

# Polynuclear aromatic hydrocarbon content in Bucharest soils

Carolina CONSTANTIN

Research Institute for Soil Science and Agrochemistry, 61 Marasti, Sector 1, 71331 Bucharest, Romania,  
(e-mail: carolina\_constantin@yahoo.com)

## Abstract

Polynuclear aromatic hydrocarbon (PAHs) represents a group of highly carcinogenic and mutagenetic organic contaminants. Knowledge of soil contamination with PAHs is needed to avoid groundwater, river and marine water contaminations, plant uptake and human exposure.

Bucharest is located within the Romanian Plain on the bottom land and terraces of the Dambovita River. The polluting emissions generated by the chemical industry, power stations and automobile traffic have contributed to soil contamination with PAHs. The uncontrolled disposal of urban wastes in inadequate dumps around the city and burning them has contributed, also, to environmental pollution around these dumps.

This paper presents PAHs values range between normal content and warning threshold values for soils with sensitive and less sensitive utilizations according Romanian Guideline Values.

Key words: Soil pollution, polynuclear aromatic hydrocarbon, urban soils, agricultural soils, polluting emissions, Romanian Guideline Values, pollution level

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