

Special Issue

Research on Secondary Metabolites in Agricultural Plants

Message from the Guest Editors

Secondary metabolites are essential components of plant physiology, influencing defense mechanisms, stress tolerance, and ecological interactions. These compounds, such as phenolics, alkaloids, terpenoids, and flavonoids, play a critical role in improving crop resilience and enhancing nutritional and medicinal properties. Advances in metabolomics, molecular biology, and biotechnology have provided new insights into the biosynthesis, regulation, and functional roles of these metabolites in agricultural systems. This Special Issue invites original research articles, reviews, and short communications focusing on the diversity, biosynthetic pathways, and ecological significance of secondary metabolites in crops. Topics include stress-induced metabolite production, genetic and molecular regulation, metabolite-based pest and disease management, postharvest quality improvement, and strategies for enhancing metabolite content through breeding, biotechnological approaches, and biofortification. Studies addressing health-promoting properties and sustainable agricultural practices are also welcome.

Guest Editors

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Deadline for manuscript submissions

closed (31 May 2026)



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Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, scholarly and scientific open access journal publishing peer-reviewed research papers, review articles, communications and short notes that reflect the breadth and interdisciplinarity of agriculture.

Editor-in-Chief

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