



Root Phenotypes of Plants in Different Growth Environment

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Message from the Guest Editors

Agriculture induces changes in the soil environment that often modify or restrict the growth and functioning of roots, e.g., soil compaction, changes in the soil structure affecting the soil's water-holding capacity, soil acidification, a decrease in soil organic matter, the alteration of microbial activity, and heterogeneous distribution of soil water and nutrients. Root growth and functions are simultaneously affected by environmental factors, with fluctuations in water availability and increased drought frequency under climate change as the most devastating factors for crop yields and productivity. In typical conditions, crop roots can cope with such challenges through specific root phenotypic plasticity reflected in a modified structure, spatial distribution, and morphology.

Thus, we encourage the submission of results of studies on multiple aspects of root responses to soil conditions conducted in both controlled and field conditions and studies that will help in our understanding of the processes at the interface between soil and the root surface.





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Message from the Editor-in-Chief

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