

Genetic diversity in *Apodemus mystacinus* (Mammalia, Rodentia) based on SSRs in Anatolia

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Aim of the study: Anatolia is a region in where the variety of subspecies diversity is high because it serves as a refuge for species in the Pleistocene period. In particular, the micro-refuge areas in this area are exposed to subspecies studies. The use of polymorphic loci accelerated the search for refuge areas and species diversity. The aim of this study is to reveal the genetic variation of species in *Apodemus mystacinus* populations based on SSR loci and to determine the micro-refuge areas, if any.

Material and Methods: DNA was extracted from 70 *A. mystacinus* specimens collected from 19 localities in Turkey using CTAB method. 7 SSR loci were used to determine the genetic variation of *A. mystacinus*.

Results: As a result of this study, *A. mystacinus* includes 2 genetic groups that indicate the presence of two subspecies; *A. m. mystacinus* and *A. m. euxinus* in Anatolia. This result also supports that one of the micro refuge areas is eastern Turkey and the other western and southern Turkey.

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