

## Special Issue

# Genetics and Molecular Breeding of Cucurbitaceous Crops

### Message from the Guest Editor

Cucurbitaceae stands out as one of the most economically important fruit and vegetable crop families, following the Solanaceae family. Cucurbitaceae includes diverse crop species such as cucumber, melon, watermelon, zucchini, pumpkin, and several different gourds.

The genome assembly of most of these cucurbit crops has been completed, playing a pivotal role in the development of molecular markers and the discovery of new functional genes, essential for precision breeding. There are a wide range of breeding traits in these crops, including resistance to abiotic and biotic stress, functional components, flowering habits, fertility, taste and texture of edible parts, and fruit size and shape. Recent trends in breeding focus on genomics and bioinformatics analysis, as well as precision breeding relying on genome editing technologies for functional genes.

We welcome innovative research articles and review papers that explore not only germplasm resources and conventional breeding but also diverse molecular and genomic approaches.

---

### Guest Editor

Dr. Younghoon Park  
Department of Horticultural Bioscience, Pusan National University,  
Miryang 50463, Republic of Korea

---

### Deadline for manuscript submissions

closed (31 October 2024)



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/193575](https://mdpi.com/si/193575)

*International Journal of  
Molecular Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

[mdpi.com/journal/  
ijms](https://mdpi.com/journal/ijms)





# International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/journal/  
ijms](https://mdpi.com/journal/ijms)



## About the Journal

### Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, and molecular biophysics. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

---

### Editor-in-Chief

Prof. Dr. José L. Quiles  
Department of Physiology, Institute of Nutrition and Food Technology  
"Jose Mataix", Biomedical Research Center, University of Granada,  
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

---

### 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, MEDLINE, Embase, CAPus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)