



*plants*



an Open Access Journal by MDPI

## Plant–Soil Interactions in Wetlands and Flooded Environments

Guest Editors:

**Dr. Elisa Pellegrini**

Freshwater Biological  
Laboratory, Department of  
Biology, Universitetsparken 4,  
2100 København Ø, Denmark  
elisa.pellegrini@bio.ku.dk

**Dr. Francesco Boscutti**

Department of Agricultural, Food,  
Environmental and Animal  
Sciences, University of Udine,  
Udine, Italy  
francesco.boscutti@uniud.it

Deadline for manuscript  
submissions:

**30 November 2021**

### Message from the Guest Editors

This Special Issue aims to gather together the latest research updates on the interactions between plants and soil in a broad range of wetlands and flooded environments in an effort to address and further improve our knowledge of this interdisciplinary topic. Plant–soil interactions are crucial to consider for the appropriate management of lands subject to flooding, with the ultimate goal of protecting cultivated areas and promoting effective actions of conservation and restoration of wetlands.

Expected changes in flooding regimes will impact on soils, altering nutrient cycling and soil processes (e.g., organic matter mineralisation). The extended lack of oxygen in soils and the consequent development of harmful phytotoxins (sulfides) influence plant growth and metabolism (fermentative metabolism). Plant communities shift in species composition and community diversity due to plant–plant interactions (competition). Plant–soil interactions in flooded environments are unique. Some acclimated plants show specific traits that can considerably modify the characteristics of the rhizosphere, which in turn can relieve the stress of flooding in plants.



[mdpi.com/si/66881](https://mdpi.com/si/66881)

# Special Issue



*plants*



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](#), [AGRICOLA](#), [AGRIS](#), [CAPlus / SciFinder](#), and many other databases.

**Journal Rank:** [JCR](#) - Q1 (*Plant Sciences*) / [CiteScore](#) - Q2 (*Plant Science*)

## Contact Us

---

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

Tel: +41 61 683 77 34  
Fax: +41 61 302 89 18  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/plants](http://mdpi.com/journal/plants)  
[plants@mdpi.com](mailto:plants@mdpi.com)  
[@Plants\\_MDPI](#)