

## عنوان مقاله:

Comparative Cytogenetic Analysis in the Populations of House Mouse Group, *Mus musculus* L.1766 (Cytotype  $2n = 40$ ) (Rodentia: Muridae) in Iran

## محل انتشار:

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## خلاصه مقاله:

Cytotaxonomy is a branch of cytogenetics, devoted to the comparative study of karyological features for systematic and evolutionary purposes. Surely, awareness of chromosomal characters increases our knowledge in different fields of studies. In this study, cytogenetic analyses were performed in 92 *Mus musculus* specimens from 26 localities in Iran. Cytogenetic characteristics of the house mouse, *Mus musculus*, in Iran show that the chromosomenumber is  $2n=40$  and the arm number is  $NF=40$ . The karyotyping results indicated the presence of 20 Acrocentric (A) chromosome pairs. The L/S (r ratio) was between 2.0621 and 4.5862. The length of shortest chromosome, length of longest chromosome and mean of chromosomal length in different populations were between 2-3.58, 6.07-7.01 and 3.43-5.05 ( $\mu m$ ), respectively. The results showed two distinct karyotypic formulae, namely cytotype B and cytotype C. Asymmetry indexes (AI, DI, As%, A, A2, A1 and Syi%) in all population except Birjand and Khash showed symmetry in chromosomes. In clustering methods using the matrix of symmetrical indexes similarities, four clusters were revealed, one for specimens of central and east of Iran, the second cluster for specimens from south and west of Iran, the third cluster was related to the eight specimens of Birjand and finally, the fourth cluster for two specimens of Khash locality

## کلمات کلیدی:

Cytotaxonomy, Systematic, Chromosome structure, House mouse, Karyology, Iran, Middle East

## لینک ثابت مقاله در پایگاه سیویلیکا:

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