

**ZBORNİK SAŽETAKA PRIOPĆENJA  
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**PROCEEDINGS OF ABSTRACTS  
OF THE PAPERS PRESENTED  
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## KOMPARATIVNA CITOGENETIČKA ANALIZA MORFOLOGIJE I ORGANIZACIJE KARIOTIPOVA MUŽJAKA VRSTA LIBELLULA DEPRESSA L. I L. FULVA MÜLL. (INSECTA; ODNATA)

Ovaj rad predstavlja komparativnu citogenetičku analizu morfologije i organizacije kariotipova mužjaka vrsta *Libellula depressa* L. i *L. fulva* Müll., dviju filogenetski vrlo udaljenih, ali morfološki najodvedenijih vrsta roda *Libellula*.

U radu su uspoređeni brojevi kromosoma i njihovo variranje, veličine kromosoma i njihovo variranje, tip determinacije spola te strukturne karakteristike kromosoma dobivene tehnikom C-pruganja.

Kod obje vrste utvrđeni su diploidni  $2n = 25$  ( $22a + X + 2m$ ) i haploidni  $n = 13$  ( $11a + X + m$ ) brojevi kromosoma. Kod manjeg broja stanica obje vrste uočena je pojava preuranjene segregacije kromosoma koja je, prividno, prouzrokovala povećanje broja kromosoma.

Relativna veličina (površina) kromosoma izražena je kao dio ukupne veličine kromosoma (%). Jedina značajnija razlika uočena je u relativnoj veličini m-kromosoma, koji je kod vrste *L. fulva* približno dvostruko veći nego kod vrste *L. depressa*.

Tip determinacije spola je XO/XX u obje vrste, s time da su mužjaci heterogametan spol.

Tehnikom C-pruganja utvrđena je u obje vrste prisutnost izrazitih C-pruga na terminalnim dijelovima svih kromosoma.

Dobiveni su rezultati raspravljani i u citotaksonomskom smislu.

COMPARATIVE CYTOGENETIC ANALYSIS OF KARYOTYPE MORPHOLOGY AND ORGANIZATION IN MALES OF SPECIES LIBELLULA DEPRESSA L. AND L. FULVA MÜLL. (INSECTA; ODONATA)

This study deals with a comparative cytogenetic analysis of karyotype morphology and organization in males of the species *Libellula depressa* L., which are phylogenetically very distant but morphologically the most specialized species of the genus *Libellula*.

In the present study the number and size of chromosomes and their variation, mode of sex determination, and chromosome structure (C-bands) are compared. Diploid  $2n = 25$  ( $22a + X + 2m$ ) and haploid  $n = 13$  ( $11a + X + m$ ) chromosome numbers were found in both species. In a small number of mitotic and meiotic cells, in both species, a precocious segregation occurs. The relative size of chromosomes was expressed as a percentage of the total chromosome size. A significant difference was found only between the relative size of m-chromosomes, m-chromosome being in the species *L. depressa* twice as small as m-chromosome in the species *L. fulva*.

The XO/XX type of sex determination was found (males are heterogametic sex) in both species. C-banding analysis revealed the presence of two distinct C-bands on each chromosome with a telomeric (terminal) position in both species. The results are also discussed in a cytotaxonomical sense.