

Komposisi unsur surih dan major di dalam tanahatas di sekitar kawasan bukit batu kapur Bukit Jernih, Kangar, Perlis

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Composition of minor and major elements in soils (topsoil and profile) in the vicinity of limestone hills at Bukit Jernih, Kangar, Perlis was determined. Minor elements that were determined included As, Ba, Ce, Co, Cr, Cu, Ni, Pb, Rb, Sr, V, Zn and Zr. In decreasing order, the minor elements concentration are Zr, Ba, Cr, V, Ce, Zn, Ni and Pb with their respective composition of $774 \mu\text{gg}^{-1}$, $396 \mu\text{gg}^{-1}$, $325 \mu\text{gg}^{-1}$, $233 \mu\text{gg}^{-1}$, $213 \mu\text{gg}^{-1}$, $152 \mu\text{gg}^{-1}$, $110 \mu\text{gg}^{-1}$ dan $100 \mu\text{gg}^{-1}$. Concentration of the other minor elements in soil was less than $100 \mu\text{gg}^{-1}$. Composition of minor elements in soil profile was decreasing with depth, however the amount of change was not significant. Composition of major elements in soils that was studied included SiO_2 , Al_2O_3 , Fe_2O_3 , TiO_2 , CaO , MgO , MnO , Na_2O , P_2O_5 , and K_2O . Silica constitutes the highest concentration in limestone soil. This is followed by Al_2O_3 , Fe_2O_3 , CaO , MgO , MnO , Na_2O , P_2O_5 and K_2O in decreasing order. The formation of Al_2O_3 in soil is three to four times greater than the formation of Fe_2O_3 . In the soil profile, minor elements were found to accumulate at around 20–60 cm depth.
