

## Special Issue

# Chemical Diversity of Plant Bioactives: Ecological Functions, Organismal Interactions, and Environmental Adaptations

### Message from the Guest Editor

Plant-derived bioactive compounds play ecological and evolutionary roles, mediating interactions between plants and their environment. These compounds are fundamental in plant defense mechanisms, symbiotic relationships, and co-evolutionary processes with microorganisms, herbivores, and pollinators. Their chemical diversity has shaped ecological networks over time and continues to offer valuable applications in food, pharmaceuticals, and biotechnological industries. This Special Issue seeks to highlight interdisciplinary research on plant-derived bioactive compounds, emphasizing their chemical diversity, ecological functions, and evolutionary relevance. We welcome contributions focusing on the following:

- **Chemical ecology and plant–microorganism interactions.**
- **Bioactive compounds in plant–herbivore and plant–pollinator relationships.**
- **Omics-based strategies.**
- **Environmental and evolutionary drivers.**
- **Green extraction and sustainable processing technologies.**
- **Adaptive and co-evolutionary dynamics.**
- **Data-driven approaches.**

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### Guest Editor

Prof. Dr. Jesús Fernando Ayala-Zavala

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### Deadline for manuscript submissions

closed (31 December 2025)



## Diversity

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## About the Journal

### Message from the Editor-in-Chief

*Diversity* (ISSN 1424-2818) is a scholarly journal that covers all areas of diversity research. Our distinguished editorial board and refereeing process ensures the highest degree of scientific rigor for publishing. Original research articles and timely reviews are released online, with unlimited free access.

We invite papers and reviews on multidisciplinary topics of diversity that bridge organismic diversity (systematics, biodiversity, phylogeny, population genetics, and evolution) and molecular diversity (phytochemistry and biophysics).

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### Editor-in-Chief

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#### Journal Rank:

JCR - Q2 (Biodiversity Conservation) / CiteScore - Q1  
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#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.6 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).