



Regulatory Signals in Plant Growth–Defense Trade Off

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Deadline for manuscript
submissions:

closed (20 December 2021)

Message from the Guest Editors

When challenged by biotic stresses, plants rely on their innate immune system for their survival, which can be activated by microbe-associated and damage-associated molecular patterns (MAMPs and DAMPs) in association with reactive oxygen species (ROS) production and ion fluxes changes, up-regulation of defense genes and down-regulation of growth genes, cell wall reinforcement, stomatal closure, and modification of xylem differentiation. Activation of immunity is also accompanied by down-regulation of growth, referred to as growth–defense trade-off.

Salicylic acid, jasmonic acid, cytokinin, and ethylene are the major controlling hormones. ROS and calcium (Ca^{2+}), with their complex dynamics and regulation, play a main regulatory role in both immunity and development, and their formation is finely tuned.

This Special Issue is open to all research articles. Particularly welcome are research papers on the following topics:

- Immunity and response to biotic stress;
- Effect of ion fluxes on plant growth and development under biotic stress.





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Message from the Editor-in-Chief

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