

## ORGANOCHLORINE PESTICIDES RESIDUES IN SOIL OF SOROCA DISTRICT, REPUBLIC OF MOLDOVA

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**Abstract.** The level, composition, and distribution of hexachlorocyclohexane (HCH) and dichlorodiphenyltrichloroethane (DDT) residues were determined by GC-ECD technique in soil samples from the Soroca district, Republic of Moldova. The concentrations of DDTs and HCHs were up to 1100 and 640 mg/kg, respectively. The obtained results indicated that in 77% of analysed soil samples the (DDE+DDD)/DDT ratios showed aged sources of DDT pollution, suggesting that in the studied area, the DDT residues have been transformed significantly into their degradation products. The  $\alpha$ -HCH/ $\gamma$ -HCH ratios were generally high (in the range of 1-28) suggesting that technical HCH is the main source of contamination. The high concentration and the degradation rates of pesticides in soil suggest that the contaminated sites are acting as continuous sources of pollution for the environment.

**Keywords:** pesticide, hexachlorocyclohexane, dichlorodiphenyltrichloroethane, soil, Republic of Moldova.

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