

Special Issue

Biostimulant and Biofertilizer Use in Agricultural Systems

Message from the Guest Editors

The excess use of chemical fertilizers in agriculture to meet increased food demands is having adverse effects on the physico-chemical and biological properties of soil. Moreover, the worsening of soil properties could reduce plant production and food quality. Therefore, in the recent years, several organic fertilizers that act as natural stimulants for plants have been developed.

Biofertilizers and biostimulants are substances containing natural derivatives and/or microorganisms that have beneficial effects on plant growth and yield. Microorganisms use several mechanisms to enhance nutrient uptake, improve soil fertility and increase crop yields, such as nitrogen fixation and potassium mechanisms. The aim of this Special Issue is to present innovative research on the interaction between plants and soil as a consequence of biofertilizers applications. Manuscripts that address the effect of biostimulants or biofertilizer applications on plant performance, soil biodiversity and quality and their interactions in agricultural systems will be considered.

Guest Editors

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Deadline for manuscript submissions

closed (1 March 2024)



Plants

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Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



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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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