Lukáš Trakal: Monitoring of the dynamics of soil water retention in the process of mycorrhizal symbiosis using TDR (time domain reflectometry) method,
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Ústav hydrogeologie, inženýrské geologie a užité geofyziky
Univerzita Karlova v Praze, Přírodovědecká fakulta

# ABSTRACT

The mean target of this diploma work was to prove anticipated influence of arbuscular mycorrhizas on selected physical and chemical parameters of soil. The results of the measurements imply that mycorrhiza has positive influence on plant's growth and if mycorrhiza surrounded roots of plants, the whole system use nutriments more economically. If we introduce parameter „mass humidity of total biomass", defined as ratio between the weight of water in biomass and the weight of desiccated biomass, so we discover, that this parameter is higher in nonmycorrhizal plants.

These facts can be interpreted so, that the whole system (plant + mycorrhiza) sucks more quantity of water from the soil owing to the greater volume of the whole biomass (mass, height) and thanks to presence of mycorrhiza, which enlarges root's system of plant and facilitates sucking of water from substrate. The greater value of the parameter „mass humidity of total biomass" by the nonmycorrhiza's plants is most probably induced by their lower evapotranspiration.