

Special Issue

Sustainable Agricultural Practices to Enhance Soil Carbon Stability in Agroecosystems

Message from the Guest Editors

Carbon is a critical environmental resource for plant growth, crop yields, soil health and fertility, and overall ecosystem functions. Agricultural practices have significantly influenced the global soil carbon storage potential and stabilization. In recent decades, sustainable agricultural management strategies (e.g., crop rotation, avoided land use conversion, cover cropping, organic amendments, etc.) have been developed to balance productivity with environmental sustainability. However, the effects of such novel strategies on soil carbon dynamics at both micro- and macro-scales and associated microbial dynamics over long-term and short-term timeframes remain uncertain. This Special Issue aims to gather original research findings and reviews that explore how sustainable agricultural practices can influence soil carbon storage and stabilization within agroecosystems. Cutting-edge research topics for inclusion encompass, but are not limited to, advancements in soil carbon stocks, sequestration and stabilization mechanisms, and associated microbial dynamics in agroecosystems at both the bulk soil and microscale levels.

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Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, cross-disciplinary and scholarly journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. We invite submissions from authors according to the aims and scope of the journal described in more detail on this page. *Agriculture* is published in an open access format – articles are published on the journal's website immediately after acceptance, giving the scientific community and the public unlimited and free access to the content.

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