
The Use of Grain Seeds in Environmental Assessment of Urban Soils Depending on the Level of Anthropogenic Load

A. Z. Makaeva, Z. P. Okazova, A. V. Kozachek

*Chechen State Pedagogical University, Grozny, Chechen Republic, Russia;
Tambov State Technical University, Tambov, Russia*

Keywords: bioindication; biomonitoring of the state of the environment; indicator plants; level of territory development.

Abstract: The possibilities of using bio-indication methods in assessing urban soils in Grozny have been studied. The study was carried out according to the methodology for assessing the total phytotoxicity of the Parker C. soil in the period 2016 – 2019. Soil samples were taken layer by layer on the territory of Grozny. It has been established that herbaceous plants, as a part of the biological resource of an urban area, are quite sensitive to environmental pollution, which is determined by different levels of development of the territory. This is manifested in the form of a slowdown in the growth of both the aboveground and underground parts of plants. Statistical analysis showed the presence of an inverse correlation between the level of development of the territory and the germination of seeds of indicator plants.

© А. З. Макаева, З. П. Оказова, А. В. Козачек, 2020