

Polycyclic Aromatic Hydrocarbons Uptake by Selected Plants in the Vicinity of Highway – Mariusz Kluska

Summary

The presents paper determination of 16 PAHs in collected samples of soil or plants and investigation of sorption process dynamics. The investigation included plants growing on shoulder of road and on cultivated field. As accumulations of quality of environment cabbage, parsley, carrot, cucumber, dandelion (*Taraxacum officinale*), plantain (*Plantago major*) and colfsfoot (*Tussilago farfara*) were used. The samples were collected at a defined distance to the main road E8 (Moscow – Berlin), near Siedlce. A total PAHs concentration in soil and cabbage samples collected in the distance 5 m to the road was 1.51 µg/kg (total carcinogenic PAHs = 556.03 ng/kg) and 358.90 ng/kg (total carcinogenic = 101.17 ng/kg) respectively. On the other hand, total PAHs in samples collected in 15 m distance to the road was 136.46 ng/kg for soil (total carcinogenic = 27.30 ng/kg) and 87.20 ng.kg for cabbage (total carcinogenic = 12.17 ng/kg).