

## Special Issue

# Microbial Carbon and Its Role in Soil Carbon Sequestration

### Message from the Guest Editors

The agroecosystem plays an important role in terrestrial carbon cycling. Soil carbon sequestration in cropland can not only offset fossil fuel emissions but also contributes to regional food security. Furthermore, soil microorganisms are ubiquitous and crucial participants in maintaining ecosystem functioning, such as soil organic matter decomposition, aggregate stabilization, nutrient cycling, and interactions with plants. Although microbial biomass carbon accounts for a small proportion of soil carbon content, it is considered as a transitional carbon repository responsible for carbon decomposition and sequestration.

With this Special Issue of *Agronomy*, we seek to gather integrative studies that shed light on microbial carbon fluxes and their roles in soil carbon sequestration. Furthermore, we encourage contributions that make use of state-of-the-art technologies, including stable and radioactive isotopes, multi-omics technology, big data or meta-analysis, and numerical modelling, to elucidate the microbial mechanisms of soil carbon sequestration in agricultural ecosystem.

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### Guest Editors

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## Agronomy

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