Special Issue

Biochar's Role in the Sustainability of Agriculture

Message from the Guest Editors

Biochar is an environmentally friendly soil amendment that has the potential to address the multifaceted challenges of soil deterioration, improving soil health, and maintaining crop yield stability. However, the underlying mechanisms of biochar amendment affect various soil physiochemical and biological properties. This has a negative effect on crops' physiology, growth, and yield, with their resilience to abiotic stresses remaining largely elusive.

This Special Issue endeavors to delve into the role and mechanisms of biochar amendments in modulating rhizosphere environments, enhancing crops' resistance to stresses, optimizing crop growth and yield, improving crop nutrient and water use efficiency, and reducing greenhouse gas emissions under different production systems. Moreover, this Special Issue aims to facilitate the exchange of the latest findings and novel insights by providing a comprehensive platform for researchers and experts in the field of biochar applications in agriculture. The knowledge disseminated within it will contribute to addressing the challenges posed by changing climatic conditions and the growing global demand for increased food production.

Guest Editors

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Editor-in-Chief

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