Lead contents and magnetic susceptibility in alluvial soils of the Štiavnica brook

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A b s t r a c t : The results of field and laboratory research showed that lead contents in soils gradually decreased with increasing distance regardless of the increase in soil organic matter and clay fraction contents. The same trend was observed for the changes in magnetic susceptibility values, which highly correlates with lead contents in monitored soils. The obtained results indicate that the measurement of magnetic susceptibility in the alluvium of the Štiavnica brook can be a very perspective method for soil survey aimed by the identification and mapping of soils highly contaminated at heavy metals.

Key words: magnetic susceptibility, lead, soil contamination, alluvial soils

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