

Abstract

Invasive plants worldwide cause considerable ecologic and economic damage. In order to prevent this, it is necessary to understand the mechanisms of plant invasion.

One of the explanations of the success of invasive plants is their effective use of feedback interactions between plant and soil. Plant-soil feedback greatly affects the prosperity of a plant. While in most plants the intraspecific feedback is negative, invasive species show less negative or even positive intraspecific feedback. This may be due to the fact that invasive plants have the ability to alter soil composition to their advantage. This work deals with the individual components of plant-soil feedback, abiotic and biotic factors influencing the process, and summarizes their importance for plant invasion. The subject of the following diploma thesis will be a research on the significance of the individual biotic and abiotic components of the plant-soil feedback and assessing their importance for plant invasion.

Key words: plant invasions, plant-soil feedback, mutualism, biotic factors, abiotic factors