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Universitatea „1 Decembrie 1918” din Alba Iulia



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Book of Abstracts

INTERNATIONAL U.A.B. – B.EN.A CONFERENCE

ENVIRONMENTAL ENGINEERING AND SUSTAINABLE DEVELOPMENT

6th Edition

ALBA IULIA, ROMANIA MAY 25-27th, 2017

 **AETERNITAS**
Publishing House

Alba Iulia
2017



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ISSN 2457 – 2829

ISSN-L 2457 – 2829

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Tiparul a fost executat la S.C. TIPO REX S.R.L.

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LICHENS-BIOINDICATORS OF AIR QUALITY

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In this paper, was followed the degree of bioaccumulation of metals Cd, Cr, Cu, Ni, Pb and Zn in the tissues of lichens. Different amounts of metals determined in tissue suggests that lichens, can biomonitoring pollution level. Biomonitoring studies of pollution in cities using lichen species *Parmelia* spp.s has noted that the level of accumulation in the tissues of these organisms has been very high in polluted industrial areas and areas of heavy traffic. Bioaccumulation of metals were correlated directly proportional with diffuse or punctual pollution from industrial environment, from heavy traffic or medium traffic. The amount of bioaccumulative species generally increases in the order Cd<Cr<Ni<Cu<Zn<Pb. For example in polluted areas, amount of Cd bioaccumulative may exceed 2mg / kg DM and the Pb exceeded 40mg / kg DM. Monitoring data using lichens are obtained easily and quickly and can be used in management of pollution.

Keywords: Road traffic, bioaccumulative metals pollution, lichens