Summary of Project Activities:

This Grape Pest Management Alliance project has been a partnership between the California grape community and the California Department of Pesticide Regulation to enhance the adoption of economically viable farming practices that decrease pesticide risks to air and water. This goal was achieved by increasing winegrower use of the California Sustainable Winegrowing Program’s voluntary self-improvement model (Figure 1), the “cycle of continuous improvement,” while extending its use to raisin and table grape growers. Execution of this project constituted the first application of elements of the model outside of winegrapes. Project oversight was provided by the California Sustainable Winegrowing Alliance, a non-profit organization led by the California Association of Winegrape Growers and Wine Institute. Sun-Maid Growers and the Grape & Tree Fruit League were key members of the Management Team and championed the transfer of cycle elements to raisins and table grapes.

Figure 1. The Sustainable Winegrowing Program cycle of continuous improvement

The “cycle of continuous improvement” consists of self-assessment, the interpretation of performance, action planning, and the implementation of change. The centerpiece is the Code of Sustainable Winegrowing Practices Self-Assessment Workbook, which covers a broad range of production practices over 14 chapters. Each chapter includes criteria (specific management areas) for evaluating practices.
using a four-category measurement system (Table 1). Chapters with at least some criteria relevant to air and/or water impacts are viticulture, soil management, vineyard water management, pest management, ecosystem management, air quality, and neighbors and community. Reports are generated that enable participants to interpret and track their performance and the industry to publicly document its progress. Targeted education complements assessment and action planning by emphasizing areas needing improvement, according to analyses of assessment data. Many winegrower participants complete cycle elements by accessing the workbook content, the assessment and reporting software, educational resource links, and an action planning template through the Sustainable Winegrowing Program’s online system (accessible via www.sustainablewinegroing.org).

Table 1. Criterion 16-6 from the Air Quality chapter exemplifying the four-category measurement system

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Category 4</th>
<th>Category 3</th>
<th>Category 2</th>
<th>Category 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-6 Pesticide Stewardship</td>
<td>I never use fumigants* And I follow recommended practices for dust (e.g., sulfur) and liquid applications to minimize PM10 and drift** And I am familiar with and avoid use of pesticides associated with higher VOC emissions (see Box 16-13) And Applicators are trained about pesticide issues relevant to air quality and training includes written material.</td>
<td>I never use fumigants* And I follow recommended practices for dust (e.g., sulfur) and liquid applications to minimize PM10 and drift** And I have some understanding of pesticide products associated with higher VOC emissions (see Box 16-13).</td>
<td>I only use fumigants to address verified biological problems* And I follow recommended practices for dust (e.g., sulfur) and liquid applications to minimize PM10 and drift**.</td>
<td>I choose and apply pesticides without considering impacts to air quality other than following legal requirements.</td>
</tr>
</tbody>
</table>

Grape Pest Management Alliance project objectives for applying the cycle to wine, raisin, and table grapes to decrease pesticide risks were: 1) analyze and interpret preexisting winegrower self-assessment data to rank relevant workbook criteria by educational priority, 2) extend information (targeted education) to promote adoption of cost-effective, lower-risk practices associated with prioritized criteria, and 3) document grower adoption of lower-risk practices and other project impacts (Attachment A). The collection and analysis of winegrower self-assessment data was important. These data were used to determine educational needs and to quantify (winegrapes) or indicate (raisin and table grape) progress. The following details activities by objective during the project, January 22, 2008 – May 14, 2010 (approximately 28 months).

Objective 1 – Analysis and interpretation of preexisting winegrower self-assessment data to rank workbook criteria relevant to reducing pesticide risks to air and/or water by educational priority.

(a) Identify criteria and associated practices for reducing pesticide risks to air and/or water (January 9 –
January 31, 2008).

This task was completed on schedule. A total of 56 workbook criteria that include practices for reducing pesticide risks to air and/or water were identified. Criteria were extracted from seven chapters – viticulture, soil management, vineyard water management, pest management, ecosystem management, neighbors and community, and air quality (Attachment B).

