

Special Issue

Metal and Metalloid Toxicity in Plants

Message from the Guest Editor

To enhance primary sector production and productivity while maintaining and improving land quality for future generations, this generation needs to solve the problems limiting the use of soils for high-value crops. Crops cultivated in soils contaminated with toxic metal(loid)s can take up a high concentration of these metal(loid)s by roots and translocate them to their tissues. The contamination of most versatile soils with metal(loid)s threatens to limit their use for high-value pasture, vegetable, grain, and tuber cropping due to the risk of metal(loid) accumulation in the food chain. The management of the quality and quantity of crops grown in soil contaminated with potentially toxic metal(loid)s is a current challenge. Hence, investigating potential mechanisms that may play roles in metal(loid) uptake and translocation in plants could help to develop mitigation strategies. This Special Issue of *Plants* will highlight the rhizosphere chemistry and uptake mechanisms of metal(loid)s, and will propose potential agronomical, microbiological, and molecular biological mitigation strategies to mitigate metal(loid) toxicity in plants.

Guest Editor

Dr. Paramsothy Jeyakumar

Environmental Sciences Group, School of Agriculture and Environment,
Massey University of New Zealand, Palmerston North 4442, New Zealand

Deadline for manuscript submissions

closed (31 August 2023)



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/86002

Plants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
plants@mdpi.com

[mdpi.com/journal/
plants](https://mdpi.com/journal/plants)





Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



[mdpi.com/journal/
plants](https://mdpi.com/journal/plants)



About the Journal

Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, and conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

Editor-in-Chief

Prof. Dr. Dilantha Fernando
Department of Plant Science, University of Manitoba, Winnipeg, MB
R3T 2N2, Canada

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, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Plant Sciences) / CiteScore - Q1 (Ecology, Evolution, Behavior and Systematics)