Abstract

The objective of my bachelor's thesis is to review available literature on biotic interactions in epiphytic lichen communities. At first the epiphytic habitat is defined. The next part deals with the interactions, specifically competition and predation. Lichens compete for light and space among each other and with other cryptogams at the same time. There are a few known mechanisms of competition, most of them being based on overgrowing of thalli and chemical action. Thallus morphology, growth rate and content of allelochemicals are the main traits determining success in competition. Competitive abilities depend on various abiotic factors as well as on total composition of the community. Lichens are forced to invest in chemical defence by the presence of herbivores and parasites. Distribution of the defence substances matches the optimal defence theory. There is numerous evidence that biotic interactions modify characteristics of both individuals and species, mainly considering the secondary metabolites content and the width of the realized ecological niche. Competitors and predators may determine species distribution. The thesis summarises the knowledge of the mechanism, character and impact of the competition and predation in epiphytic lichen communities.

Key words: lichens, cryptogams, epiphytes, competition, predation, herbivory, parasitism