(b) Analyze statewide and regional assessment data for the identified criteria and rank criteria by educational priority (lower scoring and having most impact) (February 1 – March 31, 2008).

Analyses of winegrower assessment data and the corresponding ranking of criteria by grower performance were completed for California collectively, Central Valley, North Coast, and other winegrowing regions. Existing data had been collected from 674 vineyard organizations assessing 176,908 winegrape acres (33.9% of the statewide total) from November 2002 to April 2008. An earlier collected segment of this data (November 2002 to September 2004) had been analyzed and summarized to establish the industry’s statewide initial benchmark performance and set future goals for improvement in the California Wine Community Sustainability Report 2004. To guide current educational priorities across all grape sectors for the Grape Pest Management Alliance project, the latter subset of data collected after release of the 2004 Report (October 2004 to April 2008) was sorted and analyzed to quantify updated state and regional averages for each pre-selected criterion. Criteria were ranked for both the state and each region by educational priority, i.e. lower scoring with associated practices deemed to most impact air and/or water quality. Differences in educational priorities among regions were expected and knowing them helped ensure that educational programs were designed to meet region-specific needs. Figures 2-4 display ranked criteria for the Central Valley.
Objective 2 – Extension of information (targeted education) to promote cost-effective adoption of lower-risk practices associated with prioritized criteria.

(a) Agree on regional educational targets (including emerging issues) with grower organizations (April 1 – September 30, 2008).

Throughout the course of the project, ranked criteria from self-assessment analyses were used as the basis for discussion and agreement about educational needs with regional winegrower leadership in the Central Valley, North Coast, and elsewhere, and with leadership from Sun-Maid Growers and the Grape & Tree Fruit League. Educational targets also were discussed with partners from UC Cooperative Extension, USDA-NRCS, pesticide and vineyard equipment companies, and other project partners. Many targets were determined via assessment data analyses but educational needs not covered in the Workbook or that were specific to certain regions (e.g., new pests and resistance issues) also were identified.

b) Collect and develop educational materials characterizing pesticide risks to air and/or water and protective practices for distribution to winegrape, raisin, and table grape growers and PCAs at events and via newsletters and websites (January 9 – December 31, 2008).

Numerous preexisting materials relevant to air and water protection were distributed widely at educational events. These materials include California Department of Pesticide Regulation handouts about air quality and pesticides, regional water board and water quality coalition publications, Coalition for Urban and Rural Environmental Stewardship pamphlets, USDA Natural Resources Conservation Service technical sheets, the trade articles *Improving Air Quality* (Practical Winery & Vineyard, 2007) and *Air Quality: The Latest Frontier for Sustainable Winegrowing* (CAPCA Adviser, 2007), and other pertinent compositions.

Project resource also was invested in producing and distributing the handbook, *Reducing Risks through Sustainable Winegrowing: A Growers’ Guide*, which was completed in December 2008. The guide focuses on the relationship between sustainability and risk reduction by highlighting key practices from the *California Code of Sustainable Winegrowing Practices Self-Assessment Workbook*, an important risk management tool itself, and other sources that educate growers about risk mitigation. The intent was to clarify understanding that improvement along the continuum of sustainability by adopting practices detailed both in the guide and workbook is an effective risk-management strategy, enhancing the long-term viability of farming business.

The guide contains chapters covering the key risks and corresponding sustainable practices listed in Table 2. Three of the nine chapters directly address risks associated with pesticides and their mitigation – Assuring Water Quality, Protecting Air Quality, and Minimizing Pest-Related Risks. The guide was widely distributed at Grape Pest Management Alliance events and is freely available via www.sustainablewinegrowing.org.

