

Special Issue

Interaction of Plants and Endophytic Microorganisms: Molecular Aspects, Biological Functions, Community Composition, and Practical Applications

Message from the Guest Editors

Endophytes are an endosymbionts, often a bacterium or fungus that resides within a plant without causing apparent disease. They are ubiquitous and have been isolated from almost all plants examined to date.

However, most of the endophyte and plant relationships are not well understood, especially in molecular and biochemical aspects. Plant–microbe interactions are not exclusively mutualistic, since endophytic fungi can potentially become pathogens or saprotrophs, usually when the host plant is under stress conditions. At the same time, some endophytes may enhance plant host growth, nutrient acquisition, biosynthesis of secondary metabolites, and improve plant abiotic and biotic stress tolerance. The works related to the study of physiological and molecular aspects of such interactions, biological functions, and practical applications will be interesting. Another important goal is to discuss in more detail possible and actual applications of the knowledge in agriculture and biotechnology.

Guest Editors

Dr. Olga A. Aleynova

Laboratory of Biotechnology, Federal Scientific Center of the East Asia Terrestrial Biodiversity, Far Eastern Branch of the Russian Academy of Sciences, 690022 Vladivostok, Russia

Dr. Konstantin V. Kiselev

Laboratory of Biotechnology, Federal Scientific Center of the East Asia Terrestrial Biodiversity, Far Eastern Branch of the Russian Academy of Sciences, 690022 Vladivostok, Russia

Deadline for manuscript submissions

closed (30 November 2023)



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/139779

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

[mdpi.com/journal/
plants](https://mdpi.com/journal/plants)





Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



[mdpi.com/journal/
plants](https://mdpi.com/journal/plants)



About the Journal

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, and 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.

Editor-in-Chief

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

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 (Ecology, Evolution, Behavior and Systematics)