

Herbivory is one of the key interactions of plants, which can result in important consequences for their population dynamics and which can also exert selection pressure on evolution of their traits. This bachelor thesis is concerned with insect herbivore influence on plants at the levels of individuals and population dynamics. It also focuses on interactions of occurrence of herbivory with environmental conditions. This is demonstrated on the family Lycaenidae (Lepidoptera) which is highly specialized in terms of host plants with several cases of coevolution having been described. Some Lycaenid species also evolved associations with ants probably, which help to increase their range of host plants. The relationship of feeding strategies and myrmecophily is illustrated on Czech species of Lycaenidae. The last part focuses on the Great Burnet (*Sanguisorba officinalis*) and its European-wide declining monophagous herbivore Dusky Large Blue (*Phengaris nausithous*), their ecology and conservation. Ecology of this study system will be the main topic of the intended master thesis.