



life



an Open Access Journal by MDPI

Uptake, Translocation, and Metabolism of Trace Metals in Plants

Guest Editors:

Dr. Lingli Lu

Key Laboratory of Environment Remediation and Ecological Health, Ministry of Education, College of Environmental & Resource Science, Zhejiang University, Hangzhou 310058, China

Dr. Jahidul Islam Shohag

Department of Agriculture, Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj 8100, Bangladesh

Dr. Dan Liu

Key laboratory of soil contamination bioremediation of Zhejiang Province, Zhejiang Agriculture and Forest University, Lin'an, Hangzhou 311300, China

Message from the Guest Editors

Trace metals can be essential micronutrients, but they can also be extremely toxic to plant growth and human health. Trace metal concentrations in diverse environments vary greatly due to natural and anthropogenic factors, ranging from deficiency to highly toxic levels. A better understanding of trace metal behavior in plants may contribute to the development of strategies for 1) the phytoremediation of toxic heavy metals (such as Cd, Pb, Hg, and Cr) by using hyperaccumulator or accumulator plants, 2) the biofortification of micronutrients, particularly Zn, Fe, and Se, for better human health, and 3) molecular and physiological detoxification mechanisms of toxic metals in crop plants. Therefore, one focus of plant research is on the response to trace metals in terms of uptake, transport, sequestration, speciation, physiological use, deficiency, toxicity, and detoxification. For this Special Issue, we invite investigators to contribute original research articles and review articles that will stimulate efforts contributing to enhancing our understanding of trace metal behavior in plants.

Deadline for manuscript submissions:

closed (30 November 2022)



mdpi.com/si/97884

Special Issue



life



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona Institute of Science and Technology, 08028 Barcelona, Spain

Message from the Editor-in-Chief

Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [PMC](#), [CAPlus / SciFinder](#), [AGRIS](#), and [other databases](#).

Journal Rank: JCR - Q1 (Biology) / CiteScore - Q1 (Paleontology)

Contact Us

Life Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/life
life@mdpi.com
[X@Life_MDPI](#)