Special Issue

Effects of the Soil Microbiome on Nutrient Cycling and Soil Health in Agroecosystems

Message from the Guest Editor

Soil microbiomes consist of a diverse community of microorganisms, including bacteria, fungi, and other groups, which interact to influence nutrient availability to plants, decompose soil organic matter, and form soil structure. These interactions are essential for the cycling of nutrients, such as nitrogen, phosphorus, and potassium, which are essential for plant growth and productivity. Therefore, the soil microbiome plays a critical role in driving nutrient cycling and maintaining soil health in agroecosystems. In agroecosystems, the composition and activity of the soil microbiome could be influenced by agricultural practices and management, such as tillage, fertilization, and crop rotation. Understanding the effects of these practices on the soil microbiome is critical in order to maintain sustainable agricultural development and ensure food safety. This Special Issue intends to collect and publish research advances on the effects of the soil microbiome on nutrient cycling and soil health in agroecosystems, which appears to be a highly attractive topic and well within the scope of agronomy.

Guest Editor

Dr. Hui Wei Department of Ecology, College of Natural Resources and Environment, South China Agricultural University, Guangzhou, China

Deadline for manuscript submissions

31 December 2025



Agronomy

an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



mdpi.com/si/199453

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

mdpi.com/journal/

agronomy





an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



agronomy



About the Journal

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.

Editor-in-Chief

Prof. Dr. Leslie A. Weston Gulbali Centre for Agriculture, Water and Environment Research, Charles Sturt University, Wagga Wagga, NSW 2678, Australia

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 (Agronomy) / CiteScore - Q1 (Agronomy and Crop Science)