Abstract

Mycorhizal symbiosis, mutualistic relationship between symbiotic fungus and plant roots, is ranked among important interspecies interactions. It is indicated that about 90% terrestrial vascular plants live in this symbiosis. Arbuscular mycorrhiza (AM) is the most often occurring type of mycorrhiza and simultaneously the most often occurring type of symbiosis of higher plants. Approximately 80% of all of plant species form this symbiosis. By symbiotic coexistence with fungus plant often gains benefits as for example higher tolerance against stress factors, resistance against pathogens or improvement of nutrient uptake. In recent years in series of works is detected that mycorrhiza positively influences production of plant secondary metabolites. This influence can display quantitativelyby increase of metabolite in plant and also qualitatively by change spectrum of substances produced. These substances can have importance in different spheres for human. Medicinal research regularly extends spectum of substances with bioactive effect which have origin just in the plant secondary metabolism.

Target of this thesis is, by the form of literary retrieval, to create an overview of recent state of research regarding of influence of mycorhizal symbiosis on content of secondary metabolites in plants, especially those with a bioactive effect. In the thesis will be described a significance of mycorrhizal symbiosis and what is it´s influence on plants. It will be mentioned what ways are single substances of the secondary metabolism influenced and suggested possible mechanisms and reasons of this influences.