Special Issue

Transcriptomic and Proteomic Response of Plants to Nutritional Deficiency

Message from the Guest Editor

To survive, plants have evolved a diversity of adaptations. With the completion of more and more plant genome sequencing, dissecting the underlying gene functions and the regulatory networks under various stresses, including nutritional deficiency, are becoming the key issues under post-genome Eva. Of these, transcriptomic and proteomic responses of plant to nutritional deficiency are in the spotlight in the plant nutrition field. Like other living organisms, plants require 17 essential macro-and microelements (C, H, O, N, P, K, S, Ca, Mg, Cl, Fe, Mn, Cu, Zn, Mo, Ni, and B) for development and growth. In addition, some mineral elements (Na, Si, Al, and Se) are not essential for all plant species but can be beneficial for some groups of plants. The nutritional deficiency of these essential and beneficial mineral elements is one of the critical limiting factors impairing plant growth and causing severe crop vield loss. In this Special Issue, the responses of plants to various nutritional deficiencies of these essential and beneficial elements exploited by transcriptomic and proteomic techniques are within the scope of this issue and welcome.

Guest Editor

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Deadline for manuscript submissions

closed (20 March 2023)



Plants

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Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/118179

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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, 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

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