

Special Issue

Plant Defense Genes Against Biotic Stresses

Message from the Guest Editor

Plant–pest and pathogen relationships are intricate interactions encompassing complex networks of molecules and signalling pathways and strategies to overcome defenses developed by each other. The induction of plant defense genes is initiated when specific receptors recognize the presence of pathogen, pest, incurred damage, or their volatiles. The success of plants in withstanding biotic stresses depends on their fast response by triggering a wide range of specific genes and compounds with defense properties. These plant defences locally or systemically induced by biotic stresses are regulated by a complex hormonal cross-talk. Transcriptomic and proteomic profiles have demonstrated that plants may discriminate among species of pathogens and pests and activate specific responses. Metabolomic approaches have corroborated plants' ability to differentiate species and determine the onset of indirect defense responses to complement the direct defenses.

This Special Issue calls papers covering all aspects on the understanding of plant response to biotic stresses. Prof. Isabel Díaz

Guest Editor

Prof. Dr. Isabel Díaz Rodríguez
Universidad Politécnica de Madrid, Centro de Biotecnología y Genómica de Plantas, Madrid, Spain

Deadline for manuscript submissions

closed (30 June 2018)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 10.0
Indexed in PubMed



mdpi.com/si/8833

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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 10.0
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 (Inorganic Chemistry)