ABSTRACT

Vertical profiles of three ombrotrophic peat bogs (Bílá Smědá, Novodomské rašeliniště a Jezerní slať) were used to study the history of the ^{210}Pb radiometric method. Distribution concentrations of trace elements (As, Sb, Cr, Cu, Mn, Fe, Cd, Pb, Zn, S, C, Co, Ni a Be).were studied in each individual humolite layer.

Distribution patterns of individual elements show the significant increase of concentrations of all studied elements. Similar trend was observed in deposition rates. Local mining and smelting of metals were the main emission sources before the industrial revolution. During and after industrial revolution the depossition rates reflected the increasing consumption of coal and developing of heavy industry. A significant increase in the metal deposition started during and after the World War II. Distribution pattern confirmed the decrease in the metal deposition since 70′s and 80′s of the 20^{th} century.