## Karyotype Characteristics of *Crocidura leucodon* Herman, 1780 and *Crocidura suaveolens* Pallas, 1811 (Mammalia: Insectivora: Soricidae) in Bulgaria

Nasko I. Atanassov, Tsenka G. Chassovnikarova

Institute of Zoology, Bulgarian Academy of Science, 1, Tsar Osvoboditel Blvd., 1000 Sofia, Bulgaria E-mail: nasko2002@zoology.bas.bg

## Abstract:

A karyotype characteristic of the bicoloured white-toothed shrew (*Crocidura leucodon* Herman, 1780) and lesser white-toothed shrew (*Crocidura suaveolens* Pallas, 1811) from 6 sampling sites in Bulgaria was carried out. The standard karyotype of *Crocidura leucodon* was 2n=28, NFa=52, NF=56. All autosomes were bi-armed, of which 3 pairs were metacentric, 5 pairs -submetacentric and 5 pairs - subtelocentric. The X-chromosome was a middle size submetacentric. Variations in the morphology and size of the Y-chromosome were found. Subtelocentric, submetacentric, acrocentric, with size as the longer arm of the X-chromosome, and small acrocentric Y- chromosomes were described. The submetacentric form of the Y-chromosome is described for the first time in the species range. In the only male specimen from Srebarna studied an additional B- chromosome was determined. The diploid chromosome number of *C. suaveolens* was 2n=40, NFa=46, NF=50. The autosomes were 15 pairs acrocentrics and 4 pairs bi – armed chromosomes: one pair metacentric, one pair submetacentric and two pairs subtelocentric chromosomes. The X-chromosome is a large submetacentric, in size between first and second autosome pairs, while the Y-chromosome is acrocentric, as large as the longer arm of the X-chromosome.

The karyotype analysis illustrates the chromosome and genome polymorphism of *C. leucodon* and the

Key words: karyotype, chromosomal polymorphism, Crocidura species

relative stability of the C. suaveolens karyotype in Bulgarian populations.