

## Abstract

Blackflies are globally distributed small flies belonging to the order Diptera, known as common nuisance for humans and vectors of certain parasites. The most commonly transmitted parasites include the genera *Onchocerca*, *Leucocytozoon* and *Trypanosoma*. For humans the most significant species is *Onchocerca volvulus*, which causes onchocerciasis (or "river blindness") in tropical areas. This thesis is about faunistics of blackflies in the Czech Republic, where was described 45 species of these flies to this date. First mentions of the family Simuliidae are from 19th century. More specific studies about these arthropods have been published since the 1950s and the main concern of these studies was to study blackflies at specific locations. More recent studies put focus primarily on blackflies as vectors. Host preferences are an important aspect in the characterization of blackflies and all vectors in general. Host preferences of blackflies are highly variable among species, ranging from ornitophilic blackflies tied strictly to a single host species (*S. euryadminiculum* with specificity on common loon) to opportunist species feeding on both mammals and birds (*S. vernum*). Host preferences have been addressed in only small number of studies. Classic method used for determination of host preference is identification of engorged blood from host species. In this thesis we decided to determine the host preferences by method consisting of identification of blood parasites, which tend to be highly specific to their hosts.

**Key words:** blackfly, host, blood parasite, host preferences