Special Issue

Agriculture-Related Microorganisms and Carbon Cycle

Message from the Guest Editor

Considering the carbon cycle on a global scale, it is necessary to create a flow that returns carbon dioxide in the atmosphere to agricultural land as organic matter. Cyanobacteria and photosynthetic bacteria are used as quick-acting nitrogen fertilizers in the tropics, but is there any research on returning carbon dioxide from the atmosphere to the soil as organic matter using these highly proliferative microorganisms? Is there any research on returning carbon dioxide from the atmosphere to the soil as organic matter using soil microorganisms other than cyanobacteria and photosynthetic bacteria? Potential topics include, but are not limited to:

- Characterization of microorganisms that reduce the use of chemical nitrogen fertilizers or convert atmospheric carbon dioxide to soil organic matter,
- Technologies for using these microorganisms at agricultural production sites,
- Evaluation of how much the use of biofertilizer can reduce carbon dioxide generated in the chemical nitrogen fertilizer manufacturing process,
- Assessment of the amount of atmospheric carbon dioxide converted to soil organic matter by agricultural microorganisms.

Guest Editor

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Deadline for manuscript submissions

closed (31 January 2025)

Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed

mdpi.com/si/151430

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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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