# Special Issue

# Pesticides in the Environment: Impacts and Challenges in Agriculture

# Message from the Guest Editor

Pesticides which enter the soil environment are subject to various degradative processes, such as microbial degradation, chemical hydrolysis, photolysis, volatility, leaching, and surface runoff. The degree to which each mechanism will contribute to the overall degradation of the pesticide is in turn dependent on the physicochemical properties of the pesticide, the characteristics of the soil (pH, organic matter content, microbial biomass, and redox status), environmental conditions (temperature and moisture), and management practices (application rate and formulation type). Most pesticides cause adverse effects when reaching soil organisms. The intensity of the toxic effect varies with time, dose, organism characteristics, environmental presence, or pesticide characteristics. Their presence in environments determines the dose and time at which an organism is exposed, and could represent a hazard for worldwide life due to their mobility. Hence, the persistence in the environment leads to a risk for life. In that sense, this Special Issue aims to understanding bioremediation as applied to a wider range of contaminated sites and chemicals.

# **Guest Editor**

Prof. Dr. Dong-Uk Kim

Department of Biological Science, College of Science and Engineering, Sangji University, Wonju-si 26339, Republic of Korea

### Deadline for manuscript submissions

closed (5 January 2025)



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Agriculture
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
agriculture@mdpi.com

mdpi.com/journal/agriculture





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# 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.

### 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

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