

ORGANOCHLORINATED RESIDUES IN SEDIMENTS OF BUNA RIVER MBETJET E PESTICIDEVE KLOR-ORGANIKË NË SEDIMENTEVE TË LUMIT BUNA

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ABSTRACT

In this paper are shown data for concentrations of chlorinated pesticides in two sediment samples of River Buna. Sediment sample were taken 600 and 1000 m of river outlet using carrot tube. Depth of sediments sampled were 30 cm. Samples of sediments were divided in fractions of 5 cm. Ultrasonic extraction was used for extracting pesticide residues from fraction sediment river samples. Clean-up procedure was performed using firstly metallic mercury followed a second clean-up procedure in an “open” florisil column. The organochlorine pesticides detected were HCHs (a-, b-, - and d-isomers) and the DDT-related chemicals (o,p-DDE, p,p-DDE, p,p-DDD, p,p-DDT), hexachlorobenzene (HCB), heptachlor, heptachlor epoxide, methoxychlor and mirex. Analyses were done with capillary column HP-5, 30m long, 0.32mm internal diameter, 0.25 µm film thicknesses on a gas chromatograph HP 6890 Series Plus, with µECD detector. The found concentrations of the chlorinated pesticides were in a regression linear curve; higher in depth and lower in surface of sampling sediments. These data suggest the use of these pesticides in adjacent agricultural areas.

Keywords: *lumi Buna, organochlorinated pesticides, sediment analyze, GC/ECD*