Abstract

Diploid numbers of chromosomes and comments on their morphology for 107 species of Mantodea \((2n^\varnothing = 15 – 39)\), 126 species of “Blattaria” \((2n^\varnothing = 15 – 79)\) and 84 species of Isoptera \((2n^\varnothing = 29 – 98)\) are given in this bachelor’s thesis with the notes on the meiosis and the chromosomal mechanisms of sex determination. Attention was also given to some peculiar features of Dictyoptera karyotypes like premetaphase stretch and formation of various chromosomal multivalents. The overall information about the karyotypes of Dictyoptera is related to the modern phylogenetic point of view on the evolution of the group. In this context of classification revision, which enormous in order Mantodea, the principals of karyotype changes through the evolution of some newly defined groups could be suggested. In “Blattaria” any wider judges on the karyotype evolution are not possible to make since the most cytologically studied species are from families “Ectobiidae” and Blaberidae, for which detailed phylogenetic study is still lacking. Some evolutionary trends could be recovered in Isoptera, like formation of various sexual multivalents in males and frequent fusion of one-armed chromosomes.

Key words: Mantodea, Blattaria, Isoptera, Dictyoptera, chromosomes, multivalents, karyotype, evolution