

IMPACT OF UNCONTROLLED WASTE DUMPING ON SOIL CHEMICAL AND BIOCHEMICAL PROPERTIES

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Abstract: The study makes an attempt to assess the impact of uncontrolled waste dumps on soil chemical and biochemical properties. Investigations were carried out on five waste disposal sites situated in the south-eastern outskirts of the city of Lublin. The samples of soils collected from the adjacent arable land were used as reference material. In soils of four landfills, which were established relatively recently (four to five years ago); several times higher activity of the examined enzymes (dehydrogenases, acid phosphatase, basic phosphatase, urease, protease) than in the soils from the adjacent cultivated land was determined. Opposite trends were found in the case of a waste dump established 20 years ago. The determined lack of negative influence of the examined waste dumps on the soil chemical and biochemical properties of the adjacent arable land shows that the range of the contamination effect on the surrounding area was limited.