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The using of vermiculture in the purification of sewage sludge: heavy metals in sewage sludge of municipal wastewater treatment plants.

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Keywords: sewage sludge, soil, environmental pollution, heavy metals, vermiculture, earthworms, Eisenia foetida, X-ray fluorescence analysis, concentration of the chemical elements.

Abstract

The chemical composition of sewage sludge from municipal wastewater treatment plants in Naberezhnye Chelny and experimental substrates on the basis of sewage sludge and garden soil from Kazan territory, which contained earthworms was studied. The peculiarities of the chemical composition of substrates, in which the cultivation of *Eiseniafoetida* was carried out at varying degrees of humidity were investigated. Highlighted the heavy metals – lead, chromium and zinc, which should be given special attention in biotechnological purification of sewage sludge through vermiculture.

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