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Plants as a Promising Biofactory for Bioactive Compounds: 2nd Edition

Guest Editor:

Prof. Dr. Jianfeng Xu

Arkansas Biosciences Institute, Arkansas State University, Jonesboro, AR 72467, USA

Deadline for manuscript submissions:

30 December 2024

Message from the Guest Editor

Dear Colleagues,

Plants naturally produce a diverse range of bioactive small molecules, such as alkaloids, flavonoids, terpenoids, and phenolic compounds, which are widely utilized as pharmaceuticals and nutraceuticals. Plants can also be genetically engineered to produce valuable recombinant proteins (biologics) for therapeutic and industrial applications, such as cytokines, blood proteins, antibodies, vaccines, and industrial enzymes. The driving forces behind the rapid expansion of plant-based biofactories include their low production cost, product safety, and simple scale-up process. Both whole plants and in vitro cultured plant tissues or cells can serve as a viable bioproduction platform.

This Special Issue of *Life* aims to provide a broad spectrum of reviews and original research contributions that report innovative strategies and approaches to enhancing the bioproduction of plant biofactories, as well as novel functions and applications of plant-produced bioactive compounds. In addition to papers focusing on higher plants, those on microalgae and moss production systems are also welcome

Prof. Dr. Jianfeng Xu

Guest Editor













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Editor-in-Chief

Prof. Dr. Lluís Ribas de Pouplana

Institute for Research in Biomedicine (IRB Barcelona), The Barcelona Institute of Science and Technology, 08028 Barcelona, Spain

Message from the Editor-in-Chief

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