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The Role of Silicon in Improving Crop Growth under Abiotic Stress

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Message from the Guest Editors

The aim of this Special Issue is to delve into the dynamic role of silicon in improving crop performance under environmental stress. It intends to showcase how silicon can significantly mitigate the effects of abiotic stressors, such as drought, salinity, and extreme temperatures, thereby enhancing plant growth and productivity.

The Special Issue will feature innovative research on the following:

- New sources of silicon, as well as their optimal concentrations and application methods;
- The interactions between silicon and plant genes affecting stress resistance;
- The impact of silicon on plant microbiomes and overall health;
- The role of silicon in enhancing water use efficiency in arid conditions;
- The impact of silicon on crop yield and quality, demonstrating how supplementation can improve crop performance.

Contributions are sought in the form of original research, comprehensive reviews, and methodological papers that advance our understanding of silicon's mechanisms of action in plants and its integration into sustainable farming practices.







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Message from the Editor-in-Chief

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