Nearly finished relevant educational material includes work with the IPM Institute of North America and UC Davis to customize their respective online pesticide risk evaluation tools (PRiME for IPM Institute and PURE for UC Davis) for application by California grape growers. These tools will enable growers and pest control advisors to better understand risks associated with pesticides and make informed decisions before use. The Grape Pest Management Alliance has supported the development of these tools, which will be applied soon after project termination.
Table 2. Key risks to California winegrowing and associated mitigation (sustainable practices)

<table>
<thead>
<tr>
<th>Risks to California Winegrape Production</th>
<th>Mitigation (Sustainable Practices)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water scarcity</td>
<td>Water conservation &amp; efficiency</td>
</tr>
<tr>
<td>Impaired quality of water</td>
<td>Water quality protection</td>
</tr>
<tr>
<td>Decreased quality of soil</td>
<td>Soil conservation &amp; management</td>
</tr>
<tr>
<td>Diminished air quality/climate change</td>
<td>Air quality protection</td>
</tr>
<tr>
<td>Increased cost of labor</td>
<td>Human resource management</td>
</tr>
<tr>
<td>Rising cost of energy</td>
<td>Energy conservation &amp; efficiency</td>
</tr>
<tr>
<td>Outbreaks of pests</td>
<td>Integrated pest management</td>
</tr>
<tr>
<td>Aberrant weather</td>
<td>Weather monitoring &amp; preventive planning</td>
</tr>
<tr>
<td>Unexpected market challenges</td>
<td>Selection of appropriate insurance policies &amp; tools and proactive business planning &amp; management</td>
</tr>
</tbody>
</table>

(c) Establish and enhance 10+ demonstration vineyards with grower-cooperators and site spokespersons (April 1, 2008 – March 31, 2009).

Twenty three demonstration vineyards (wine, raisin, and table grapes) were established across California’s winegrowing regions (Table 3) and used as venues and models for showcasing and discussing vineyard practices related to reduced-risk pest management. Of these, 16 were established in the Central Valley, 5 in the North Coast, and 2 in the San Francisco Bay region. Displayed technologies and practices corresponded to those detailed as more sustainable in the workbook. The number of demonstration sites increased over time to ensure a wide geographical distribution of sites, increase the diversity of practices/technologies shown, and maximize project exposure and impact.

Table 3. Targeted education events and demonstration vineyards by region

<table>
<thead>
<tr>
<th>Region</th>
<th>Events</th>
<th>Demo Vineyards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Valley (multi-sector)</td>
<td>26</td>
<td>16</td>
</tr>
<tr>
<td>North Coast</td>
<td>19</td>
<td>5</td>
</tr>
<tr>
<td>San Francisco Bay</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>South Coast</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>23</td>
</tr>
</tbody>
</table>
(d) Conduct 20+ targeted education events (field meetings at demonstration vineyards, workshops, and seminars) for grape growers and PCAs in all grape-growing regions (April 1, 2008 – December 31, 2009).

Forty nine targeted education events involving reduced-risk pest management, including those at demonstration vineyards, were conducted over the course of the project (Table 3; see Attachment C for specifics). By region, 26 occurred in the Central Valley, 19 in the North Coast, 3 in the San Francisco Bay, and 1 in the S Coast. Estimated attendance was 2,226, mostly growers (wine, raisin, table grape, and other crops) and pest control advisors. Topics included discussion and/or displays of integrated pest management strategies and tactics, characterizations of reduced-risk pesticides (including volatile organic compound emission potentials), judicious management of vine mealybug, status and concerns for light brown apple moth and European grapevine moth, management of plant-parasitic nematodes, environmentally friendly weed management, customized cover cropping and other vegetative enhancements, air-and water-related regulations, spray liability issues and insurance, low-drift sprayers, relevant incentive programs for improving practices (e.g., EQIP), organic farming requirements, and on-site reduced-risk practices.

The numerous partners involved in extending information at events included experienced growers, pest control advisors, agricultural consultants, grower association leads, UC Cooperative Extension, USDA-NRCS, private companies, and government agencies.

Objective 3 – Documentation of grower adoption of lower-risk practices relevant to pesticides and air and/or water quality and other project impacts.

