Abstract

The genus *Leucocytozoon* is a bird parasite. Its hosts constitute usually of representatives of the Falconiformes group and hawks (Accipitridae). The vector of this parasite are blackflies (family Simuliidae). This thesis brings an overview of species of the genus *Leucocytozoon* so far detected in birds of prey. The thesis focuses primarily on methods of detecting *Leucocytozoon* in hosts. Traditionally, this genus has been described on the basis of its morphological characters observed via microscope. With the discovery of polymerase chain reaction method (PCR), the detection possibilities expanded and allow us to study this parasite on molecular levels. The thesis contains a basic overview of detection methods, characteristics of their principles and outlines their strengths and weaknesses regarding the practical applicability as well. Based on that, the microscopic approach alongside with the detection based on molecular methods is recommended.