

## **Abstract**

The thesis brings overview of main taxa of soil organisms. It describes in detail their trophic and non trophic interactions that contribute to organic matter decomposition in soil. In particular soil food web and behavior of fungal and bacterial channel of food web is described in relation to organic matter decomposition, soil formation and humus formation.

This work contains also experimental work dealing with interaction of soil microscopic fungi and invertebrates. Food preference and suitability for development of three fungal species growing on three different litter types was studied. Litter was more important for food preference and food suitability. There were disproportion between litter suitability and litter preference. In particular oak was not preferred by adults but very suitable for development.