

Special Issue

Effects of Smoke on Plant Biology and Ecology

Message from the Guest Editor

Since the late 1980's, smoke-derived compounds have been a hot topic in plant and crop physiology. Smoke-derived compounds can affect crops, trees, and natural plant communities differently. The impact of smoke compounds, mostly butenolides, on plants is closely linked to some phytohormones. A specific cellular response leads to the expression of specific genes, leading to a particular developmental feature (or a set of features). However, the plant response varies within the species and is influenced by plant growth pattern and developmental stage, butenolide concentrations, soil composition and microbiota, and other environmental factors. Considering all these circumstances, we invite you to share your high-quality relevant scientific results and opinions on the effects of smoke on plant biology and ecology, in terms of both pure research and practice. We hope that our Special Issue will bring both new valuable original data and up-to-date viewpoints on the subject.

Guest Editor

Prof. Dr. Renata Bączek-Kwinta

Department of Plant Physiology, Breeding and Seed Science, University of Agriculture in Krakow, ul. Podluzna 3, 30-239 Cracow, Poland

Deadline for manuscript submissions

closed (25 June 2023)



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/72783

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)