

Special Issue

Plant Growth Promoting Bacteria

Message from the Guest Editor

Dear colleagues, Over one-third of the world's crop yields are lost due to pests, diseases, and environmental stresses, it is very important to exploit the functions of plant-associated microbes—the plant microbiome. An important part of the plant microbiome includes plant growth-promoting bacteria (PGPB), which can reside in the rhizosphere and phyllosphere or can colonize the plant's interior tissues (endophytic bacteria). PGPB may promote plant growth directly by facilitating nutrient acquisition or modulating hormone levels or indirectly by reducing the negative effects of pathogens on plant growth and development. The articles (original research papers, perspectives, hypotheses, opinions, reviews etc.) selected for publication in this Special Issue will focus on the following: plant genes and metabolic pathways involved in the recruitment of protective root PGPB; PGPB functions recruited to stressed plants; microbe benefits; and the role of the host immunity system in the selection of PGPB. Study levels of interest include metagenome sequencing, gene regulatory network, metabolite profiles, plant–microbe phenotyping, and bioinformatics.

Guest Editor

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Deadline for manuscript submissions

closed (20 July 2023)



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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, and 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

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