agriculture

an Open Access Journal by MDPI

IMPACT FACTOR 3.6

CITESCORE 7.8

The Role of Mycorrhizal Fungi in Regulating Crops Growth and Improving Soil Fertility

Guest Editors:

Prof. Dr. Qiang-Sheng Wu
College of Horticulture and Gardening, Yangtze University, Jingzhou 434025, China

Prof. Dr. Yuejun He
Forestry College, Research Center of Forest Ecology, Guizhou University, Guiyang 550025, China

Deadline for manuscript submissions:
closed (20 March 2025)

Message from the Guest Editors

Mycorrhizal fungi are a group of beneficial soil fungi, widely distributed in various ecosystems, which can colonize the roots of 72% of terrestrial plants and establish a reciprocal symbiosis, thus creating an organism between plants and mycorrhizal fungi. With the deepening of research regarding mycorrhizal fungi, their plant-related functions have been uncovered, such as improving plant growth, fruit quality, stress tolerance, and so on. However, when compared with the mycorrhizal roles in plant physiological studies, mycorrhizal research concerning soil fertility is relatively undeveloped, being more centered on potting conditions, making its application to field crops seem slow. In spite of this, mycorrhizal fungi, as an important way of sustainable agricultural production, remain a promising friendly fungal biostimulant. This has also attracted research in the field of crops, especially corn, rice, soybean, and horticultural plants.

Therefore, this Special Issue aims to illuminate the intrinsic mechanisms of mycorrhizal fungi in regulating crop growth and to predict and clarify the mechanisms by which mycorrhizal fungi improve soil fertility in crops.

agriculture

IMPACT FACTOR 3.6

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