

Special Issue

Advances in Plant Redox Biology Research

Message from the Guest Editors

Plant redox biology has become a cornerstone for deciphering the molecular mechanisms that govern stress resilience, growth, and immune responses in plants. Chinese researchers have spearheaded advancements in this field, uncovering novel insights into redox signaling pathways, the dual roles of reactive oxygen and nitrogen species (ROS/RNS), and the redox-mediated regulation of gene expression and protein activity. This Special Issue, "Advances in Plant Redox Biology Research in China", aims to bring together high-quality original research and review articles that reflect the current state and future directions of this rapidly evolving field. Key topics include, but not limited to the following:

- redox-sensitive post-translational modifications;
- ROS/RNS crosstalk in signaling networks;
- redox homeostasis under abiotic/biotic stresses;
- cutting-edge technologies for real-time redox imaging and quantification

By bridging molecular, cellular, and system-level approaches, this collection underscores China's leadership in transforming fundamental redox discoveries into actionable strategies for crop resilience and sustainable agriculture.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

It has been recognized in medical sciences that in order to prevent adverse effects of “oxidative stress” a balance exists between prooxidants and antioxidants in living systems. Imbalances are found in a variety of diseases and chronic health situations. Our journal *Antioxidants* serves as an authoritative source of information on current topics of research in the area of oxidative stress and antioxidant defense systems. The future is bright for antioxidant research and since 2012, *Antioxidants* has become a key forum for researchers to bring their findings to the forefront.

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