

**DETERMINATION OF HEAVY METALS IN AGRICULTURAL SOILS AND CROP SOILS OF *Solanum tuberosum* FROM THE INTERIOR BAY OF PUNO**

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**ABSTRACT**

The objective of the investigation was to determine the presence of heavy metals (Pb, Cd and As) in agricultural soils and soils for crop of *Solanum tuberosum* of the Inner Bay of Puno; the samples were analyzed using the ICP-OES optical emission spectrometry method to quantify trace elements. The concentration of metals were compared with the parameters established in the ECAs for soil S.D. No. 011 - 2017 MINAM and the CCME. The results show that the soils under study are contaminated by Lead (505,2 mg / kg) and Arsenic, (40,19 mg / kg), exceeding the established parameters; a situation that deserves immediate remediation, concluding that the samples analyzed show tendencies of greater accumulation of lead, arsenic and cadmium as they are found around the oxidation lagoon, which is the main route of contamination, in addition to anthropogenic activity.

**Keywords:** Concentration, Crops, Heavy Metals, *Solanum tuberosum*.

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