

Plant-soil feedback is known as the interaction between plant and soil. There is the feedback, when plant affect soil during their roots and on the other side soil affect growth and development through the change of their biotic and abiotic conditions. The plant-soil feedback is important mechanism of affecting plants or their competitive plant species through the soil. In this thesis I would like to summarize the functioning of the plant-soil feedback and factors which influence the feedback, the effect of feedback on the species diversity of plant communities, role in secondary succession, invasion and during coexistence of different species. I would like to point out, in which cases this feedback was confirmed experimentally and which experimental methods are used in the study of plant-soil feedback.