# Special Issue

# Exploring Plant-Derived Bioactive Compounds: Therapeutic, Insecticidal and Antimicrobial Applications

## Message from the Guest Editor

Harnessing plants as sources of biomedical and biotechnologically relevant compounds supports sustainable innovation and the UN 2030 Sustainable Development Goals. It promotes human and environmental health, biodiversity conservation, and eco-friendly production. This Special Issue explores the biomedical and biotechnological potential of plant-derived compounds—from primary metabolites (proteins, lipids, carbohydrates, nucleic acids) to secondary metabolites (alkaloids, flavonoids, terpenoids, phenolics, saponins, etc.), whether in complex mixtures (e.g., extracts, essential oils) or as isolated molecules. Topics include but are not limited to:

- Antimicrobial, antiparasitic, and antibiofilm activities
- Pharmacological effects (e.g., anti-inflammatory, antioxidant, neuroprotective, antitumor, antidiabetic)
- Toxicity assessments (in vitro and in vivo)
- Insecticidal properties and vector/pest control
- Ecotoxicological studies
- Innovative plant-based formulations

We welcome original research, reviews, and case studies highlighting plant compounds with biomedical or biotechnological value.

#### **Guest Editor**

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### Deadline for manuscript submissions

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## **About the Journal**

### 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, 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.

### Editor-in-Chief

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