

Special Issue

Bioactive Compounds from Plants: Synthesis, Activities and Functions

Message from the Guest Editors

Plant natural products are synthesized through complex enzymatic networks orchestrated by evolutionary history and responsive to genetic, developmental, and environmental cues. Deciphering these pathways, their regulation, and their diversification across plant lineages is fundamental to improving the yield, stability, and functionality of plant-derived bioactive compounds. This Special Issue aims to provide an integrated view of plant natural products from gene to molecule to application. We welcome original research and high-quality reviews that explore the following topics: (i) elucidation of biosynthetic and regulatory pathways; (ii) evolution and diversification of bioactive metabolites; (iii) innovative applications and modes of action of plant-derived compounds in health, agriculture, and industry. Contributions that employ cutting-edge approaches in genomics, artificial intelligence, structural biology, metabolic engineering, and synthetic biology are particularly encouraged. Studies on emerging model and non-model species are also welcome.

Guest Editors

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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, and conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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