(a) Conduct winegrower self-assessments against the criteria relevant to pesticide risks and air and/or water to quantify improvements in performance for winegrowers (October 1, 2008 – February 28, 2010).

Grape Pest Management Alliance resource supported the conduct of 29 self-assessment workshops for winegrowers throughout California. Workshops included assessments against all criteria in the Code of Sustainable Winegrowing Practices Self-Assessment Workbook, including the 56 pre-selected criteria relevant to pesticide risks to air and/or water. Collected data were pooled with the existent October 2004 to April 2008 subset for purposes of quantifying progress since the initial benchmarks published in the California Wine Community Sustainability Report 2004.

(b) Design and conduct a survey of raisin and table grape growers to cross-reference adoption of lower-risk practices (November 1, 2009 – February 28, 2010).

Originally envisioned as a Survey Monkey tool, the survey for raisin and table grapes growers ultimately was designed as a paper-based, self-assessment exercise by Grape Pest Management Alliance contractor SureHarvest. Although this task was completed, implementation of the assessment remains under consideration by leadership at Sun-Maid Growers and Grape & Tree Fruit League. Execution of the assessment or a related version is expected to occur after termination of this project, especially since SureHarvest has secured additional funding to progress sustainability initiatives in California specialty crops including raisins and table grapes.

(c) Analyze and interpret assessment (winegrower) and survey (raisin and table grape growers) results to quantify and cross-reference adoption of lower-risk practices pertinent to pesticides and/or water quality (March 1- 31, 2010).
A thorough analysis of assessment data was done to document project impacts on grower performance by comparing initial benchmark data collected from November 2002 to September 2004 (n = 662 vineyards/blocks over 134,165 acres) with that collected from October 2004 to October 2009 (n = 553 vineyards/blocks over 132,147 acres). Statewide, grower performance increased for 50 of the 56 pre-selected criteria (89%) pertinent to pesticides and air and/or water quality, including 35 of 38 for the pest management chapter (Figures 5 & 6 display results for the pest management chapter).

Moreover, greater increases were noted for many criteria that include practices addressed during targeted education events – pest monitoring; use of economic thresholds; reduced-risk pesticides; cultural pest controls; predatory mite releases; weed monitoring, knowledge, and treatment decision making; buffer zones; and drift management.

Importantly, these increases reflect the impact of the Grape Pest Management Alliance project, related Sustainable Winegrowing Program activities, and regional initiatives on the continual adoption of reduced-risk pest management practices by California winegrowers. Although similar assessment information was not collected from raisin and table grape growers, the fact that educational activities were directed to all grape growers and pest control advisors strongly implies that similar progress occurred for these and likely other specialty crop sectors. Results advocate the usefulness of the California Sustainable Winegrowing Program’s “cycle of continuous improvement” as a model for positively affecting grower behavior.
(d) Produce and disseminate commodity specific reports documenting the project and achievements in reducing pesticide risks in winegrape, raisin, and table grape production (March 1 – April 30, 2010).

Project activities and results were published in the widely disseminated 2009 California Wine Community Sustainability Report (available at www.sustainablewinegroing.org). Other than that described here, commodity specific reports detailing sustainability initiatives and achievements for raisin and table grapes, including for reduced-risk pest management, are expected later after related projects commence.

**Significant Project Results**

Key achievements during January 2008 to May 2010 for the Grape Pest Management Alliance project are listed below.

