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CONCENTRATION OF SOME HEAVY METALS (Cr, Cd, Pb) IN VEGETABLE CROPS PLANTED GROUPS AT SITES ON THE COURSE OF THE ORONTES RIVER IN HAMA - SYRIA

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ABSTRACT

Concentration of heavy metals (Pb-Cd-Cr) was determined, that's most polluted environment and rivers in fourteen varieties of vegetables throughout two growing seasons (2013-2014 & 2014-2015), belonging to the three groups of vegetables (leaves and tuber and fruits), and using atomic absorption device, where the samples were collected from six different locations in Hama, and close to the course of the Orontes River, which vary different in irrigation operations and source of irrigation water. Results of this study showed that no significant difference (P> 0.05) between the types of vegetable groups in the content of heavy elements at each locations seposatly. But it clearly showed the presence of very high significant differences (P <0.0001) in the contents of vegetables from heavy elements collected from sites, this effect is due to irrigation water.

Also, the average concentration of cadmium was higher than the global natural concentrations in accordance with similar studies, the average lead, and chromium were lower than the averages of similar vegetables from other countries.

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