

A MULTI-FACETED APPROACH TO MANAGING POWDERY MILDEW ON ORGANIC TABLE GRAPES IN SOUTHWEST IDAHO



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INTRODUCTION & OBJECTIVES

Organic table grape production is a good match for southwest Idaho's rapidly changing agricultural landscape. Population has increased over 30% since 2000. Farms are downsizing, and producers want successful alternative crops to diversify operations and generate income.

Michael Medes of Rocky Fence Vineyards, a producer of organic table grapes, will use this Professional + Producer Grant to seek solutions to powdery mildew, the most threatening disease to marketable fruit.

With the help of Ariel Agenbroad and Tony McCammon, and with the support of Dr. Esmaeil Fallahi and Dr. Krishna Mohan, they will test the effectiveness of preventive management practices, using an expanded trellis system, early detection and climate-based disease forecasting.

Reducing damage from powdery mildew will reduce fungicide use and labor, while increasing the quality and sustainability of table grapes and their production in southwest Idaho.

Project findings will be shared at on-farm demonstration events, conferences and in future Extension publications.



PROJECT TIMELINE

Plan of Work	Schedule
Research existing recommendations, strategies and materials, create appropriate management protocols for trialing at Rocky Fence Vineyard	February – September 2008
Convert 1644 existing "T" vine trellis systems at Rocky Fence Vineyard to expanded "T" or "Y" systems.	February – March 2008
Test for primary and ongoing infection of powdery mildew spores, submitting leaf, stem and fruit samples to the laboratory at University of Idaho Parma Research Station.	February – September 2008
After bud break and positive fungus detection, collect and compute Emmett weather station data for correlation with the UCIPM RAI tool. Follow treatment interval recommendations provided by the tool, applying only approved materials. Develop experimental design for materials comparison.	April – October 2008
Record end of season yield and market information. Compare with previous season's data. Evaluate results in connection with disease management.	November 2008 – February 2009
Host on-farm demonstration events at Rocky Fence Vineyard as indicated in outreach plan.	September 2008, September 2009
Develop, and present results and recommendations as indicated in outreach plan. Create Extension publication.	September 2008 – continue through December 2009
Submit final report to SARE	January 31, 2010

Funded through a 2008 Western Sustainable Agriculture Research and Education (WSARE) Professional + Producer Grant

