Special Issue

Bud Fruitfulness in Grapes: Metabolism Response to Environmental Conditions

Message from the Guest Editor

The influence of environmental factors on viticulture has been recognized for centuries through the concept of terroir, which links climate, soil, and topography to fruit and wine quality. The advent of climate change in recent decades has intensified research, as rising temperatures and altered weather patterns are having an impact on grape phenology and quality.

This Special Issue covers a diverse array of topics, including the influence of environment on grape physiology and fruit metabolite profiles, terroir, adaptive agricultural practices to mitigate environmental stress, long-term climate change impacts on grape phenology and fruit typicity, and sustainable practices to ensure high-quality production.

We welcome the submissions of original research papers and review articles to further understand how environmental factors (climate, soil, light, etc.) impact grapevine growth, metabolism, and fruit quality, and to develop sustainable practices to enhance vineyard resilience in a changing climate.

Guest Editor

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Deadline for manuscript submissions

30 December 2025



an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



mdpi.com/si/236215

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Editor-in-Chief

Prof. Dr. Leslie A. Weston

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