

Abstract

This master thesis deals with succession and succession mechanisms of beetles (Coleoptera) on carrions of small vertebrates. As a model sample of small carrion a small mouse of weight 20 grams was chosen. In 2014 two experiments occurred. The first one studied the succession of a beetle community in dependence on seasonality and time of death of the sample. The second experiment was aimed to survey the blocking effect of an early insect succession on the final beetle community composition on carrions. It turned out, that during decomposition of the carrion the overall amount of beetles raised equally to the guild of necrophagous beetles. Change of the species spectrum during succession was not statistically confirmed. On the other hand, the effect of seasonality was clear as during the season the abundance and the amount of species increased. The proportion of trophic guilds changed significantly, necrophagous beetles were the most dominant part of the community towards the end of the season. Equally, the taxonomic composition of the community also changed during the season. The seasonal dynamics of carrion beetles was clear; *Nicrophorus vespillo* (Linnaeus, 1758) and *N. investigator* Zetterstedt, 1824 showed their peaks in spring and summer while *N. humator* (Gleditsch, 1767) and *N. vespilloides* Herbst 1784 in autumn. Beetles of genus *Thanatophilus* Leach, 1815 were also dominant in autumn. Blocking of the early beetle succession for one day had no effect on the beetle community composition, only the abundance was lower and the succession postponed. Quite contrary, blocking for the period of three and six days showed significant changes in the composition and abundance of the community as the covered traps were more attractive for necrophagous beetles and predators.