

## Accepted Manuscript

Title: Baseline heavy metals in plant species from some industrial and rural areas: Carcinogenic and non-carcinogenic risk assessment

Authors: Ghasem Zolfaghari, Zohreh Akhgari Sang Atash, Ameneh Sazgar



PII: S2215-0161(18)30008-6  
DOI: <https://doi.org/10.1016/j.mex.2018.01.003>  
Reference: MEX 249

To appear in:

Received date: 5-11-2017  
Accepted date: 4-1-2018

Please cite this article as: Zolfaghari, Ghasem, Atash, Zohreh Akhgari Sang, Sazgar, Ameneh, Baseline heavy metals in plant species from some industrial and rural areas: Carcinogenic and non-carcinogenic risk assessment. *MethodsX* <https://doi.org/10.1016/j.mex.2018.01.003>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Baseline heavy metals in plant species from some industrial and rural areas: Carcinogenic and non-carcinogenic risk assessment

Ghasem Zolfaghari<sup>1,□</sup>, Zohreh Akhgari Sang Atash<sup>2</sup>, Ameneh Sazgar<sup>3</sup>

<sup>1</sup>Department of Environmental Science and Engineering, Faculty of Environmental Sciences, Hakim Sabzevari University, Razavi Khorasan, Sabzevar, P.O. Box: 397, Iran

<sup>2</sup>Department of Environmental Science and Engineering, Gorgan University of Agriculture and Natural Resources, Gorgan, Iran

<sup>3</sup>Department of Environmental Science and Engineering, Ferdowsi University of Mashhad, Mashhad, Iran

### Corresponding Author

Ghasem Zolfaghari, Department of Environmental Science and Engineering, Faculty of Environmental Sciences, Hakim Sabzevari University, Razavi Khorasan, Sabzevar, P.O. Box: 397, Iran

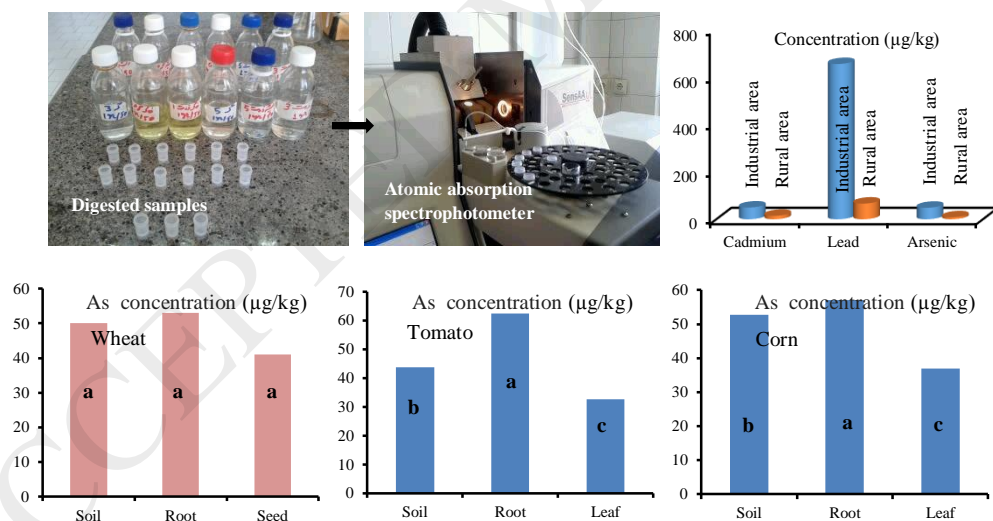
Telephone: +98 51 44013015, Fax: +98 51 44013271

E-mail addresses:

ghr\_zolfaghari@yahoo.com

g.zolfaghari@hsu.ac.ir

### Graphical abstract



### Abstract

This paper provides the first quantitative information on accumulation of cadmium, lead, and arsenic in the soil, leaf, and root of wheat (*Triticum aestivum* L.), corn (*Zea Maize*), and tomato (*Solanum lycopersicum*) in the downstream agricultural lands of an industrial area and agricultural lands of a rural area, Razavi Khorasan province, Iran. The results showed that there is a significant difference among the cadmium concentrations in the soil, root and leaf/seed in various plants ( $p=0.00$  for wheat and corn and  $p=0.0004$  for tomato). There was no significant

Download English Version:

<https://daneshyari.com/en/article/8389947>

Download Persian Version:

<https://daneshyari.com/article/8389947>

[Daneshyari.com](https://daneshyari.com)