

Special Issue

Plant-Microbe Interactions and Resistance against Herbivorous Pests

Message from the Guest Editors

Plants have associations with various beneficial soil microbes, which play important roles in plant growth promotion and resistance against abiotic and biotic stress, including herbivores. The use of these symbiotic microorganisms seems to be a promising alternative control of herbivorous pests in commercial crops. Beneficial soil microbes may enhance defensive mechanisms by which crops may deter herbivore feeding. These beneficial microbes may modulate phytohormone signaling, such as the jasmonic acid, ethylene and salicylic acid pathways, defensive gene expression, synthesis of toxic secondary metabolites, volatile organic compounds, and plant defensive proteins. The main goal of this Special Issue is to bring together current findings on the influence of microbes in crops' resistance to biotic stress, with a particular emphasis on how the soil microbiota can activate molecular, physiological, and chemical plant defenses against herbivorous pests.

Guest Editors

Dr. Marcia González-Teuber

Departamento de Química Ambiental, Facultad de Ciencias,
Universidad Católica de la Santísima Concepción, Concepción
4090541, Chile

Dr. Patricio Ramos

Centro de Investigación de Estudios Avanzados del Maule (CIEAM),
Vicerrectoría de Investigación y Postgrado, Universidad Católica del
Maule, Talca 3480112, Chile

Deadline for manuscript submissions

closed (20 October 2023)



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/135520

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

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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

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