

**Abstract:**

Endemism is a biogeographical phenomenon where a taxon is restricted to a certain area and does not occur elsewhere. The study of the ranges of such taxa may provide new insights into their evolutionary history or the history of the locality where they are currently found. In the European context, mountainous areas are more interesting from this point of view, because they are characterized by a higher degree of endemism than the adjacent lowlands.

One method how to effectively describe the range of an endemic species is species distribution models, SDMs. Based on these models, we are able to quantify the relationships between species and environmental components or predict the occurrence of species to new spatial and temporal locations. The resulting models have the potential to be incorporated into a wide range of other studies.

The aim of this bachelor thesis is to summarize the issues involved in this type of ecological modeling in the context of mountain endemic plants. Emphasis is placed on the individual specifics of the biological and environmental data used for this purpose and on the analysis of the different statistical methods and furthermore on the characterization of endemic taxa of the Balkan Peninsula, which should be the focus of a follow-up thesis.