



Plant Biotic and Abiotic Stress Tolerance: Physiological and Molecular Approaches for Sustainable Agricultural Production

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Message from the Guest Editor

Dear Colleagues,

Plants face various harmful stress factors which limit their growth and productivity. To enhance plant growth and yield, it is important to understand how plants respond to such numerous stresses and to exploit the gained information in stress tolerance breeding programs. Various plant biostimulants play essential roles in defense responses against biotic and abiotic stresses such as phytohormones, natural extracts, substances, ...etc.

This Special Issue, therefore, seeks contributions addressing how plant species respond to various biotic and abiotic stresses, such as microbial diseases, salinity, drought, cold, heat, flooding, nutrient deficiency, and heavy metals. It welcomes reviews, perspectives, communications, and original research articles focusing on the physiological and molecular understanding of biotic and abiotic stress responses in plant species, as well as discussing the plant biostimulants roles and changes in gene expression patterns and their regulation. Approaches to enhance stress tolerance and crop yield under stress conditions are also of particular interest.

Dr. Mohamed A. El-Esawi

Guest Editor





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