

Abstract

This bachelor thesis deals with the use of cytogenetic methods in taxonomy of Arachnida. To understand this matter, we need to analyse available information about inter and intraspecific karyotype variability of individual orders. At the beginning of the thesis there is a description of cytogenetic methods used with Arachnida. They are used to gather the karyotype's fundamental information, such as the diploid number of chromosomes, chromosome morphology and possible occurrence of sex chromosomes. Main part of the thesis is focused on describing karyotypes of selected orders (Amblypygi, Palpigradi, Pseudoscorpiones, Scorpions, Opiliones and Araneae) and considering the convenience of use of cytogenetic methods for their taxonomy based on these information. The thesis includes current number of described genera (species) of the orders, as well as a number of cytogenetically analyzed genera (species) for comparison.