Special Issue

Mechanisms of Interaction and Coevolution between Plants and Microorganisms

Message from the Guest Editors

Just as it is an urgent need to implement carbon neutrality, it is also urgent to find alternative solutions to reduce chemical inputs in agriculture. In addition to changing certain farming practices (switching to notillage, etc.), there are increasingly pressing demands for the use of nature-based solutions such as biofertilization and biocontrol of pathogens and pests. Only a better understanding of the mechanisms governing the interactions between plants and their associated microbiota, and also between microorganisms, can provide scientifically validated solutions. Research on microbiology, molecular biology, biochemistry of the interactions between microorganisms in reservoirs (soil, water, air) and their host plants (of agronomic interest or model plants) is needed to better understand the functioning of this holobiont. This Special issue will highlight the mechanisms underlying plant-microbiota interactions. Studies on newly described mechanisms of interaction between microorganisms and their host plants, and also between microorganisms, are encouraged. Studies on co-evolution between plants and their associated microbiota are also encouraged.

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About the Journal

Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

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