





an Open Access Journal by MDPI

New Perspectives on Phosphorus Management in the Soil-Plant System—Looking for Solutions to the P Scarcity

Guest Editors:

Dr. Magdalena Debicka

Institute of Soil Sciences, Plant Nutrition and Environmental Protection; Wrocław University of Environmental and Life Sciences; ul. Grunwaldzka 53, 50-357 Wrocław, Poland

Dr. Piotr Stępień

Institute of Soil Sciences, Plant Nutrition and Environmental Protection, Wrocław University of Environmental and Life Sciences, Grunwaldzka 53, 50-357 Wrocław, Poland

Dr. Elżbieta Jamroz

Institute of Soil Science and Environmental Protection, Wrocław University of Environmental and Life Sciences, Grunwaldzka 53, 50-357 Wrocław, Poland

Deadline for manuscript submissions:

closed (30 May 2024)



mdpi.com/si/164395

Message from the Guest Editors

Dear Colleagues,

The management of phosphorus in agricultural areas has always posed numerous problems simply due to the chemical nature of this macronutrient. This is driven by two aspects: on the one hand, the low P bioavailability, requiring continuous soil fertilisation, and on the other, its strong sorption and high accumulation in forms unavailable for plants as well as the risk of the eutrophication as a result of possible P mobilisation into the environment. These issues of growing concern include: Limited natural resources of the world's phosphorites; An increasing need to handle an expanding amount of waste; Environmental changes caused by human activity and climate change, resulting in, e.g., the acceleration of soil degradation, especially of arable soils, and the progressive loss of organic matter.

The Special Issue is, therefore, proposed to address the problems of searching for alternative (renewable) sources of P fertilisation and studying plant resistance to P deficiency based on physiological processes, deepening the knowledge of P availability and transformations in soil and plant in relation to current environmental challenges.

Guest Editors









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Leslie A. Weston

Gulbali Centre for Agriculture, Water and Environment Research, Charles Sturt University, Wagga Wagga, NSW 2678, Australia

Message from the Editor-in-Chief

Agronomy draws together researchers from diverse areas of agricultural research with a common aim of enhancing agricultural productivity globally. The journal provides unlimited free access to all those interested in advancing agricultural science from both the research and general community. Papers are released immediately after acceptance through the internet. Agronomy is supported by our authors and their institutes through low article processing charges (APC) for accepted papers. We hope you will support the journal by becoming one of our authors.

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, and other databases.

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

Contact Us