

Changes in forms of Lead and Manganese with passage through the intestinal tract of *Pontoscolex corethrurus* (Oligochaeta: Annelida)

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Mining and industrialization are major sources of environmental pollution and soil contamination, thus affecting soil food webs. Earthworms are sensitive to soil contaminants and can be used as bioindicators of soil pollution with heavy metals. On the other hand, their bioturbating activities in soils can alter soil chemistry and the availability of various elements. However, little is known regarding the capacity of tropical earthworms to alter the forms of heavy metals in soils. Therefore, the present study was undertaken to evaluate the effect of the passage of soil containing different amounts of heavy metals through the intestinal tract of *Pontoscolex corethrurus* on the forms of lead and manganese. The transformation of labile forms to more stable forms was assessed using the sequential extraction of Pb and Mn on five soils from a lead mining site in Adrianópolis country, Parana State, Brazil. Five adult worms were incubated in each plastic container with 300 cm³ of each soil type ($n=3$ replicates), maintained at 70% field capacity and room temperature until enough castings were produced for the analyses. Castings and control soil were collected every two days using tweezers and the analyses were performed on uningested soil (control) and casts. Statistical differences between uningested soil and castings were tested using ANOVA and Tukey-tests.