



## Peptides in Plants

Guest Editors:

**Dr. Larisa I. Fedoreyeva**

**Prof. Dr. Boris F Vanyushin**

**Dr. Ekaterina N. Baranova**

**Dr. Neonila V. Kononenko**

Deadline for manuscript  
submissions:

**closed (20 June 2023)**

### Message from the Guest Editors

For many years, peptides in plants were considered only as antimicrobial components of plant defense mechanisms. Antimicrobial peptides kill pathogens by interacting with phospholipids and permeabilizing membranes. Another group of antimicrobial peptides is able to penetrate through membranes into cells and deliver various molecules. This ability of this class of peptides has recently received much attention from researchers. Such antimicrobial peptides are actively used not only in the fight against pathogenic microorganisms, but also in the treatment of genetic diseases.

The discovery that many different (secreted) peptides are involved in signaling has stimulated intense research. Peptide hormones play a key role in many physiological processes, coordinating developmental and environmental signals between different cells. Hormonal peptides play a critical role in plant growth and development, including defense mechanisms in response to pest damage, the control of cell division and expansion, as well as pollen incompatibility. They can trigger or inhibit a variety of genetic processes and biochemical reactions in the cell.





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)