agriculture

an Open Access Journal by MDPI

IMPACT FACTOR 4.5

CITESCORE 7.8

Impacts of Pesticides on Soil and Environment

Guest Editor:

Prof. Dr. Xingang Liu
Institute of Plant Protection, Chinese Academy of Agricultural Sciences, Beijing 100193, China

Deadline for manuscript submissions:
closed (15 December 2022)

Message from the Guest Editor

The extensive use of pesticides over last several decades has highlighted the potential risk posed by pesticides to the soil environment. An increasing proportion of arable soils have been reported to be contaminated with pesticides, to varying degrees. Soil contamination with pesticides influences non-target species including humans by affecting soil microbial populations, bacterial diversity, nitrogen transformations, soil animals, and soil enzymes, ultimately influencing entire agricultural ecosystems. However, the research on mechanisms of pesticide effects on non-target organisms and ecosystems is still insufficient. The fate of pesticides in the environment is affected by chemical, physical, biological, and hydro-meteorological processes in soil. The major environmental processes related to pesticides are transport, degradation, and uptake by organisms. The remediation of contaminated soil is also a focus of current research. Research suggests that physical, chemical, and biological techniques as well as combined techniques for the removal of contaminants can be used to remediate polluted soil. We expect more scientific discoveries and solutions to be proposed in the future.

agriculture

IMPACT FACTOR 4.5

CITESCORE 7.8

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, scholarly and scientific open access journal publishing peer-reviewed research papers, review articles, communications and short notes that reflect the breadth and interdisciplinarity of agriculture.

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), GEOBASE, 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