Special Issue

The Role of Plant Growth-Promoting Microorganisms (PGPMs) in Horticulture Production

Message from the Guest Editors

Plants interact with beneficial microorganisms from their early stages of development, playing crucial roles in promoting seed germination, improving nutrient availability, enhancing water uptake, preventing phytopathogen attacks, and strengthening responses to abiotic stresses. Microorganisms can be isolated from various sources and evaluated for their plant growth-promoting potential both in vitro and in vivo. Several strategies have been proposed to manage these beneficial microorganisms, including methods that leverage microbiomes to enhance tolerance to abiotic stress and promote plant growth. In the context of current climate change, which creates increasingly challenging conditions for plant growth, there is a pressing need to identify compatible microorganisms to ensure the growth and yield of horticultural crops. This Special Issue aims to focus on plant–microbe interactions and invites studies that employ a combination of approaches to explore the diversity, adaptation, ecological roles, and benefits of plant-associated microbes in horticultural production under both biotic and abiotic stresses.

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Message from the Editor-in-Chief

Horticultural plants and their products provide sustenance, health, and beauty. A confluence of factors is putting increasing pressure on horticultural production to evolve, and innovative research is addressing these challenges. *Horticulturae* provides a venue to communicate research results in a rapid manner with open access, allowing everyone the opportunity to stay abreast of leading research addressing horticulture. I invite you to consider publishing the results of your research in this high quality, peer-reviewed journal.

Editor-in-Chief

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