

The karyotype of *Apodemus agrarius* (Pallas, 1771) (Mammalia: Rodentia) in Turkey

by Nuri Yiğit, Reyhan Verimli, Mustafa Sözen, Ercüment Çolak,
and Şakir Özkurt

Abstract: The karyotypes of seven specimens of *Apodemus agrarius* from İğneada in Thrace (European Turkey) were examined. The results showed that the diploid number of chromosomes is $2n = 48$, the number of autosomal arms $NFa = 56$, and the fundamental number $NF = 58$. The X chromosome is large acrocentric and the Y chromosome is small acrocentric. It was found that one subtelocentric pair in the chromosome set of *A. agrarius* is different from that of European populations.

Kurzfassung: Anhand von 7 Exemplaren der Brandmaus *Apodemus agrarius* aus İğneada in Thrakien (europäische Türkei) wurde der Karyotyp untersucht. Die diploide Anzahl der Chromosomen ist $2n = 48$, die Anzahl der autosomen Arme $NFa=56$, und die Grundzahl der Chromosomen $NF = 58$. Das X-Chromosom ist groß und akrozentrisch, das Y-Chromosom klein und akrozentrisch. Die Chromosomen von *A. agrarius* aus Thrakien unterscheiden sich von den europäischen Populationen im Vorhandensein eines subtelozentrischen Chromosomenpaars.

Key words: *Apodemus agrarius*, karyology, chromosomes, Turkey, Middle East.

Introduction

Six species of the genus *Apodemus* have been recorded in Turkey: *A. agrarius*, *A. mystacinus*, *A. sylvaticus*, *A. flavicollis*, *A. hermonensis*, and *A. uralensis* (FILIPUCCI et al. 1996). Of these, *A. agrarius* is a Palearctic species whose distribution range reaches Turkish Thrace, i.e. European Turkey (OGNEV 1948, KURTONUR 1975, CORBET 1978). There are many papers on species of *Apodemus* in Turkey, mainly on morphological and biometric aspects of these species. DOĞRAMACI & KEFELIOĞLU (1991) described the karyotypes of *A. mystacinus*, *A. sylvaticus*, and *A. flavicollis* in Turkey, but the karyotype of *A. agrarius* in Turkey was still unknown. The aim of this paper is to describe the chromosomes of *A. agrarius* from Thrace, and to compare them with other European populations.

Material and methods

We collected one specimen of *A. agrarius* at Velikaköprüsü and seven specimens at İğneada on 14.8.1988. Seven specimens were karyotyped from the bone marrow of the colchicined animal according to the methods described by FORD & HAMERTON (1956). 12 slides were prepared from