

Abstract

Order Kinetoplastida includes monoxenous trypanosomatids, the numerous and divergent group that parasitize versatile spectrum of insects. The most frequent hosts include heteropteran bugs and dipterans. The recent research of the biodiversity of monoxenous trypanosomatids has been implemented only in a few areas. Published studies have demonstrated unexpected variability of kinetoplastids and demonstrated that the considerable number of species has not been discovered yet. This thesis attends to study monoxenous trypanosomatid diversity in heteropteran bugs, especially on the territory of the Czech Republic. The objective of this long-term study focused on one locality has been to reveal the parasite diversity with connection of host ecology. In addition to this, many other isolates originated from different localities have been involved to the studies focused on geographical distribution, host specificity and phylogeny of the entire group Kinetoplastida. Special attention has been paid to species *Leptomonas pyrrhocoris*, which occurs in bugs of family Pyrrhocoridae.

Key words: Heteroptera, trypanosomatids, host specificity, geographic distribution, transmission, phylogeny