- Identified 56 criteria and associated practices from 7 chapters of the Sustainable Winegrowing Workbook pertinent to reducing pesticide risks to air and/or water (Objective 1).
- Analyzed winegrower self-assessment data for identified criteria and ranked them by grower performance for the state and selected regions (e.g., Central Valley and North Coast) (Objective 1).
- Used ranked criteria to support discussion and agreement with regional winegrower leadership on educational priorities (Objective 2).
- Collected and composed educational material (e.g., handouts, brochures, instructional guides, articles, power point presentations) pertinent to reducing pesticide risks to air and/or water (Objective 2).
• Established 23 demonstration vineyards (16 Central Valley, 5 North Coast, and 2 San Francisco Bay) as venues and models to showcase reduced-risk practices (Objective 2).
• Conducted 49 targeted education events attended by 2,226 grape growers and pest control advisors (26 Central Valley, 19 North Coast, 3 San Francisco Bay, and 1 South Coast) with partners that included displays and topics based on agreed priorities (Objective 2).
• Facilitated 29 self-assessment workshops that included assessment against the 56 pre-selected criteria (Objective 3)
• Designed and composed a self-assessment exercise pertinent to reduced-risk pest management for raisin and table grape growers (Objective 3)
• Documented improved winegrower performance statewide for 50 of the 56 pre-selected criteria, with project achievements captured in the published and widely disseminated 2009 California Wine Community Sustainability Report.

References


### Objective 1: Analysis and interpretation of preexisting winegrower self-assessment data to rank relevant workbook criteria for education

<table>
<thead>
<tr>
<th>Task</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Identify criteria and associated practices for reducing pesticide risks to air and/or water</td>
<td>Jan 1</td>
<td>Jan 31</td>
</tr>
<tr>
<td>(b) Analyze statewide and regional assessment data for the identified criteria and rank criteria by educational priority (lower scoring and most impact)</td>
<td>Feb 1</td>
<td>Mar 31</td>
</tr>
</tbody>
</table>

### Objective 2: Extension of targeted information to promote cost-effective adoption of lower-risk practices associated with prioritized criteria

<table>
<thead>
<tr>
<th>Task</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Agree on regional educational targets (including emerging issues) with grower organizations</td>
<td>Apr 1</td>
<td>Sep 30</td>
</tr>
<tr>
<td>(b) Collect and develop educational materials for characterizing and reducing pesticide risks to air and/or water for widespread distribution to growers</td>
<td>Jan 1</td>
<td>Dec 31</td>
</tr>
<tr>
<td>(c) Establish and enhance 10+ demonstration vineyards (with grower spokespersons)</td>
<td>Apr 1</td>
<td>Mar 31</td>
</tr>
<tr>
<td>(d) Conduct 20+ targeted education events (field meetings, workshops, and seminars) for grape growers and PCAs in all grape-growing regions</td>
<td>Apr 1</td>
<td>Dec 31</td>
</tr>
</tbody>
</table>

### Objective 3: Documentation of adoption of lower-risk practices relevant to reducing risks to air and/or water and other project impacts

<table>
<thead>
<tr>
<th>Task</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Conduct winegrower self-assessments against the criteria relevant to pesticide risks and air and/or water</td>
<td>Oct 1</td>
<td>Feb 28</td>
</tr>
<tr>
<td>(b) Design and conduct a survey of raisin and table grape growers to cross-reference adoption of targeted lower-risk practices</td>
<td>Nov 1</td>
<td>Feb 28</td>
</tr>
<tr>
<td>(c) Analyze assessment (winegrower) and survey (raisin and table grape growers) data to determine statewide and regional progress</td>
<td>Mar 1</td>
<td>Mar 31</td>
</tr>
<tr>
<td>(d) Produce and disseminate commodity specific reports documenting the project and achievements in reducing pesticide risks</td>
<td>Mar 1</td>
<td>Apr 30</td>
</tr>
</tbody>
</table>

### Objective 4: Key grant administration activities

<table>
<thead>
<tr>
<th>Task</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Hold post-grant acceptance meeting with the Management Team to review and advance objectives and tasks</td>
<td>during Jan</td>
<td>during Apr</td>
</tr>
<tr>
<td>(b) Conduct quarterly meetings with the Management Team to review progress and advise next steps</td>
<td>during Apr</td>
<td>during Jul</td>
</tr>
<tr>
<td>(c) Produce and submit semiannual progress reports and the final report to DPR</td>
<td>by Jul 31</td>
<td>by Jan 31</td>
</tr>
<tr>
<td>(d) Produce and submit reimbursement materials to DPR on a quarterly basis</td>
<td>by Apr 30</td>
<td>by Jul 31</td>
</tr>
</tbody>
</table>
Attachment B – SWP Criteria including Practices re: Reducing Pesticide Risks to Air and Water

