Abstract

The objective of this bachelor thesis is to review possible mechanisms and principles of canopy-tree change in pioneer forests. In the first part of the thesis I characterized this type of forests from the view of the composition, origin and structural and functional characteristics. In the next part I was trying to draw up the possible principles of canopy-tree change. This part is built up on three principles of succession processes - disturbances, species availability and species performance. The practical part is also a part of this thesis. Here, I focus on the gap-phase regeneration in the pioneer stages of secondary forests originating on abandoned fields in Doupovské Mountains. The gaps represent one of the mechanisms which drive the dynamics of temperate forests and canopy-tree changing in these forests. The practical part describes the main gap characteristics like the size, frequency, their proportion of the pioneer forests, the most common gap-makers, and common causes of origin. At the same time, the data about the tree seedlings (quantity and species diversity) in gaps were collected to test the hypothesis about the effect of gaps on the understory tree species. These results provide only a light view on gap dynamics in the pioneer forests.

Key words: pioneer forests; secondary forests; disturbance; gap-phase regeneration; Doupovské Mountains