck, 1894, revealed variability in occlusal surface pattern of the upper molars; however, such variability was not described in *A. peninsulae* (Kawamura, 1989).

For the first time the structure of occlusal surface of 112 upper molars (M 1-3) was investigated from mice *A. peninsulae* caught during 7-11 August 2018 in the Ussuriysky Reserve. Classification of occlusal surface structures is based on Jacobs (1978). Different variants can be distinguished based on the fusion pattern of the tubercles (from t1 to t8) as well as on the appearance of additional tubercles, and the enteroconule.

Sixteen variants (4 of them were known earlier in *A. speciosus* and *A. argenteus* and 2 in *Sylvaemus* = *Apodemus witherbyi* Thomas, 1902) were described for M1, two for M2 and 11 for M3 (Kawamura, 1989, HosseinPour, 2009). Therefore, we have found a total of 23 new variants of M 1-3 in *A. peninsulae*.

As a result, more variants of the *A. peninsulae* occlusal teeth surface than in other *Apodemus* species s. lato were revealed, which may indicate higher genetic diversity in this species. Research of the upper molar variants may be useful in population studies of this species.