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Rice Growth, Photosynthesis and Nitrogen Utilization

Guest Editor:

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Message from the Guest Editor

Rice (*Oryza sativa* L.) is one of the most important crops grown worldwide. Sustaining high rice productivity requires intensive application of inorganic nitrogen fertilizers. However, large nitrogen fertilizer inputs impose detrimental effects on the environment. Thus, improvements in the nitrogen utilization of rice are essential. Interestingly, photosynthesis is recognized as an efficient way to increase nitrogen utilization and productivity. Yet, the understanding of regulatory mechanisms that increase photosynthetic efficiency and nitrogen utilization in rice is still limited, and how photosynthesis coordinates with nitrogen metabolism for improving rice growth and productivity remains largely unclear. Fortunately, technological advances in ‘omics’ approaches provide the possibility to reveal the underlying mechanisms for improving nitrogen-use and photosynthetic efficiency at the gene, protein, and metabolism level.

This Special Issue of *Life* aims to publish the latest research progress on the regulatory mechanisms of rice growth, photosynthesis and nitrogen utilization. We welcome investigators to contribute original research articles and review papers.



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Special Issue



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Message from the Editor-in-Chief

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