Special Issue

Rice Growth, Photosynthesis and Nitrogen Utilization

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.

Guest Editor

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Life (ISSN 2075-1729) is an international, peer-reviewed open access journal that publishes scientific studies related to fundamental themes in life sciences. Some papers are published individually, while others are submitted for inclusion in special issues with guest editors. You are invited to contribute a research article, essay, or a review to be considered for publication.

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