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# Bioavailability of Heavy Metals in different land use in Drenica region, Kosovo

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The assessment of land contamination with heavy metals requires analysis of both, total and bioavailable form. The aim of this paper is to show the level of heavy metals and their mobility in agricultural lands and meadows. To do so, two layers (topsoil and subsoil) are used. According to random method, 66 samples have been taken (27 in plough layer, 27 samples in subsoil of agricultural lands and 6 samples in topsoil, and 6 samples in subsoil of meadows). The total content and mobility of Ni, Zn, Cu, Cr, Cd and Pb has been determined after the extraction with Aqua Regia, EDTA and $NH4NO_3$ respectively. The results have shown that 75 % of Ni values and about 3 % of Cr values extracted with Aqua Regia have exceeded the limit of values, concerning EU standards, into the two layers and both land use types. Other metals have shown lower values than the limit set by EU standards. The statistical analysis has shown that only the total form of Pb has shown statistical differences between the layers and the land use types in significance level of p<0,001. Even though there have not been statistical differences to the total form of heavy metals (besides Pb), Zn, Cd, Cu and Pb extracted with EDTA have shown statistical differences in significance level p<0,001 and p<0,05 among the layers and land use types. However, metals extracted with $NH4NO_3$ have not shown statistical differences. We can conclude that the layers and the system of land use have shown impact in the amount of Zn, Cd, Cu and Pb extracted with EDTA, but not in their total form (except Pb) and that of leaching form (extracted with $NH4NO_3$).