COPPER, CADMIUM AND ZINC CONTAMINATION IN THE ROAD DUST AND THEIR TOXICITY DETERMINED USING BIOLOGICAL METHOD

Summary

Anthropogenic sources of heavy metals in the environment are present in urban areas, industrial centers and in areas of human activity. Road transport contributes to the increasing level of heavy metals in ecosystems. Many toxic substances including aromatic hydrocarbons and heavy metals (i.e. Cu, Cd, and Zn) occur in road dust. The ranking of these metals from largest to smallest content in road dust is: Zn>Cu>Cd. Toxic effects of pollutants directly into the human body is difficult to estimate. In this case, the use of bioindicators is an invaluable. The bioindicator means plant species and/or animals showing sensitivity and characteristic responses to a particular factor. One of the methods used in toxicology are bioassays in which criterion for assessing the toxicity of poisons is lethal toxin concentration required to kill half the members of a tested population (LC 50) after a specified period of exposure in air (mg/m^3) or water (mg/dm^3).