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# VYUŽITIE SLOVENSKÝCH ZEOLITOV K OBOHACOVANIU PÔD ZINKOM A ZNIŽOVANIU HLADÍN KADMIA

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## ABSTRACT

Bujnová A., Koprda V. & Lesný J.: **The exploitation of slovak natural zeolites and zeolone to enrichment of soils with Zn and to decrease of Cd levels**

The comprehensive knowledge of sorption characteristics, as well as the sufficient understanding of sorption processes, fulfilled by natural and synthetic zeolites and their chemically modified forms, belong to the basic necessities of their utilization as materials predestinated for increasing some nutrient concentrations and/or decreasing the toxic metal's concentration in soils. This research was undertaken to quantify the ability of a synthetic zeolite and two in Slovakia occurring zeolite tuffs (in their natural and modified forms) to adsorb zinc and cadmium. The studied adsorption isotherms have been performed using metal concentrations in solutions ranged from 0,1 to 50 mmol dm<sup>-3</sup>. The applied solid to liquid ratio was 10 g dm<sup>-3</sup>. The results suggest that clinoptilolite and zeolon P4A have a high poten-