

## SUMMARY

This thesis is divided into two separate portions. The first part covers my own lichen floristic exploration of the Károvské údolí locality stretching out along the southern limits of Prague near Zbraslav. The location is formed by relatively steep slopes with orientation to North and South. Natural conditions are characterised by communities of xerothermic steppes and oak groves with alder clumps and hornbeams prevailing in lower parts along the Károvský potok stream. Geologically, the parent rock consists of shale rocks of acid chemical composition.

During my search, I recorded 116 lichen species. Among them, saxicolous and terricolous lichens characteristic of acid rock outcrops and xerotherm steppes prevail. During exploration, I found also the critically endangered (CR) species *Peltigera elisabethae*, endangered species (EN) *Flavoparmelia caperata* and representatives of the genus *Verrucaria*, tolerant of long-term freshwater flooding – *V. cf. andesiatica*, *V. aquatilis* and *V. funckii*. One of species discovered, *Pertusaria flavicans*, has not been recorded in the Czech Republic to date. This locality is home to a summer house resort which has expanded the list of lichens by basophilic species which inhabit anthropogenic substrata. My master thesis is the first thorough research of the lichen flora in this area.

The second part has didactic objectives. It contains excerpts from 101 textbooks of Biology (Science) published over the period of latter part of the 19<sup>th</sup> century through to the 21<sup>st</sup> century dealing with lichens. As a part, I prepared laboratory tasks and worksheets with tasks set on the lichen subject with the purpose of subsequent use in training. In total I completed 5 research protocols with laboratory tasks, 4 worksheets with tasks and 1 didactic game. The resulting study materials were compiled on basis of the new obligatory curricular documents, particularly the Framework training programmes and the requirements of the common part of the new General Certificate of Education tests (Czech Republic). I verified feasibility of the tasks during my stays.

**Key words: acidophile species, ecology, Károv (Prague, Zbraslav), laboratory tasks, lichens, textbooks, xerotherm communities**