



an Open Access Journal by MDPI

Effects of Nanoparticles on Plant Growth and Development under Biotic and Abiotic Stress

Guest Editors:

Dr. Gregorio Cadenas-Pliego

Department of Nanomaterials Chemistry, Centro de Investigación en Química Aplicada, 25294 Saltillo, Mexico

Prof. Dr. Adalberto Benavides-Mendoza

Departamento de Horticultura, Universidad Autónoma Agraria Antonio Narro, Saltillo 25315, Mexico

Prof. Dr. Antonio Juárez Maldonado

Departamento de Botánica, Universidad Autónoma Agraria Antonio Narro, Saltillo 25315, Mexico

Deadline for manuscript submissions: closed (17 November 2023)

Message from the Guest Editors

Dear Colleagues,

Different technologies are used to reduce the effects on agricultural crops caused by biotic and abiotic stresses. Recently, nanotechnology has attracted much attention and has been used to combat stress in plants and reduce negative effects on agricultural production, avoiding large economic losses. Various nanoparticles and nanomaterials have been used, and positive and negative biological effects have been found.

Nanotechnology is an important tool for sustainable crop production, reducing nutrient loss, suppressing disease by pathogens and thus improving yields. The idea of using nanotechnology for the sustainable production of safe food is explored from a number of perspectives, including those related to the toxicity of food and the environment.

This special issue includes articles related to the use of nanoparticles and nanomaterials to combat biotic and abiotic stress in crop production.



mdpi.com/si/124614

Specialsue





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Dilantha Fernando Department of Plant Science, University of Manitoba, Winnipeg, MB R3T 2N2. Canada

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 community.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Plant Sciences) / CiteScore - Q1 (Ecology, Evolution, Behavior and Systematics)

Contact Us

Plants Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/plants plants@mdpi.com X@Plants_MDPl