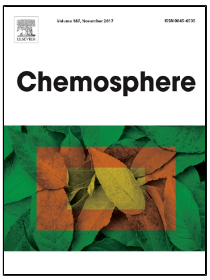
Accepted Manuscript



Origin and spatial distribution of metals in moss samples in Albania: A hotspot of heavy metal contamination in Europe

Pranvera Lazo, Eiliv Steinnes, Flora Qarri, Shaniko Allajbeu, Sonila Kane, Trajce Stafilov, Marina V. Frontasyeva, Harry Harmens

PII:	S0045-6535(17)31559-X
DOI:	10.1016/j.chemosphere.2017.09.132
Reference:	CHEM 20005
To appear in:	*Chemosphere*
Received Date:	01 August 2017
Revised Date:	26 September 2017
Accepted Date:	27 September 2017

Please cite this article as: Pranvera Lazo, Eiliv Steinnes, Flora Qarri, Shaniko Allajbeu, Sonila Kane, Trajce Stafilov, Marina V. Frontasyeva, Harry Harmens, Origin and spatial distribution of metals in moss samples in Albania: A hotspot of heavy metal contamination in Europe, *Chemosphere* (2017), doi: 10.1016/j.chemosphere.2017.09.132

Highlights:

· The origin of trace metals in moss samples is assessed through different methods.

· Mosses are able to reflect the spatial variability of trace elements air pollution.

- Mineral dust particles is the main source of trace elements in present moss samples.

- Geochemical interpretation of current moss data show high local dust emission.

· EF is used to distinguish contributions from atmospheric deposition or substrate soil.

Abbreviations:

AAS – Atomic absorption specroscopy

C_i – Concentration of element i

CVAAS - cold vapor atomic absorption spectrometry

EF – Enrichment Factor

ENAA – epithermal neutron activation analysis

ETAAS - electrothermal atomic absorption spectrometry

FA – Factor analysis

GIS - Geographic Information System

HM – heavy metal

ICP-AES - inductively coupled plasma atomic emission spectrometry

INAA – Instrumental neutron activation analysis

L_i - individual loads of element i

NAA - neutron activation analysis

PM – Particulate matter

RLE – Ratios of lithophile elements