



## The Role of Non-vascular Vegetation for Ecosystem Functioning and Climate in Different Regions of the World

Guest Editors:

**Prof. Dr. Philipp Porada**

Ecological Modelling, Institute of Plant Science and Microbiology, Universität Hamburg, Ohnhorststr. 18, 22609 Hamburg, Germany

**Dr. David J. Weston**

Oak Ridge National Laboratory (ORNL), Oak Ridge, TN, USA

**Prof. Dr. Leopoldo G. Sancho**

Section of Botany, Facultad de Farmacia, Universidad Complutense Madrid, 28040 Madrid, Spain

Deadline for manuscript submissions:

**closed (30 June 2023)**

### Message from the Guest Editors

Bryophytes, lichens, terrestrial algae, and cyanobacteria share several physiological characteristics that distinguish them from vascular plants, such as their lack of active control over water loss and uptake. The impacts of non-vascular vegetation on soil surface properties such as albedo, thermal conductivity, or water storage may alter ecosystem processes ranging from the energy balance to succession trajectories. A main obstacle for a more quantitative assessment of these numerous potential effects of non-vascular vegetation is the relatively low number of studies, which results in uncertainty when up-scaling estimates. In addition to climatic variation, the dependence of ecosystem functioning on species composition of non-vascular communities adds to this uncertainty. In this Special Issue, we aim to highlight the potential key functional role of non-vascular vegetation and to promote research that increases our overall knowledge in this regard. We welcome original papers on all topics related to non-vascular vegetation and ecosystem functioning, including both empirical and modelling approaches.





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, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Plant Sciences) / CiteScore - Q1 (Ecology, Evolution, Behavior and Systematics)

## Contact Us

---

Plants Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

[mdpi.com/journal/plants](http://mdpi.com/journal/plants)  
[plants@mdpi.com](mailto:plants@mdpi.com)  
[X@Plants\\_MDPI](https://twitter.com/Plants_MDPI)