

Special Issue

Plant-Parasitic Nematodes in Horticultural Plants

Message from the Guest Editors

Approximately 4100 species of all known nematodes are plant-parasitic nematodes (PPNs) that affect the quality and the quantity of numerous agricultural crops, representing a significant constraint on global food security. When PPNs attack their host, they disrupt its development, which leads to underdeveloped plants, causing a reduction in crop yield. Damage caused by these nematodes has been estimated at USD 80 billion/year. However, this value is likely to be underestimated, as PPNs are small-plant/soil-borne pathogens, and the symptoms that they cause are unspecific, and most of the cultivators are often unaware of their presence. Current approaches to control PPNs include the use of nematicides and/or unselective pesticides, but many of synthetic chemical nematicides pose serious concerns for human health and environment. To cope with such threat, accurate diagnostic methods for nematode detection and deep understanding about nematode infection processes and their intricate relationships with the host plants are crucial for the development of effective integrated nematode management programs.

Guest Editors

Dr. Carla Maleita

Department of Chemical Engineering, Chemical Engineering and Renewable Resources for Sustainability (CERES), University of Coimbra, 3030-790 Coimbra, Portugal

Dr. Ivânia Esteves

Department of Life Sciences, Centre for Functional Ecology - Science for People & the Planet, Associate Laboratory Terra, Calçada Martim de Freitas, University of Coimbra, 3000-456 Coimbra, Portugal

Deadline for manuscript submissions

closed (31 December 2024)



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/197122

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, 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)