Chapter 3 – Viticulture
3-11 Soil Sampled for Biological Problems Pre-Planting
3-12 Addressing Biological Problems
3-13 Rootstocks

Chapter 4 – Soil Management
4-12 Non-Point Source Pollution Prevention
4-14 Cover Crops and Soil Quality
4-15 Choice of Cover Crop

Chapter 5 – Vineyard Water Management
5-03 Off-Site Water Movement

Chapter 6 – Pest Management
6-01 Vineyard Monitoring for Insects and Mite Pests
6-02 Economic Thresholds and Pest-Natural Enemy Ratios for Leafhoppers, Mites, and Thrips
6-03 Use of Broad-Spectrum/Long-Residue Insecticides and Miticides
6-04 Use of Reduced-Risk Insecticides and Miticides
6-05 Cultural Practices for Insect and Mite Management
6-06 Dust Abatement in and Around Vineyards for Mite Management
6-07 Use of Weather Data and Degree-Days for Managing Moth Pests
6-08 Portion of Vineyard Treated for Mites or Leafhoppers
6-09 Training of Employees
6-10 Releasing Predatory Mites
6-11 *Pseudococcus* Mealybugs
6-12 Vineyard Monitoring for Disease
6-13 Powdery Mildew Management
6-14 Use of Reduced-Risk Fungicides for Powdery Mildew and Botrytis Control
6-15 Canker Management: A. Eutypa Dieback, B. Bot Canker
6-16 Botrytis Management
6-17 Identification of Causal Agent of Bunch Rot
6-18 Pierce’s Disease Management where Blue-Green Sharpshooter is Primary Vector
6-19 Glassy-Winged Sharpshooter Monitoring
6-20 Vineyard Monitoring for Weeds
6-21 Weed Knowledge
6-22 Herbicide Choice and Rate in Relation to Environmental Impacts
6-23 Herbicide Leaching Potential and Movement in Surface Water
6-24 Timing of Herbicide Treatments for Perennials
6-25 Area Treated with Herbicides
6-26 Vineyard Monitoring for Vertebrate Pests
6-27 Vertebrate Pest Management
6-28 Area of Vineyard Treated for Vertebrate Pests
6-29 Predation by Vertebrates
6-30 Low-Volume Vine Canopy Sprayers
6-31 Sprayer Calibration and Maintenance
6-32 Spray Coverage
6-33 Buffer Zone
6-34 Drift
6-35 Pesticide Storage
6-36 Pesticide Mixing and Loading
6-37 Pesticide Emergency Response Plan
Chapter 8 – Ecosystem Management
8-03 Ecosystem Processes - Water Cycle
8-08 Watershed Management
8-09 Enhancing Habitat Through Vegetation Management in and Around the Vineyard
8-10 Habitat Enhancement - Nest Boxes for Wildlife that Prey on Vineyard Pests
8-14 Ecosystem Management - Riparian Habitat
8-15 Ecosystem Management - Aquatic Habitats: Streams, Rivers, and Wetlands
8-18 Use of Pesticides Toxic to Terrestrial and Aquatic Wildlife

Chapter 15 – Neighbors and Community
15-09 Agricultural and Winery Chemicals
15-12 Air Quality

Chapter 16 – Air Quality
16-05 Pest Management Strategy
16-06 Pesticide Stewardship
## Attachment C – Targeted Education Events and Associated Demonstration Vineyards

