

Grapevine Red Blotch Disease Impacts Global Wine Production

What research knows about Grapevine Red Blotch Disease of grapevines

BRAUNSCHWEIG, NIEDERSACHSEN, GERMANY, November 14, 2023 /EINPresswire.com/ -- In the current issue of the renowned scientific journal PLOS Pathogens Pearls, an international team led by Dr Björn Krenz from the Department of Plant Viruses at the Leibniz Institute DSMZ-German Collection of Microorganisms and Cell Cultures GmbH summarizes the latest research findings and unanswered questions surrounding the globally spreading disease of grapevines.



A healthy vine (left) next to plant showing symptoms of Grapevine Red Blotch Disease (right); source: Cornell University/Marc Fuchs

Understanding Grapevine Red Blotch Disease (GRBD)

GRBD, first identified in California in the 2000s, is a viral infection affecting both wild and commercial grapevines. The disease, caused by the Grapevine Red Blotch Virus (GRBV), leads to poor grape quality due to disrupted ripening processes. Dr. Krenz notes, "The lower quality of wine produced from infected grapes is causing considerable economic losses to winegrowers." The study suggests that GRBV likely originated in North America and is spreading globally, mainly through the transport of infected cuttings. In addition, the three-cornered alfalfa hopper (*Spissistilus festinus*) is identified as a potential carrier. To combat this spread, researchers recommend the use of GRBV-free plant material and, in heavily affected areas, the complete removal of infected vines.

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Dr. Björn Krenz

Although significant progress has been made in understanding GRBD, many questions remain unanswered, including the full extent of its spread, the exact mechanisms of grape damage and possible other vectors or viruses involved. Further research is crucial for the protection and sustainable development of the global wine industry.

Original publication

Krenz B, Fuchs M, Thompson JR (2023)

Grapevine red blotch disease: A comprehensive Q&A guide. PLoS Pathog 19(10): e1011671.

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