

Abstract: Non-boreal podzol is azonal type of podzols in lowlands of middle latitude, for which is especially typical translocation of organics compounds from soil surface into spodic horizon. During this translocation a considerable accumulation of organic matter is developed. Carbon estimation in Czechia is executed in depth upper 30 cm only, and that is why the carbon pools are underestimated in podzols. In this bachelor thesis was executed general estimation of soil organic carbon (SOC) by means of methods used in CzechCarbo project, which led to result of 56,4 tC/ha. This mass is equivalent to upper 30 cm layer. It means that if the spodic horizon is not included in SOC estimation, it could cause misrepresentation in soil organic carbon estimating.

Keywords: podzols, soil organic matter, soil organic carbon, carbon sequestration, soil carbon estimating.