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Research on the Regulatory Mechanism of Algae Reproduction under Abiotic Stress Conditions

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Message from the Guest Editor

Algae are exposed to changes in environmental conditions such as abiotic stresses. Thus, acclimation and acquisition of stress tolerance are indispensable for sustainable survival. Recent omics analyses represent the primary importance of stress-inducible and repressive expression of genes involved in the biosynthesis and metabolism of intracellular components in adaptive response to abiotic stresses in algae. In addition, physiological research indicated that transition from growth to reproductive phases is sometimes promoted by abiotic stresses. It is usually expressed as changes in lifecycle tradeoff. However, the relationship between stress-inducible gene expression and reproductive response is mostly unknown to date.

This Special Issue highlights novel findings that significantly contribute to the development about how abiotic stress-inducible reproduction is regulated at physiological and molecular levels. Thus, we intend to collect high-quality articles related to reproductive responses including lifecycle tradeoff under various kinds of abiotic stress conditions. Physiological and molecular biological studies on reproductive strategies are within the scope of this issue.



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Special Issue



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Message from the Editor-in-Chief

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