

Abstract:

Hematophagous arthropods that are involved in transmission of many infectious diseases have profound importance in human and veterinary medicine. Bloodmeal identification considerably contributes towards better understanding of vector-borne diseases and vector-host interaction. It reveals epidemiologically significant data on reservoir hosts and degree of anthropophily of studied arthropods. Methods of bloodmeal identification evolved from field observations, serological and DNA-based methods towards protein analyses. Nowadays, the most frequent methods are DNA-based methods but new methods are still being developed.

This bachelor thesis summarizes and compares used methods with the primary focus on phlebotomine sand flies, which are involved in transmission of leishmaniasis.

Key words: sand flies, bloodmeal identification, hematophagous arthropods, analysis