



Iron and Sulfur in Plants

Guest Editors:

Dr. Stefania Astolfi

Department of Agricultural and
Forest Sciences (DAFNE),
University of Tuscia, Via S. C. de
Lellis, 01100 Viterbo, Italy

Dr. Silvia Celletti

Department of Life Sciences,
University of Siena, 53100 Siena,
Italy

Deadline for manuscript
submissions:

closed (31 March 2020)

Message from the Guest Editors

In recent years, environmental policies have led to the reduction of S-rich industrial emissions and, consequently, free S deposition to the soil. Thus, soils are progressively becoming S depleted, and the situation is worsening because the increased crop yields and production are using soil S reserves at greater rates. Although the uptake and assimilation pathway of S is well characterized, there are many unresolved questions concerning the regulation of its metabolism in response to both its availability in the environment and the demand of plants for it under certain environmental conditions. Recently, a significant interaction between S and Fe was observed, in which a deficiency in one of the two nutrients induces physiological modifications, allowing the adequate and balanced assimilation of the other. However, the comprehension of the mechanisms underlying the responses to this combined deficiency are still mostly lacking, even though some theories have been postulated. Therefore, Fe–S interplay should be exploited from both a scientific and an applicative point of view to provide both new knowledge and sustainable agricultural strategies.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of
Odontostomatologic and
Specialized Clinical Sciences,
Sez-Biochimica, Faculty of
Medicine, Università Politecnica
delle Marche, Via Ranieri 65,
60100 Ancona, Italy

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI