



Novel Study on Biochar Carbon Stability in Soils

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Message from the Guest Editors

Owing to its stability in soils, biochar has gained attention as a soil carbon sequestration tool to offset increasing atmospheric CO₂ concentrations. Biochar comprises disparate ratios of aliphatic and aromatic carbon substances at different stability rates, which may affect the stability of biochar carbon in the soil. However, the influence of soil and biochar properties on biochar carbon stability is not well-documented. Moreover, biochar-derived dissolved organic carbon may stimulate microbial activity via the breakdown of labile soluble organic carbon and the improvement in soil physical properties, phenomena which may increase the mineralization of the soil organic carbon. Those areas still have several knowledge gaps, an issue processing in particular from the reliance on traditional techniques and approaches to study them. Therefore, this Special Issue aims to present research underlying novel approaches and techniques to tracking and evaluating the unknown aspects of biochar carbon stability in soils.





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