Special Issue

Improved Sustainable Agriculture Using Biochar as a Soil Amendment

Message from the Guest Editor

The sustainable development of modern agriculture is challenged by inappropriate soil management, such as soil contamination, overuse of chemical fertilizers and pesticides and intensification of soil planting. Recycling the carbon and nutrients of agricultural wastes (such as crop straw, animal manure and food waste) could contribute to sustainable food production in agriculture. Converting the agricultural organic waste into biochar via pyrolyzing not only retains the nutrients, but also permanently sequesters carbon in soils. Therefore, biochar production and soil amendment are regarded as promising methods of agricultural wastes disposal and improving soil fertility. A deeper understating of the impact of biochar on soil quality and food production is necessary before the implementation of large-scale biochar soil amendment. This Special Issue focuses on the assessment of the potential role of biochar application in treating problematic soils, and its impact on crop growth, productivity, grain quality, soil fertility and soil health. Studies carried out under controlled environment conditions are not within the scope of this issue.

Guest Editor

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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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