

Special Issue

Lipid Action in Crop Development and Defense

Message from the Guest Editors

As major components of plasma membrane and organelles, lipids also function as active molecules, likely contributing to signal transduction, the permeability and fluidity of membranes and as precursor substances for some important hormones. Lipids also perform the functions of signals and regulators in a variety of cellular processes, such as programmed cell death (PCD), cell-to-cell interactions, abscisic acid (ABA)-dependent stomatal closure, cell wall formation, pollen development, Golgi and endoplasmic reticulum (ER) integrity, drought and salt tolerance, low-temperature-induced signal transduction, cell division and growth, mineral ion homeostasis, plant-microbe interactions, cell type differentiation, organogenesis and cellular organization and adaptation. This special issue seeks to advance knowledge on genes regulated by lipids or plant hormones, focusing on these topics:

- Candidate gene response to lipids and related plant hormones;
- Exploration of the relationship between lipids and plant architecture;
- The genes, transcription factors and enzymes involved in lipid metabolism;
- Lipid involved in crop tolerance;
- Vesicular trafficking networks in crop-fungal pathogen interactions.

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