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Molecular Plant Nutrition: From Elements Uptake to Signaling and Crop Improvement

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Message from the Guest Editor

This Special Issue on “Molecular Plant Nutrition: From Element Uptake to Signaling and Crop Improvement” aims to provide an overview of the latest advances in our understanding of the molecular mechanisms underlying plant nutrition, with a particular emphasis on the uptake and signaling of essential and toxic elements. We will also explore the ways in which this knowledge can be applied to the development of crop improvement strategies for sustainable agriculture. Topics covered in this Special Issue include the molecular mechanisms of element uptake and transport, the regulation of element signaling pathways, the role of nutrient interactions in plant growth and development, the effects of environmental stresses on nutrient uptake and utilization, and the development of crops with enhanced nutrient use efficiency and tolerance to toxic metals. Overall, this Special Issue will highlight the importance of molecular plant nutrition research in addressing the challenges of the global food security and environmental sustainability.



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Special Issue



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Message from the Editor-in-Chief

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