**SLIME MOULDS IN RELATION TO OTHER ORGANISMS SHARING THEIR MICROsites**

**Summary**

Slime moulds form a peculiar group of organisms. Their presence is most often noticed thanks to formation of sporangia slightly similar to fungal fruitbodies. Only few species, however, produce big sporangia, sometimes even exceeding 10 cm in diameter. Most taxa form very tiny, variously shaped fructifications. Noteworthy, the formation of fruitbodies is preceded by vegetative stage of development, completely different, characterized by slimy multinuclear mobile plasmodium and taking place deep in a substrate. Such different forms of one organism are influenced by various factors during the life cycle. Interrelations between slime moulds and many other organisms (e.g. insects, snails, other invertebrates, as well as fungi, algae and vascular plants) can be observed. Sporangia of slime moulds are often found on thalli of mosses and stems of vascular plants as a result of plasmodium migration without parasitic interactions. Young developing sporangia are used as source of food by small invertebrates, while mature structures can serve as their breeding place. Inside big aethalia of *Reticularia* sp., *Amaurochaete* sp. or more rarely *Lycogala* sp., the presence of coleopters (*Anisotoma* sp.) was observed. During long rainy periods sporangia of myxomycetes are often infected by fungi, with their hyphae not only covering the surface, but also overgrowing the fructifications of slime moulds.