



Effects of Wastewater and Pesticides on Soil Fertility and Microbiological Activity

Guest Editors:

Prof. Dr. Naga Raju Maddela

Department of Biological
Sciences, Faculty of Health
Science, Universidad Técnica de
Manabí, Portoviejo, Ecuador

Dr. Binbin Sheng

Guangdong Province Key
Laboratory for Biotechnology
Drug Candidates, School of Life
Sciences and Biopharmaceutics,
Guangdong Pharmaceutical
University, Guangzhou 510006,
China

Deadline for manuscript
submissions:

closed (25 September 2023)

Message from the Guest Editors

Dear Colleagues,

Unsustainable agricultural practices have a significant impact on soil pollution for diverse reasons; among these, the application of wastewater (untreated/treated) for irrigation and the use of excessive pesticides are key causes of soil pollution in agriculture. The consequence of agricultural soil pollution is the loss of soil fertility. Wastewater comprise a cocktail of pollutants that are both naturally occurring or man-made and can include chemical contaminants (e.g., nitrogen, bleach, salts, pesticides, metals, toxins produced by bacteria, and human or animal drugs) and biological contaminants. These contaminants have various adverse effects on the development, morphology, and metabolism of soil microorganisms by causing functional disturbances, protein denaturation, the destruction of cell membrane integrity, etc. In particular, soil microbial enzymes are efficient in revealing ecosystem perturbations, and they are very sensitive to agricultural management practices.

Therefore, this Special Issue calls for all types of articles, such as original research, opinions, and reviews, are welcome.

Prof. Dr. Naga Raju Maddela

Dr. Binbin Sheng

Guest Editors





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Les Copeland

Sydney Institute of Agriculture,
School of Life and Environmental
Sciences, The University of
Sydney, Sydney, NSW 2006,
Australia

Message from the Editor-in-Chief

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubAg, AGRIS, RePEc, and other databases.

Journal Rank: JCR - Q1 (Agronomy) / CiteScore - Q1 (Plant Science)

Contact Us

Agriculture Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/agriculture
agriculture@mdpi.com
[X@AgricultureMdpi](https://twitter.com/AgricultureMdpi)