

Fine roots contribute significantly to the global carbon and water cycle. Their dynamics and changes that may occur are therefore key players in these processes. Climate change significantly affects the dynamics of fine roots, and since individual factors are in interaction and may also function against each other, the overall response of the root system to climate change is difficult to predict. However, understanding these processes is essential for creating more accurate models to predict the response of ecosystems to a changing climate. This bachelor's project is a literature review that summarizes the knowledge about the effects of elevated temperature, CO₂ concentration and drought on the dynamics of fine roots in temperate forests. Also, it provides a comprehensive view of the interaction of all three factors and considers some issues open for further research.