

Abstract

Studies of the occurrence of montane and boreomontane species in ravines of the sandstone landscape are scarce and the occurrence of these species are explained by the presence of temperature inversion. The question is, which factors limit the occurrence of these species in ravines with temperature inversion. The aim of this diploma thesis is to reveal factors that influence the occurrence of *Huperzia selago* in inverse ravines of sandstone landscape. This work uses a habitat variables recorded directly for populations of *H. selago* and variables derived from a digital elevation model. These derived variables are also used for creation of two predictive models of geographic distribution of *H. selago* in the National Park Bohemian Switzerland. When we summarize the most informative variables of predictive models and habitat conditions significantly different from control sites, we get the typical habitat of *H. selago*. Such sites will likely be found on the rock at the bottom of the valley. Factors that influence the suitability of habitat are: moisture, vegetation type, slope, and distance to the bottom of the valley.