

## **Abstract**

Sand flies (Diptera: Psychodidae) are important vectors of protozoan, bacterial and viral pathogens causing diseases in humans and domestic animals. This thesis summarizes the current knowledge on sand fly-borne viruses, their distribution in the World, infection symptoms and life cycle in the nature. These viruses are transmitted by sand flies of genera *Phlebotomus*, *Lutzomyia* and *Sergentomyia* and they can be found on every continent except for Antarctica. They belong into four families, Bunyaviridae, Rhabdoviridae, Reoviridae and Flaviviridae, the most known and widespread is genus *Phlebovirus* from the family Bunyaviridae. Some of these sand fly-borne viruses cause febrile illness, sometimes accompanied by acute meningoencephalitis (e.g. Toscana virus), while the others have not been proven to cause any disease in vertebrates. Animal reservoir of most of these viruses has not been found yet.