<table>
<thead>
<tr>
<th>Date</th>
<th>Venue</th>
<th>County</th>
<th>Demo Vineyard</th>
<th>Est. Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/04/08</td>
<td>Cacciatore Winery</td>
<td>Tulare</td>
<td>Yes</td>
<td>25</td>
</tr>
<tr>
<td>03/05/08</td>
<td>Quady Vineyards</td>
<td>Madera</td>
<td>Yes</td>
<td>39</td>
</tr>
<tr>
<td>03/06/08</td>
<td>Wend-Tyler Vineyards</td>
<td>Stanislaus</td>
<td>Yes</td>
<td>24</td>
</tr>
<tr>
<td>03/20/08</td>
<td>Ceago Vinegarden</td>
<td>Lake</td>
<td>Yes</td>
<td>72</td>
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<tr>
<td>05/06/08</td>
<td>Cacciatore Winery</td>
<td>Tulare</td>
<td>Yes</td>
<td>24</td>
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<tr>
<td>05/07/08</td>
<td>Saviez Farms</td>
<td>Fresno</td>
<td>Yes</td>
<td>39</td>
</tr>
<tr>
<td>05/08/08</td>
<td>McManis Family Vineyards</td>
<td>San Joaquin</td>
<td>Yes</td>
<td>28</td>
</tr>
<tr>
<td>07/08/08</td>
<td>Laguna Ranch</td>
<td>Sonoma</td>
<td>Yes</td>
<td>26</td>
</tr>
<tr>
<td>07/09/08</td>
<td>Barricia Vineyards</td>
<td>Sonoma</td>
<td>Yes</td>
<td>21</td>
</tr>
<tr>
<td>07/10/08</td>
<td>Rued Vineyards</td>
<td>Sonoma</td>
<td>Yes</td>
<td>11</td>
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<td>07/10/08</td>
<td>Jordan Vineyards</td>
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<td>07/31/08</td>
<td>Ridge Vineyards</td>
<td>Santa Clara</td>
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<td>11/18/08</td>
<td>Grape &amp; Raisin Expo</td>
<td>Fresno</td>
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<td>12/11/08</td>
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<td>03/10/09</td>
<td>Portuguese Hall</td>
<td>Fresno</td>
<td></td>
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<tr>
<td>03/11/09</td>
<td>San Joaquin Wine Company</td>
<td>Madera</td>
<td>Yes</td>
<td>48</td>
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<tr>
<td>03/12/09</td>
<td>Yonan Farms</td>
<td>Stanislaus</td>
<td>Yes</td>
<td>31</td>
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<tr>
<td>04/28/09</td>
<td>Wilson Ag</td>
<td>Kern</td>
<td>Yes</td>
<td>19</td>
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<tr>
<td>04/29/09</td>
<td>James Unti Farms</td>
<td>Madera</td>
<td>Yes</td>
<td>34</td>
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<tr>
<td>04/30/09</td>
<td>Duarte Ranch</td>
<td>Stanislaus</td>
<td>Yes</td>
<td>24</td>
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<tr>
<td>06/09/09</td>
<td>Laguna Ranch</td>
<td>Sonoma</td>
<td>Yes</td>
<td>31</td>
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<td>06/10/09</td>
<td>Barricia Vineyards</td>
<td>Sonoma</td>
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<td>06/11/09</td>
<td>Rued Vineyards</td>
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<td>Jordan Vineyards</td>
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<td>Riverside</td>
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<td>Brutocao Schoolhouse Plaza</td>
<td>Mendocino</td>
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<td>Benziger Winery</td>
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<td>Jackson-Rodden Ranches</td>
<td>Stanislaus</td>
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Attachment D – Agendas for Grape Pest Management Alliance Events
March 2008 Winegrape Tailgate Meetings

Sponsored by Central California Winegrowers & California Sustainable Winegrowing Alliance
Funded in part by grants from the United States Department of Agriculture Risk Management Agency &
California Department of Pesticide Regulation

*Similar 9:00 a.m. – noon meetings conducted in Pixley, Madera, and Modesto*

Tuesday, March 4  Cacciatore Fine Wine & Olive Oil Plant
1875 S Elm St, Pixley, CA 93256

