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Karyotype of *Arvicola terrestris* (Mammalia:Rodentia) in Turkish Thrace

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Arvicola terrestris (Lin, 1758) is distributed in Europe, Russia, Turkey, Iran and Palestine (Ellerman and Morrison-Scott, 1951; Corbet, 1978; Harrison and Bates, 1991). Also, Steiner and Vauk (1966) noted *A. terrestris* from Beyşehir lake. Mursalolu (1975) collected specimens from various localities in Turkey. These studies are based on distribution along with morphological aspects of this species. Karyology of *A. terrestris* in Asia Minor was analysed by Ozkurt *et al.* (1999). The aim of the present study is to examine karyological characteristics of *A. terrestris* in Turkish Thrace.

Eight specimens from Kırklareli in Turkish Thrace were karyotyped from the bone marrow of the colchicined animal (Ford and Hamerton, 1956).

The diploid number of chromosomes is $2n = 36$, the number of autosomal arms is $NFa = 60$ and the fundamental number is $NF = 64$. The autosomal set has 7 pairs of metacentrics, 6 pairs of submetacentrics and 4 pairs of acrocentrics. The X chromosome is large submetacentric and the Y chromosome is medium-sized acrocentric (Fig. 1).

Kuliev *et al.* (1978) reported $NF = 72$ for *A. terrestris* from Novosibirsk and $NF = 66$ for Azerbaijan population. These values are different from NF and NFa values of

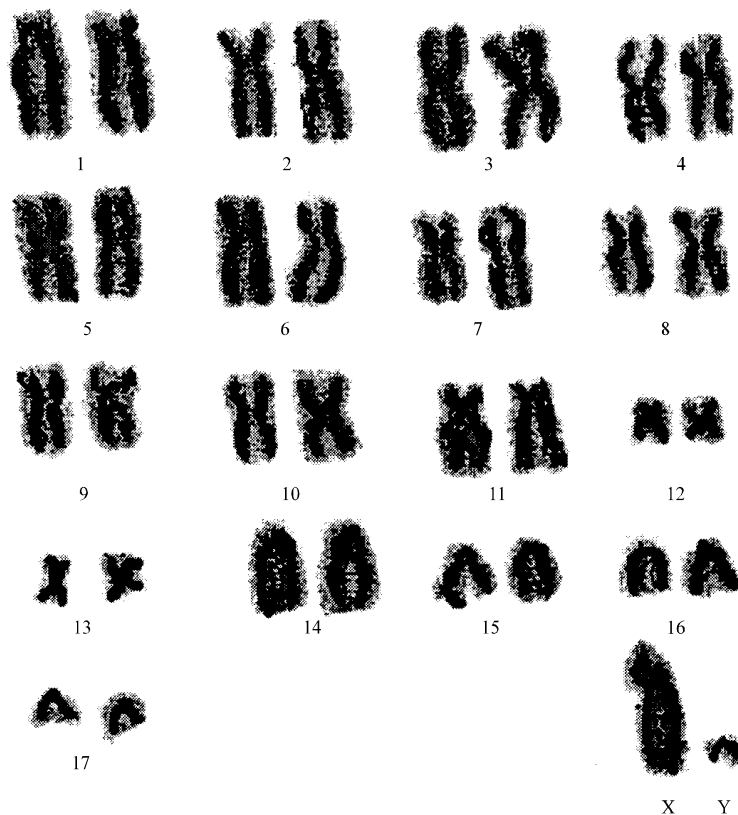


Fig. 1: Karyotype of male *Arvicola terrestris* from Kırklareli

population from Turkish Thrace. According to Zima and Kral (1984), European populations have $2n = 36$ chromosomes, $NFa = 60-68$, 13 pairs of meta-submetacentrics and 4 pairs of subtelo-acrocentrics and the X chromosome is submetacentric and the Y chromosome is acrocentric. These karyotypic values given by Zima and Kral (1984) are consistent with our findings. Four acrocentric pairs were observed by Raicu *et al.* (1971) in population from Romania and by Kuliev *et al.* (1978) in one locality from Caucasus as in this study. Özkurt *et al.* (1999) found medium sized-submetacentric Y chromosome, 18 metacentric and 8 subtelocentric in the karyotype of population in Kırşehir (Asia Minor). These values are different from those of population in Turkish Thrace. These findings show that there are variations in karyotype of *A. terrestris*. Also, the karyotype of *A. terrestris* population in Turkish Thrace is similar to both that of European and that of Caucasian population and differ from Asia Minor, Novosibirsk and Azerbaijan population with respect to some karyotypic characteristics.

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