



Crop Cultivation and Low Carbon Agriculture

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Message from the Guest Editors

Agricultural production contributes to increasing global warming due to substantial amounts of greenhouse gas emissions (GHGs), mainly including CO₂, CH₄, and N₂O.

From fertilizer production to food storage and packaging, the global food system is responsible for about one-third of anthropogenic GHGs. Croplands are often intensively managed, which can reduce GHGs emissions by optimizing tillage practice, fertilizer application, irrigation, biochar application, and straw management. Mitigating carbon emissions in agriculture by improving crop cultivation technology has garnered massive interest at the environmental science and even industrial levels. Thus, considering the high interest in climate change mitigation and food security, this Special Issue aims to contribute to the sustainable agricultural intensification and will cover a wide variety of areas, mainly including the assessment of agricultural carbon emissions from the whole progress or a critical link in the production chain at field scale or regional scale. Also of interest are the strategies and management of crop cultivation that contribute to low carbon production and increased soil carbon sequestration





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Message from the Editor-in-Chief

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