Abstract

Soil contamination from heavy metals that are produced vehicles is a serious environmental problem. This study aimed to assess the contamination of Pb, Cd, Cu, Zn and Ni in roadside soils Zabol - Zahedan done. 252 soil samples (from a depth of 30 - 0 cm) distance of 0, 50 and 100 yards were picked up from the roadside. total concentrations of elements in soil physicochemical properties include soil texture, pH, EC, organic carbon, CEC was measured percentage of the lime. to evaluate the correlation between heavy metals and soil physical and chemical properties of the Pearson correlation coefficient was used. Analysis results show that the average lead concentration between 0, 50 and 100 yards, respectively, with 2/12, 2/03 and 2 mg. Kg^{-1}. average cadmium concentrations between 0, 50 and 100 yards, respectively, 0/21, 0/21 and 0/20 mg kg^{-1}. average copper concentrations between 0, 50 and 100 yards, respectively, is equal to 9/67, 9/40 and 9/03 mg kg^{-1}. average zinc concentrations between 0, 50 and 100 yards, respectively, with 54/33, 52/75 and 51/56 mg. kg^{-1}. average nickel concentrations between 0, 50 and 100 yards, respectively, with 10/26, 10/02 and 9/76 mg kg^{-1}. analysis of variance shows that the distance between the road and the concentration of lead, cadmium, copper, nickel and zinc, but there were no significant differences. Concentration with increasing distance from the road, lead, copper, zinc and nickel is reduced. However, cadmium concentrations did not change with increasing distance from the road. Calculated based on the ratio of non-enriched elements were enriched. according to the accumulation of these elements with the accumulation of less than zero are unpolluted. Copper, zinc, lead, cadmium and nickel in terms of mean values and coefficient of infection (the 0/207, 0/556, 0/102, 0/683 and 0/148) has modulus less pollution than one infection showed slight to said. And the total area in terms of environmental quality, pollution degree of improvement with less than 1/5, one of the very few areas without contamination or pollution is categorized. The results show that the heavy metals of geological origin, but human activity such as fossil fuel combustion and traffic has had an impact on their concentration. However, if the traffic is not heavy metal-contaminated soil can be observed.

Keywords: Contamination, Heavy metals, Roadside soils, Zabol – Zahedan,

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Assessment of heavy metals pollution (Lead, Cadmium, Zinc, Copper and Nicle) in roadside soils of Zabol- Zahedan

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