



Plant-N-Cycling Microorganisms Interactions in the Rhizosphere

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closed (31 December 2021)

Message from the Guest Editors

Nitrogen (N) is an essential element for all life forms and the major limiting nutrient in plant growth. To satisfy the N demand of plants, huge amounts of N fertilizers are applied to agricultural soils. However, up to half or even more of the applied N is lost to the environment, causing adverse effects on pollution, climate change, and human health. Therefore, reducing anthropogenic pressures on the N cycle remains one of the most challenging problems and a crucial goal in N research.

Plants play an active role in shaping the structure and function of N cycling microbial communities that inhabit the rhizosphere, but a mechanistic understanding of these interactions is still lacking. Addressing this issue, however, is essential to achieving better soil N management and improving the sustainability of agriculture.

In this Special Issue, we encourage submissions of theory-driven studies that provide mechanistic insights into the relationships between plants and N-cycling microorganisms as they occur in and are affected by the rhizosphere, as well as holistic studies embracing such complex relationships and their spatiotemporal variability.





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Message from the Editor-in-Chief

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