Special Issue

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

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.

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)

Plants

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed

mdpi.com/si/123976

Plants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
plants@mdpi.com

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

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)