



### Western SARE

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### Western SARE Grant Categories

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## CURBING TABLE GRAPE MILDEW

### Situation

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

However, the incidence of powdery mildew, *Uncinula necator*, threatens growers' ability to achieve high quality, marketable fruit. Management of the disease is critical to the producer success. But

most of the information on powdery mildew has been developed for growers in California, Washington and Oregon. A powdery mildew management regimen for Idaho, could contribute to the table grape industry's sustainability.

### Objectives

- Assess preventative measures for powdery mildew
- Evaluate organic fungicide materials for use on powdery mildew in Idaho table grapes
- Develop recommended protocols for managing powdery mildew
- Share project results with ag professionals and producers via field days, posters, handouts, publications and online materials

### Actions

Ariel Agenbroad and Tony McCammon, with the support of Esmaeil Fallahi and Krishna Mohan of the University of Idaho, in collaboration with producer Mike Mendes, will work to assemble a set of sustainable "protocols" deemed appropriate for southwest Idaho organic table



grape production. The focus will be on preventative measures, such as grapevine trellis systems, early detection and climate-based disease forecasting and, when necessary, use of approved organic fungicide treatments.

The protocols will be tested at Mendes' Rocky Fence Vineyards, a 9-acre certified organic table grape operation in Emmett, Idaho, where powdery mildew can devastate production.

### Potential Benefits

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

### Professional + Producer Grant

**Title:** A Multi-Faceted Approach to Managing Powdery Mildew on Organic Table Grapes in Southwest Idaho  
 Project Number: FW08-322

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**Amount Funded:** \$15,000



*Western SARE, a USDA organization, funds grants for research and education that develop or promote some aspect of agricultural sustainability, which embraces*

- *profitable farms and ranches*
- *a healthy environment*
- *strong families and communities.*

*The Western Region, one of four SARE regions nationwide, is administered through Utah State University.*

**Western SARE:**  
<http://wsare.usu.edu>

**National SARE**  
[www.sare.org](http://www.sare.org)

## CURBING TABLE GRAPE MILDEW

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.	September 2008, September 2009
Develop, and present results and recommendations. Create Extension publication.	September 2008 – continue through December 2009
Submit final report to WSARE	January 31, 2010

