



Contribution of Mycorrhizal Symbiosis to Plant Growth

Guest Editors:

Dr. Erica Lumini

Institute for Sustainable Plant Protection (IPSP), Italian National Research Council (CNR), Viale Mattioli 25, 10125 Torino, Italy

Dr. Valeria Bianciotto

Institute for Sustainable Plant Protection (IPSP) Italian National Research Council (CNR), Viale Mattioli 25, 10125 Torino, Italy

Deadline for manuscript submissions:

closed (30 November 2019)

Message from the Guest Editors

Dear Colleagues,

The associations between soil mycorrhizal fungi and roots, referred to as mycorrhizae. The extraradical mycorrhizal mycelium, which grows out from the roots in soil, has access to mineral nutrients that are delivered to the host plants in exchange for organic compounds. Mycorrhizal symbioses influence plant growth and performance (including plant productivity), and increase their tolerance to biotic and abiotic stresses (e.g., water deficit). The development of large-scale DNA sequence datasets, thanks to next-generation sequencing (NGS), and the development of several genome/transcriptome projects on soil fungi and plant allows for identifying new functions and verifying how different mycorrhizal fungi interact and communicate with their host plants.

The purpose of this Special Issue is to focus on some new aspects related to these widespread symbioses, highlighting some of their potentialities in agro-forest environments. Papers that describe single case studies, technical advances, and perspective views that depict the contribution of mycorrhizal symbiosis to plant growth are most welcome.

Dr. Erica Lumini

Dr. Valeria Bianciotto

Guest Editors





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Dilantha Fernando
Department of Plant Science,
University of Manitoba, Winnipeg,
MB R3T 2N2, Canada

Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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), PubMed, PMC, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Plant Sciences*) / CiteScore - Q1 (*Plant Science*)

Contact Us

Plants Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/plants
plants@mdpi.com
[X@Plants_MDPI](https://twitter.com/Plants_MDPI)