# Special Issue

# **Allelopathy in Agroecosystems**

### Message from the Guest Editors

Allelopathy, the phenomenon in which plants release biochemicals into the environment to influence neighboring plant growth and development, holds significant importance in agroecosystems. In recent years, its potential applications in agroecosystems have garnered increasing attention. Researchers have explored its utility in weed management by envisioning a reduction in synthetic chemical inputs and developing allelopathic crop cultivars through genetic manipulation. This Special Issue aims to delve deeper into the interface between allelopathy and agroecosystems by offering insights into its mechanisms, applications, and implications for sustainable agriculture practices. We invite contributions that elucidate the biochemical and ecological mechanisms unerlying allelopathic interactions while exploring innovative methodologies for studying the potential of allelopathy for integrated weed management and crop improvement. Research articles, reviews, and perspectives are welcomed with an emphasis on uncovering novel insights and methodologies that can advance our understanding of the practical implications of allelopathy in agroecosystems.

#### **Guest Editors**

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### Deadline for manuscript submissions

closed (30 June 2025)



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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, 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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