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## Heavy metal contaminants in organic fertilizers

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**Abstract** When using animal manures as organic fertilizers, heavy metal content could influence the soil quality, may contaminate crops and cause health risks to both livestock and humans. The paper aims to report original results concerning Cadmium (Cd), Copper (Cu), Lead (Pb) and Zinc (Zn) occurrence in animal manures collected from a pig farm located in Mihail Kogalniceanu village, Constantza district. Standardised protocols were followed for sample preparation and analysis of metal content. Concentrations of heavy metals have been measured using flame atomic absorption spectrometry (FAAS). In the same time, nutrients have been determined (phosphorus, potassium and nitrogen) in soil and pig manures as well as other soil characteristics (pH, calcium carbonate, salinity, humus) in order to follow the further potential influence of pig manure on the soil characteristics. The results showed that, in the investigated organic fertilizers, heavy metal levels are not higher than the “attention limit” accepted for soil pollution and they can be used for soil quality improvement.

*Keywords:* pig manures, heavy metals, soil, nutrients, FAAS

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