

Special Issue

The Role of Nutrients in Crop Performance Under Biotic and Abiotic Stresses

Message from the Guest Editors

This Special Issue will showcase how mineral nutrients drive crop tolerance to environmental stress under field and controlled conditions. We invite studies that connect nutrient supply, uptake, transport, and partitioning with measurable stress tolerance outcomes at the organ, plant, and cropping system levels. We particularly welcome research that translates mechanistic insights into agronomic management, breeding targets, and decision support for sustainable production, especially as it relates to the following:

- Nutrient mediated priming against abiotic and biotic stress;
- Quantitative links between nutrient stoichiometry and stress physiology;
- Nutrient interactions with plant associated microbes;
- Precision and site-specific fertilization under climate variability;
- Novel inputs including chelates and nano-enabled formulations;
- High-throughput phenotyping combined with robust statistics and modeling;
- Data-rich field trials that quantify tolerance, yield stability, and resource use efficiency.

For this Special Issue, we welcome original research that links nutrients to stress tolerance from gene to field, including multi-season and multi-location trials, and so on.

Guest Editors

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