

Assessment of Pollution Cd, Pb and as in Rice Cultivation in Savadkooh

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Abstract : More than 90 percent of the world's rice is produced and consumed in Asia. Heavy metal contamination of soil and water environments is a serious and growing problem. Toxin by human activities causes pollution in soils so that the intensity of metals in soils was exceeded. This study was done on 7 samples of rice cultivated in Savadkooh of Mazandaran province and soils; they were grown. The amount of heavy metals Arsenic, Lead and Cadmium were measured by atomic absorption. The test results showed that the amount of Lead in rice strain, Tarom A, was 0.768 ppm, the maximum amount of Cadmium in rice strain, Hashemi B, was 0.09 ppm and the highest levels of Arsenic was in red Tarom, 0.39 ppm. According to the results obtained in this study can be found all rice grown in Savadkooh city of Arsenic, Cadmium and Lead, but the measurements are less than specified in the national standard, and their use is safe for consumers. These results also indicate that positive and significant correlation between the studied heavy metals in soil and rice strains that grow there and by increasing the amount of heavy metals in the soil, the amount of these metals in crops grown on them is also increasing.

Keywords : heavy metals, *Oryza sativa* L., soil pollution, Savadkooh

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