

ABSTRACT

In this thesis, the succession of spider assemblages in five limestone quarries of different ages in Bohemian Karst has been studied. The main goal of this paper was studying changes of spider assemblages along successional gradient. Furthermore, different environmental factors affecting spider communities and also assemblages of spider communities in different terraces of the quarry have been studied. Standardized methods (pitfall traps, hanging desk traps, shifting leaf litter, sweeping of herb vegetation, and beating shrubs) have been used for recording the highest possible richness of spiders. The results showed that position of the terraces and the age of the quarry do not affect species richness and density. Species density of epigeic spiders increased significantly with number of the plant species. The results showed that spiders do not have their own succession, but they are following vegetational succession. The environmental factors which affect species composition of spiders from the pitfall traps are position of terraces, shading and moss cover. Although the age of the quarry was insignificant for spiders from pitfall traps, every quarry was inhabited by different spider communities. Shrubs and tree-dwelling spiders showed correlations with the age of the quarry. Data recorded from earlier collections enabled comparison of succession of spider assemblages for a longer period of time.