

## Special Issue

# Algal Morphogenesis and Response to Abiotic Stresses

### Message from the Guest Editor

Due to daily and monthly changes in living conditions, macroalgae are thought to acquire tolerance to these environmental changes to maintain growth and development normally. Understanding the regulatory mechanisms of stress response and development is quite important to breed novel strains of macroalgae with excellent characteristics against exposure to environmental stress under global warming conditions. To date, knowledge about life cycle and morphology of macroalgae have been extensively accumulated mainly for supporting their phylogenetic classification. However, physiological and molecular biological mechanisms of regulating response to environmental stress, development, and morphogenesis mostly remain to be elucidated, although environmental stress-inducible genes and some candidates of signaling factors have been identified. This Special Issue highlights the latest findings related to the regulation and networks of growth, morphogenesis, and stress response at physiological, biochemical, and molecular levels. Thus, we intend to collect research articles, short communications, and review articles related to the above topics pertaining to freshwater and marine macroalgae.

---

### Guest Editor

Prof. Dr. Koji Mikami

Department of Integrative Studies of Plant and Animal Production,  
School of Food Industrial Sciences, Miyagi University, 2-2-1 Hatatate,  
Taihaku-ku, Sendai 982-0215, Japan

---

### Deadline for manuscript submissions

31 August 2026



## Plants

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.1  
CiteScore 7.6  
Indexed in PubMed



[mdpi.com/si/208303](https://mdpi.com/si/208303)

*Plants*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[plants@mdpi.com](mailto: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, and 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)