

ABSTRACT

The class Kinetoplastea contains free-living and parasitic species. One of the most dominant group within the class is the order Trypanosomatida which includes obligate parasites (*Trypanosoma*, *Leishmania*) infecting a wide range of hosts. Some species are serious pathogens of humans and domestic animals and cause considerable losses. However, the majority of trypanosomatids belongs to monoxenous parasites of insect which are usually harmless to their hosts. Monoxenous trypanosomatids predominantly infect Hemiptera and Diptera.

This diploma thesis is focused on the detection of monoxenous trypanosomatids in cockroaches captured in the Czech Republic and cockroaches from different breedings. Cockroaches are very suitable mechanical vectors of many different pathogens (including parasites) and are significant health threat for humans and animals. First trypanosomatids in cockroaches were documented at the beginning of the 20th century, but there is no study focused on this topic specifically. Another aim of this thesis is morphological and ultramicroscopic analysis and the study of the host specificity of the recently described species *Herpetomonas tarakana*, isolated from a cockroach. My findings were partly used in the already published study “Diversity of trypanosomatids in cockroaches and the description of *Herpetomonas tarakana* sp. n.”; however the thesis continues and further develops the research on this topic.

Key words: Trypanosomatida, cockroach, host specificity, ultrastructures, flagellum