vinetur

How climate change could both enhance and imperil bordeaux wines

A comprehensive study examines the impacts of climatic shifts on the characteristics and quality of bordeaux red wines

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As vineyards across Europe partake in their annual harvest, from the chilly climates of the United Kingdom to the sun-soaked terrains of Sicily, the pivotal question of how climate change impacts wine quality comes into sharper focus. A rigorous process of

grape sorting, pressing, and fermentation in various types of barrels follows the harvest, leading up to the highly anticipated 'en primeur' season—where wine quality is assessed and a futures market emerges. Originated by Bordeaux wine merchants in the post-war era, the en primeur system allows early purchasing of wine, offering liquidity to vineyards in the bottling phase.

During the en primeur period, merchants and critics undertake the critical task of assessing wine quality and character. Descriptive reviews in the form of tasting notes—capturing aspects like fruitiness, mouthfeel, and spice notes—complement numerical scores that compare the vintage to prior years and other local wines. However, the scores fluctuate with annual weather changes, influenced by a myriad of factors, from soil type to vinification choices.

Recent research delves into the intriguing relationship between wine quality and annual weather variations, focusing on Bordeaux—a region already experiencing climate change's influence through early ripening, water stress, and fluctuating wine quality. Due to the extensive scale of en primeur, encompassing thousands of chateaus and a cadre of high-profile critics, Bordeaux offers an ideal setting for such an investigation.

The Interplay of Weather and Quality

The findings are both promising and cautionary. Warmer temperatures, higher winter rainfall, and shorter growing seasons correlate with higher wine quality. With climate change models projecting more frequent occurrences of such conditions, Bordeaux wines could become stronger and more rounded in the coming years. Observations from vineyards in St-Émillion, one of Bordeaux's 37 appellations, and interviews with industry experts like Alexa Boulton, commercial director at Château-Figeac, reinforce these trends.

The Caveats: Extremes on the Horizon

However, the encouraging data comes with significant caveats. The frequency of extreme weather events like late frosts, droughts, and violent storms is rising, jeopardizing entire vintages. A striking example was the 2020 hailstorm that ravaged Bordeaux, causing substantial losses in grape yield, and subsequently, wine quality.

Such extremes pose a looming threat to vineyards, requiring urgent adaptation and risk mitigation strategies.

Implications Beyond Bordeaux: A Global Perspective

The ripple effects of these findings extend beyond Bordeaux, affecting wine regions worldwide. For example, although the UK is now capable of producing excellent red wines, fluctuations in temperature and humidity have led to widespread disease and fruit loss, as corroborated by English winemaker Natasha Rompante.

As climate change continues its inexorable march, the wine industry must adapt and evolve. The research illuminates the specific weather conditions that contribute to better wine, offering a cautiously optimistic outlook for Bordeaux. But it's clear that a deeper understanding of the complex interplay between climate, vine, and wine is essential for the long-term viability of vineyards globally.