

## Special Issue

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

### Message from the Guest Editor

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.

### Guest Editor

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### Deadline for manuscript submissions

30 September 2025



## Life

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### Message from the Editor-in-Chief

*Life* (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

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### Editor-in-Chief

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