Special Issue

Microbiology in Paddy Soil

Message from the Guest Editor

Rice is the most stable food for more than 50% of the world's population. Globally, paddy fields for rice production cover almost 150 million, constituting the largest anthropogenic wetlands on earth. The depletion of oxygen and other electron acceptors upon flooding results in a decrease in redox potential that proliferates microbial activities directing the redox reactions in paddy soils, such as aerobic respiration, denitrification, ferric iron/arsenate/sulfate reduction, methanogens, etc. The highly complex microbiology mediates the biogeochemical processes in paddy soil and is closely related to rice security and global climate change. The Special Issue aims to present fundamental research exploring the ecological processes and mechanisms by which microbial groups interact with each other and with the paddy environment, including microbial diversity and interaction, elemental biogeochemistry, and coupling among different processes. The Issue will focus on identifying the functional microbes and the underlying mechanisms involved in different biogeochemical processes.

Guest Editor

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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