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Heavy Metals in Soil and Vegetables in Anadrinia Region as a Result of the use of Pesticides, Herbicides and Fertilizers

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Abstract: In our work, results show that the area where the analysis of soil samples are done by ICP-OES method, generally not show contamination with heavy metals, despite the increased level of arsenic where the maximum value reaches up to 50.23 ppm, but also values of iron concentration are at maximum about 15824.26 ppm. Regarding the level of concentration of heavy metals in vegetables, generally we do not have any pronounced deviation of the concentration of heavy metal analyzed, concern are the high values of lead concentration, where the analysis of cabbage are found values up to 6.38 ppm. Samples of pepper, taken on land planted with this species, indicate the raised value of chromium and lead, as well as the concentration of other metals analyzed are present in the average value. In the analyzed sample of potatoes, show a tendency of the increase of concentration of lead where the maximum values go to 15.22 ppm, at potatoes, we have two types of standards, in the potatoes and peel of the potatoes, but also we have a high values of lead. Cucumbers generally show low values of the concentration of heavy metals. In tomatoes, we have normal values of concentration of heavy metals, apart from a deviation of the concentration of lead in the maximum level of 9.87 ppm at Xërxe village.

***Keywords**: Heavy metals, vegetables, pesticides, herbicides, fertilizers, Anadrinia*

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