

Abstract

Heavy metals are non-biodegradable and can living tissue accumulation in the body, they accumulate throughout the food chain and therefore easily absorbed by the body be. Among the metals iron and manganese as metal contaminants were studied. The purpose of this study was to evaluate the concentration of heavy metals (iron and manganese) in roadside soils is Zabol to Zahedan. Zabol -Zahedan road soils sampling along a length of 120 km were considered. Sampling intervals of 2/5 km. Total 258 soil samples from a distance of zero, 50, and 100 meters from the main road to the depths of the wings was 30-0 cm. Physical and chemical soil properties such as soil texture, calcium carbonate, organic carbon, EC, pH and percentage of limestone was studied. The concentration of heavy metals (Fe, Mn) were measured using atomic absorption. Assessment of soil pollution by heavy metals (iron and manganese) by factors contamination, the accumulation index and enrichment factor took place. The results showed that the accumulation index (Igeo) iron and manganese, points 0, 50 and 100 is less than zero (negative), respectively, the points 0, 50 and 100 degrees of contamination (Igeo Class), the class (0) and in terms of severity, are non- polluting and enrichment factor iron and manganese, points 0, 50 and 100 were found to be less than one, then points 0, 50 and 100 based on these factors, without enrichment ($EF < 1$) is an indication of natural infection in this region. Given the amount enriched with iron and manganese is less than 10, natural origin of these elements will be approval and invoice contamination iron and manganese, points 0, 50 and 100 less than one was, therefore, points 0, 50 and 100 based on these.factors, highly polluting, low ($1 > CF$) is.

Keywords: heavy metals, roadside soils, contamination factor, the accumulation index, enrichment factor



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