



an Open Access Journal by MDPI

Plant Microbiome Responses to Environmental Changes

Guest Editors:

Dr. Lidia Błaszczyk

Department of Plant Microbiomics, Institute of Plant Genetics Polish Academy of Sciences, 60-479 Poznań, Poland

Dr. Sylwia Salamon

Department of Plant Microbiomics, Institute of Plant Genetics, Polish Academy of Sciences, Strzeszynska 34, 60-479 Poznan, Poland

Deadline for manuscript submissions:

closed (20 January 2023)

Message from the Guest Editors

Dear Colleagues,

We are inviting submissions to the Special Issue on Plant Microbiome Responses to Environmental Changes.

Plants are not individual entities but attractive holobionts inhabited by numerous microorganisms. The role of these residents varies from beneficial endophytes, through neutral commensals to harmful pathogens. The function, as well as the community structure of the plant inhabitant, may be changeable and is shaped by climatic conditions and agricultural management. It has been shown that the plant microbiome plays a vital role in host growth and fitness, as well as may alleviate the abiotic and biotic stresses effects.

Due to the importance of plant-associated fungi and bacteria in host adaptation, there is a need to understand how the microbiome responds to environmental changes and thus shape the plant's response to changing environmental conditions. Deciphering the plant-microbial relationship is critical to designing new crop management strategies to improve plant health and growth.

Keywords

fungi; bacteria; drought; heat; cold; crop; climatic changes; pollutions; endosphere; rhizosphere; phyllosphere











an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola CerulloDipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

Contact Us