

Abstract

This thesis summarizes environmental factors which influence both species richness and abundance of mollusc fauna, and it also describes molluscs' diversity of the Czech Republic mountain areas. The abundance and species richness of mollusc assemblages are influenced mostly by accessibility of Ca together with correlated pH of soil, humidity, woodland structure together with character of litter, decomposed wood amount, and altitude. Results of number studies on these topics do not correspond to each other. The species diversity of twelve mountain areas in the Czech Republic were described and 182 species (about 74 % molluscs fauna in the Czech Republic) were recorded. While east-west gradient is apparent for Carpathian species spreading, Alpine species are spreading to the north randomly. Western mountains contain higher proportion of species with wide zoogeographical range.