

Special Issue

Innovative Approaches to Sustainable Agriculture: Natural Bioactives and Advanced Fertilization

Message from the Guest Editors

Amidst climate change, soil degradation, and rising food demand, sustainable agriculture is crucial. Natural bioactives from plants and microorganisms enhance crop resilience and productivity. These compounds, including phytohormones and antioxidants, boost growth, improve stress tolerance, and protect against pests. Leveraging bioactives reduces reliance on synthetic chemicals, fostering eco-friendly farming. A shift toward sustainably sourced bioactives, often from food industry by-products, cuts waste while providing valuable compounds. Eco-friendly extraction methods like supercritical fluid and pressurized liquid extraction efficiently recover bioactives from agro-industrial waste. These innovations support sustainability, health, and efficiency in agriculture. By embracing these approaches, we enhance crop yields, soil health, and environmental sustainability. This Special Issue of *Plants* explores practical solutions for advancing sustainable farming.

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Deadline for manuscript submissions

15 February 2026



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/231840

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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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