Microbial Biomass and Biological Activity of Dark Gray Forest Soils upon Application of Sewage Sludge

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Abstract

The effects of municipal sewage sludge on biological properties (the microbial biomass, soil respiration rate, and nitrogen fixation activity) and the concentration of heavy metals in the dark gray forest soil were studied. Three kinds of sewage sludge - untreated sludge, sludge subjected to aerobic fermentation, and composted sludge - were applied. Judging from data on ecophysiological quotients, the application of sewage sludge causes relatively weak changes in the microbial activity and microbial biomass of the soil studied.