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**EFFECT OF LONG-TERM FERTILIZATION ON THE AVAILABLE TOXIC ELEMENT CONTENT OF DIFFERENT SOILS**

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**ABSTRACT**

The National Long-Term Fertilization Trials were set up more than 30 years ago and in that time soil and water protection and environmental relations of fertilization had not been the direct aim of research. From the agricultural load the use of phosphate fertilizers gets outstanding attention because of the accumulation of toxic heavy metals. The aim of our research was to study the influence of long-term, intensive fertilization on the available toxic element content and accumulation in different soils. Samples were collected from 8 experimental sites with equal treatments from the depth of 0-20 cm.

The so-called available, 0,1M KCl + 0,05M EDTA extractable element content was determined. In the paper the results of Cd, Pb, Cr, are discussed in details. The experimental results of toxic elements show that the 28-year old constant fertilization treatments did not result higher values than the accepted concentration level, even they did not approach it.

**KEY WORDS:** long-term trials, fertilization, available, toxic elements, soil

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