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**Chromosome races in the genus *Acomys* (Rodentia: Murinae).** A. ZAHAVI and J. WAHRMAN, Department of Zoology, The Hebrew University of Jerusalem. The evolutionary relationship which might exist between *Acomys cahirinus* and *Acomys russatus* has been reported previously<sup>1</sup>. The karyotype analysis suggested that both species possess a similar amount of chromatin in spite of a great difference in chromosome numbers, the diploid set comprising 38 chromosomes in the former and 66 in the latter species. Recently another race of *Acomys*, from Cyprus, became available for study. This form was considered by Bate<sup>2</sup> as a distinct species but it is currently regarded as the sub-species *nesiotes* of the widely distributed *A. cahirinus* complex<sup>3</sup>. Both forms are actually very similar from the morphological point of view and also display the same chromosome number. The XY bivalents are alike in shape and size in all the three forms of *Acomys* studied thus far.

A careful analysis revealed, however, that the two 'sub-species' of *cahirinus* differ in the morphology of some of their chromosomes. No perfect agreement in the number of chromosome arms could be established and a simple Robertsonian relationship between these closely allied forms is therefore unlikely. In *A. cahirinus cahirinus* 32 large metacentric autosomes and 4 very short elements of uncertain morphology constitute the diploid autosome set; whereas in *A. cahirinus nesiotes* there are 30 metacentric autosomes, 4 acrocentric autosomes (one pair of which is of about the same size as the larger metacentrics) and only two short chromosomes similar in appearance to the small elements of the former race (Table I). These slight differences can be demonstrated in most mitotic and meiotic stages but are especially clear in second metaphase plates which are particularly favourable for analysis in species of this genus.

TABLE I

Origin	Autosomes				arms*	
	2n	meta- male centric	acro- centric	short		
<i>Acomys cahirinus</i> <i>cahirinus</i> Desmarest	Israel	38	32	—	4	68—72
<i>Acomys cahirinus</i> <i>nesiotes</i> Bate	Cyprus	38	30	4	2	66—68

\*The exact number of arms depends upon the position of the centromere in the short elements which cannot be definitely ascertained at present.

The differences between these karyotypes can probably be accounted for by structural rearrangements such as pericentric inversions or translocations. It is hoped that the examination of hybrids which are raised in this laboratory will contribute to an understanding of the relationships between the chromosomes of these races.

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