

Special Issue

Pros and Cons of Microorganisms in Plant Tissue Culture

Message from the Guest Editor

In vitro culturing of plant cells, tissues or organs is a typically a multi-stage process involving their cultivation on specialized media under aseptic conditions and controlled environmental conditions. Therefore, at this stage, it is crucial to use of a number of available bio-stimulants that would increase plant survival, such as commercial preparations of nitrogen-fixing Cyanobacteria, microalgae or macroalgae-derived stimulants, or various types of root mycorrhizal preparations. Currently, knowledge about another issue, the deliberate cultivation of plant tissue cultures contaminated with appropriate strains of microorganisms, is limited. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Tissue culture contaminations
- Disinfection protocols
- Biocontrol agents (BCA)
- Bio-hardening methods
- Plant beneficial microbes
- Morphometric and biochemical analyses
- Ex vitro survival rate
- Cost-effective plant tissue culture protocols
- Deliberate multiplication of infected cultures

Guest Editor

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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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manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.2 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).