Sand flies, members of the subfamily Phlebotominae do not occur in the CzechRepublic, but as near as in the Mediterraneantheir fauna is quite abundant. Sand flies can be found approximately between 50°N and 40°S. Species of genus Phlebotomus, Sergentomyia and Lutzomyia include medically and veterinary important vectors of viral and bacterial diseases as well as leishmaniasis, one of the most important human protozoal diseases.

321 years have passed since the first sand fly was described, but only 110 years ago intensive taxonomic work began. Over the years many classification systems have been proposed, mainly based on division of morphological characters. The classification is not clearly settled even after several taxonomic revisions and many questions remain, especially about genus Sergentomyia, which is repeatedly mentioned in connection with transmission of mammals' leishmaniasis.

This bachelor thesis gives contemporary summary of taxonomic knowledge of sand flies; special attention is given to genus Sergentomyia.