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The contaminative effect of using sewage in agriculture at some parts of northern land of Khouzestan province

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The use of sewage in agriculture in order to provide water and plant nutrition has been common since years ago. The application of sewage will not result in any bad consequences if it is used in an appropriate way by taking into account its observations and relevant standardization. Raw sewage is being used directly in agricultural part in most parts of country at present, so factors and elements that cause complications and disease within chemical and/or biological origin in food cycle should necessarily be noticed. In this research the agriculture lands which were irrigated by sewage in the past years and/ or are being irrigated now were surveyed and some soil and plant samples were taken. They were compared with the resources irrigated with non sewage water. The required investigations were carried out at the effect of using sewage on heavy metals concentrations and endangering food cycles. The results of heavy metals analysis indicated that the concentration of heavy metals such as Cadmium (Cd) and Nickel (Ni) in soil were not more than authorized limits however the concentration of Lead (Pb) had increased the critical limit in relation to check treatment in most treatments. The concentration of Copper (Cu) and Zinc (Zn) are also reported as toxic levels in most treatments.

Keywords: Contamination, Sewage, Heavy metals

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