Special Issue

Application of Nanoparticles on Horticultural Crops

Message from the Guest Editor

The application of nanoparticles in industry, medicine, and agriculture has benefited society in various ways. However, the vast application of nanoparticles can result in the potential release of these materials into the environment. Nanoparticles accumulated in the soil can interact with soil microorganisms, be taken up by plants. and potentially affect environmental and human health. Exposure of plants to nanoparticles can impact plant growth, development, and reproduction. Metal-based nanoparticles in particular are likely to be oxidized in the environment, enter plant cells via membrane transporters, and affect the structure of the cell membrane and cellular organelles. Determining the impact of nanoparticles on plants at the molecular and physiological level is necessary to better understand the mechanism of nanoparticles' effects on plants. The proposed issue aims to present the results of studies focused on the effects of nanoparticles on plant physiological and molecular responses with a focus on membrane transporters and the protein profile of plants.

Guest Editor

Dr. Azam Noori

Department of Biology, Merrimack College, North Andover, MA 01845, USA

Deadline for manuscript submissions

closed (15 July 2023)



Horticulturae

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 5.1



mdpi.com/si/86018

Horticulturae
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
horticulturae@mdpi.com

mdpi.com/journal/ horticulturae





Horticulturae

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 5.1



About the Journal

Message from the Editor-in-Chief

Horticultural plants and their products provide sustenance, health, and beauty. A confluence of factors is putting increasing pressure on horticultural production to evolve, and innovative research is addressing these challenges. *Horticulturae* provides a venue to communicate research results in a rapid manner with open access, allowing everyone the opportunity to stay abreast of leading research addressing horticulture. I invite you to consider publishing the results of your research in this high quality, peer-reviewed journal.

Editor-in-Chief

Prof. Dr. Luigi De Bellis

Department of Biological and Environmental Sciences and Technologies (DiSTeBA), Salento University, Lecce, Italy

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), PubAg, AGRIS, FSTA, and other databases.

Journal Rank:

JCR - Q1 (Horticulture) / CiteScore - Q1 (Horticulture)

