

Abstract

The most important abiotic factors of serpentine habitats are lack of water, low content of main nutrients, high magnesium content and a high concentration of heavy metals. Thus, serpentine soils are a very stressful environment for most plant. For their exceptional characteristics, serpentine sites are suitable for the study of evolutionary processes. The present literary review contains a summary of the main topics related to the issue of plant populations growing on serpentine bedrock. In addition, the mechanisms of the local adaptation and the conditions that allows these processes are analyzed. At the end of the thesis, the ecological aspect of the habitats is discussed, which can serve as areas with reduced competition and provide the living space to the competitively weaker species. Due to the specific conditions at the serpentine areas, these areas are characterized by a higher level of endemism and often serve as a refuge for relict species.

Keywords: Serpentinophyte, serpentine, serpentine endemism, local adaptation, substratum specialization