

## Development of soil pollution evaluation method using luminous bacteria -Class II Specified Chemical Substances-

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Recently, a lot of soil pollutions with heavy metals or volatile organic compounds have been found in many parts of the world. The soil pollution survey and the countermeasure are required socially. The bioassay with luminous bacteria is becoming the center of attention as a simplified detection technique or an acute toxicity evaluation method on pollutants.

In Japan, 9 heavy metals (Cd, Pb, Hg, Se, Cr<sup>6+</sup>, As, F, B, CN) have been regulated as Class II Specified Chemical Substances by Soil Contamination Countermeasures Act.

In this study, the bioassay tests using the luminescent bacteria were carried out on these nine substances, and the results are reported.

Keywords: bioassay, luminous bacteria, Soil Contamination Countermeasures Act, Class II Specified Chemical Substances, heavy metals