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Effects of Plant Growth Regulators from Natural or Synthetic Sources on Horticultural Plants

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Message from the Guest Editors

Plant growth regulators (PGRs) are natural or synthetic compounds with hormone-like activities. Like hormones, PGPRs act as chemical messengers for intercellular signaling and play a fundamental role in plant growth and development and response mechanisms to a wide range of abiotic and biotic stresses.

They are naturally synthesized by plants and microorganisms or can be produced from organic or chemical sources, and can be grouped into classes of compounds such as auxins, gibberellins, cytokinins, abscisic acid, ethylene, brassinosteroids, etc.

The mechanisms underlying the effects of PGRs, and their roles in plant growth and development, the interaction or independence of their mode of action, and hormonal cross-talk under biotic and abiotic stresses are crucial for horticultural plant sustainable management and needs to be investigated using innovative approaches.

Therefore, the Special Issue aims to collect research articles, reviews, short notes, and opinion articles focusing on the effects and the mode of action of the PGRs from organic and synthetic sources and their effectiveness in improving plant growth and tolerance to biotic and abiotic stresses.













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Message from the Editor-in-Chief

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