

IMPACT FACTOR 4.5





an Open Access Journal by MDPI

Plant Secreted Metabolites

Guest Editors:

Dr. Louis Grillet

Department of Agricultural Chemistry, National Taiwan University, Taipei 10617, Taiwan

Dr. Christian Dubos

French National Institute for Agriculture, Food, and Environment (INRAE), 147 Rue de l'Université, 75007 Paris, France

Dr. Hatem Rouached

The Plant Resilience Institute, Department of Plant, Soil and Microbial Sciences, Michigan State University, East Lansing, MI 48824, USA

Deadline for manuscript submissions:

closed (31 October 2022)

Message from the Guest Editors

Dear Colleagues,

In the wild or in the fields, plants live in a fluctuating environment. Edaphic conditions can vary drastically depending on the weather, or geographic and geochemical factors. They will produce and secrete metabolites that either have a protective effect on themselves, or a modifying effect on their environment. Such adaptative mechanisms are implemented by plants in order to promote the remobilization and uptake of immobile nutrients such as phosphorus and iron. Consequently, there is also an indirect impact on the plant nutrition, due to changes in mineralization of organic matter, pressure from pests and pathogens, and competition or cooperation with neighboring plants. A plethora of examples is available in the literature, but the underlying biochemical and molecular mechanisms are often poorly documented

This topic aims at improving our knowledge and understanding of small molecules secreted by plants, in order to enable us to leverage these remarkable biological properties for applications such as plant protection, engineering of crops with improved nutrition capabilities, and decreased environmental impact.













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 communitys 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