

Abstract:

The plant takes up mineral nutrients by its roots from the soil. Minerals are available in the soil solution in the form of ions and can be translocated across the cytoplasmic membrane into the cell of the plant. If the plant is alone, we talk about direct pathway. In case of some minerals, which are not available so easily, the plant finds solution in mutualistic relationship - the mycorrhizal symbiosis. By mycorrhizal pathway the nutrients come from much larger volume of soil, than the plant could reach, and intake of low-mobile elements, like phosphorus, becomes facilitated. How is the phosphorus taken up through mycorrhizal pathway, how is it regulated and accessory knowledge are the topic of this bachelors thesis.