Karyotypes of seven rodents from Jordan (Mammalia: Rodentia)

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Abstract. We present here data on the karyotypes of seven species of rodents from Jordan. The karyotype of *Acomys dimidiatus* was found to be 2n= 38, NF= 70; *Acomys russatus russatus* and *A. r. lewisi* 2n= 66, NF= 94; *Apodemus flavicollis* 2n= 48, NF= 48; *Apodemus mystacinus* 2n= 48, NF= 52; *Meriones tristrami* 2n= 72, NF= 76; *Skeetamys calurus* 2n= 38, NF= 70; *Allactaga euphratica* 2n= 48, NF= 96. Of these species, the karyotypes of *A. flavicollis*, *A. mystacinus*, *S. calurus*, and *A. euphratica* are here reported for the first time from Jordan.

Key words. Karyotype, rodents, Muridae, Gerbillidae, Dipodidae, Jordan, Middle East.

Introduction

Our knowledge of the karyology of the small rodents of Jordan is very limited. QUMSIYEH et al. (1986) studied the karyotypes of five rodent species collected from various localities in Jordan. The present investigation aims to study the karyotypes of all the small mammals of Jordan and to compare their morphology with similar species in the Middle East.

Material and methods

Thirty-three specimens representing seven rodent species were captured by Sherman live traps from six localities in Jordan during June 2006: As Sarih (32°30'N, 35°54'E), Jarash (32°17'N, 35°54'E), Um Quitain (32°19'N, 36°38'E), Al Wisad (37°57'N, 31°35'E), Wadi Musa (30°19'N, 35°29'E) and Wadi Rum (35°24'N, 29°35'E). The animals were studied for their karyological characteristics. Conventionally stained chromosomes from these specimens were examined according to standard procedures. By examining the photographs of about 20-30 metaphase cells of each specimen, the diploid number of chromosomes (2n), the total number of chromosomal arms (NF) and the number of autosomal arms (NFa) were determined along with metacentrics, submetacentrics, subtelocentrics and acrocentrics with regard to centromere positions. All specimens were then prepared as skins, and deposited at the Department of Biology, Jordan University of Science and Technology Museum, Irbed, Jordan (JUSTM).

Results

Acomys dimidiatus Cretzschmar, 1826. Material (N = 5): Wadi Rum, 10.vi.2006: 2 \circlearrowleft (JUSTM 157-158), ibid., 17.vi.2006: 1 \circlearrowleft (JUSTM 198); Jarash, 10.vi.2006: 1 \circlearrowleft (JUSTM 176); Wadi Musa, Petra, 15.vi.2006: 1 \circlearrowleft (JUSTM 181). – The karyotype of five animals