

**DYNAMICS OF TOTAL ORGANIC MATTER CONTENT AND MOBILE AND INERT
FORMS OF SOIL ORGANIC MATTER IN LOAMY-SAND SPODOSOL WITH
DIFFERENT LEVELS OF FERTILITY**

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Seasonal dynamics of total organic matter (C_{tot}) content as well as the dynamics of mobile and inert forms of soil organic matter in the loamy-sand soddy podzolic soil of low and high fertility were measured. Average content of C_{tot} was significantly lower ($p < 0,05$) in the soil with low fertility than in the soil with high fertility during the period of observation. The Enrichment Factor (coefficient) (E_{soc}) was used for assessment of carbon accumulation in the silt particles (< 1 mkm) of soils. The Factor was higher than 1 for all studied soils: the enrichment of inactive part of soil organic matter was observed. Maximum carbon accumulation in the soil silt fraction was observed in the soils to which mineral N-fertilizers were applied.

Keywords: *light fraction of soil organic matter, silt particles of soils, soil organic matter.*