

Abstract

The bachelor thesis deals with a special sebaceous organ that probably serves as a chemical communication means with four species of *Apodemus* field mouse – *A. flavicollis*, *A. sylvaticus*, *A. agrarius* and *A. microps*. This organ is found on the ventral side of a tail, so it is classified as a caudal organ. It consists of significantly enlarged sebaceous glands. It is particularly developed mainly with males; however, both females and infants have it as well. Its morphological structure has the same base regardless of the species, gender, and/or age; however the extent of development varies among species. The organ releases a secretion whose chemical content is unknown so far. Thanks to the gas-liquid chromatography, researchers have found out that there are both variations in the secretion contents among individual species, as well as within the same species. This kind of secretion is basically a characteristic feature of an individual, as it bears information about the species, gender, age and even the population affiliation. Functions of the organ stay unknown as well. It might serve to mark the territory, to play a role in social interactions (i.e. agonistic behaviour) and/or to be an important part of copulatory behaviour.