

Special Issue

Environmental Stress and Adaptation: Molecular Mechanisms and Ecosystems Biodiversity

Message from the Guest Editors

This Special Issue will address the diverse mechanisms through which organisms respond to environmental stressors, including those of plants, microorganisms, and aquatic biodiversity. We invite articles on molecular mechanisms, new methods for measuring oxidative damage, ecological shifts caused by abiotic stress, and environmental DNA (eDNA) metabarcoding to understand aquatic biodiversity and ecosystem health.

1. Oxidative stress: How do Reactive Oxygen Species (ROS) and antioxidants work in organisms under stress? The involvement of ROS in plants, cyanobacteria, and even more organisms relative to the effects of environmental stresses like drought, pollution, high light, and extreme temperatures will be considered.
2. Molecular and biochemical mechanisms: Genetic structure, cellular changes, and stress-related signaling pathways in the same organism.
3. eDNA metabarcoding: Using environmental DNA to measure species distribution and monitor biodiversity in complex environments.
4. Ecological consequences of environmental stress: How do changes at the molecular level affect, for example, species composition, environmental interactions, and community structure?

Guest Editors

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Message from the Editor-in-Chief

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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