

The Karyotype of the Jewel Beetle, *Anthaxia praeclara* Mannerheim, 1837 (Coleoptera: Buprestidae)

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Aim of the study: Cytogenetics of the genus *Anthaxia* Eschscholtz, 1829 has advanced more slowly. There is relatively little information available on the chromosomes of this genus. A perusal of literature reveals that only 10 species have been karyotyped to date, approximately 1.1% of all known *Anthaxia* species. Hence, karyotypic data of these beetles remain still scarce, requiring also a more systematic approach. In this work, we report the first karyological information of the jewel beetle *Anthaxia praeclara* Mannerheim, 1837 with the aim of contributing to a more knowledge and understanding of chromosomal diversity in the genus.

Material and Methods: The material used in present study was collected from Ankara and Eskişehir provinces, during May and July 2016. Karyotypes were obtained from testis cells of ethyl-acetate anaesthetised adult males, subjected to a hypotonic treatment in distilled water, fixed using fresh ethanol-acetic acid solution (3:1), then squashed in 50% acetic acid and stained in a phosphate buffered 4% Giemsa (pH=6.8) for karyotype analysis. Spermatogonial metaphases were analyzed and photographed with an Olympus light microscope coupled to a digital camera, at 1000x.

Results: The diploid chromosome number of the jewel beetle, *Anthaxia praeclara* Mannerheim, 1837, was found to be $2n=16$ with meioformula $n♂=7 + X_{yp}$. This karyotype is consistent with previous reports in *Anthaxia* includes following karyotyped species; *A. viridifrons*, *A. Igockii*, *A. bicolor*, *A. podolica*, *A. deaurata*, *A. hungarica*, *A. sponsa*, *A. mirabilis*, *A. olympica*, *A. amasina*. The limited data indicate the need for further karyological studies. Since, these investigations will undoubtedly add to better understanding of the systematic and phylogenetic relationships within this genus and among genera of Buprestidae.

Keywords: Coleoptera, Buprestidae, *Anthaxia praeclara*, karyotype.