

Abstract

Mycorrhizal fungi are known as symbionts of many plant species. Fungi provide better access to mineral nutrients and water for host plants, and in return fungi receive carbohydrates from plants. Although a significant proportion of organic matter is bound in the root biomass, little is known about the factors affecting root decomposition. Understanding the process of root decomposition and the factors that affect it, is important to us. Knowledge of root decomposition helps us understand the carbon cycle and answer questions about carbon sequestration in soil.

This Bachelor's thesis is focused on the importance and function of mycorrhizal fungi during root decomposition. It describes the influence of mycorrhizal fungi on the decomposition of fine roots colonized by mycorrhizae, the ability of mycorrhizal fungi to decompose organic matter and influence the decomposition rate through competition with saprotrophic organisms.

Keywords: mycorrhizal fungi, roots, decomposition, rate, organic matter, soil, importance, carbon sequestration