Environmentálny dopad banskej činnosti na osídľovanie banskej haldy v Gelnici a jej vplyv na človeka

Environmental impact the mining on settlement of the spoil heap in Gelnica and its impact on human

Banské haldy sú navážky hlušiny, ktoré predstavujú trvalú environmentálnu záťaž. Práca sa zaoberá geo-ekologickými charakteristikami a výskytom organizmov na banskej halde v Gelnici v lokalite Slovenské Cechy-Gaple v Košickom kraji a jej environmentálnym vplyvom na človeka. V práci sú prezentované pH vlastnosti pôdy haldy, zoznam a fotodokumnentácia prítomnej vegetácie (vypracované fytocenologické zápisy), húb a živočíchov, obsah toxických kovov v najfrekventovanejšom lišajníku a tiež ich prítomnosťou vo vode v studni a v studničke pod haldou. . Najrozšírenejšími druhmi osídľujúcimi haldu v Gelnici sú *Agrostis capillaris* a lišajníky. Druhy rodu *Stereocaulon* patriamedzi ohrozené a kriticky ohrozené druhy lišajníkov. Pôdu haldy charakterizuje kyslé pH (5,1). Zo živočíchov sa tu výskytujú prevažne bezstavovce. V lišajníku *Cladonia arbuscula* subsp*. mitis* boli najviac zastúpené prvky hliník, železo, antimón a meď, ktorých obsah v pôde haldy je najvyšší. Vo vzorkách vody zo studne a studničky sa nachádzajú také množstvá kovov, ktoré sú v súlade s normou.

Spoil heaps are permanent environmental impact. The work deals with the geo-ecological characteristics and the occurrence of organisms on the heap in the area in Gelnica in locality Slovenské Cechy-Gaple in the Kosice region and its impact on humans. The work presents the characteristics of the soil pH of spoil heap, vegetation ( phytosociological records), fungi and animals, toxic metals content in the lichen and also presence in toxic metals in the water in the well under the spoil heap. The most widespread species grown on heap in Gelnica are Agrostis capillaris and lichens. Species of the genus Stereocaulon among endangered and critically endangered species of lichens. Soil heap is characterized by acidic pH (5.1). In lichen Cladonia arbuscula subsp. mitis were most accumulate elements aluminum, iron, antimony and copper, which contents is in the soil of spoil heap the highest. In water samples are the quantities of metals which are in compliance with the normas.

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