Wednesday, March 5  Quady Winery & Vineyard
13181 Rd 24, Madera, CA 93637

Thursday, March 6  Wend-Tyler Winery & Vineyard
8737 Shoemake Ave, Modesto, CA 95358

AGENDA (identical per date/location)

9:00 a.m.  Registration and Overview: What’s Going On with CCW
Peter Vallis, Central California Winegrowers

9:15 – 9:30 a.m.  Sustainability and You: How San Joaquin Valley Winegrowers are Leading the Way for a Better Grape-Growing Future
Joe Browde, California Sustainable Winegrowing Alliance

9:30 – 10:00 a.m.  Air Resources: Regulations and Protective Practices
Johnnie Siliznoff, USDA-Natural Resources Conservation Service

10:00 – 10:30 a.m.  Plant-Parasitic Nematodes and Grapes: Status and Management
Mike McKenry, University of California Cooperative Extension

Break

10:35 – 10:55 a.m.  Grape Market Update: Why It’s Looking Better
Allied Grape Growers

10:55 – 11:15 a.m.  Business Planning Issues affecting Your Ranch
United Valley Insurance Company

11:15 – 11:30 a.m.  Host Grower Presentation – On-Site Practices for Quality Winegrowing

11:30 – Noon  Equipment Demonstration: Environ-Friendly Pest Management
Fresno Equipment Company/John Deere

FREE LUNCH

2.0 Hours of Continuing Education Credits for Pesticide Applicators and PCAs

To RSVP or for more information contact Central California Winegrowers at:
559-618-1856 or rbron@ccwinegrowers.org
Lake County Organic Winegrowing Seminar  
March 20, 2008  
Ceago Vinegardens  
5115 East Highway 20 • Nice, California

8:00 am  Registration and Continental Breakfast
8:25 am  Welcome and Introduction: Shannon Cunier, Executive Director, Lake County Winegrape Commission; Jim Fetzer, Owner, Ceago Vinegardens
8:30 am  Alternative Winegrowing Systems and Wine in the Organic Market Place: Ann Thrupp, Manager of Sustainability, Fetzer Vineyards, Hopland
9:00 am  Becoming Organic—Registration and Certification: Lars Crail, Grower, Yokagoi Land Management, Kelseyville
9:30 am  CCOF Foundation’s Going Organic Project and the OSP:  Fred Thomas, CCOF Foundation and CERUS Consulting, Chico
10:00 am  BREAK
10:15 am  Organic Vineyard Management Practices: Soil Fertility, Vineyard Floor Management and Viticulture: Glenn McCourty, Farm Advisor, UCCE Lake County
11:00 am  Pest and Disease Management: Mike Boer, PCA, Ag Unlimited, Ukiah; Lucia Varela, UCCE Area IPM Advisor, Glenn McCourty
12:00 noon  A VERY FINE ORGANIC LUNCH: Enjoy a salad of organic greens, fresh bread, and hearty beef or vegetarian stew cooked over the fire in Ceago’s Great Room. The meal features local biodynamic, organic and sustainably produced foods.
1:00 pm  Tour of Ceago Vinegardens with Jim Fetzer.
2:00 pm  Lake County Organic Winemaking Panel: Successes and Challenges: Moderator: Chris Sawyer, journalist. David Weiss, Monte Black and Lars Crail, Lake County Organic Growers
2:30 pm  Organic Farming and the Implications for Wine Quality: Ginny Lambrix, Winemaker and Director for Jim Ball Vineyards, Philo
3:00 pm  Organic Wine Tasting and Vendor Show: Taste some great organic wines and visit with Vendors who will be on hand to display their organic products.

TO REGISTER: Mail, Fax, Phone, the Lake County Winegrape Commission: PO Box 877 Lakeport. CA 95453 (707) 995-3421 • FAX (707) 995-3618 • shannon@lakecountywinegrape.org

Yes, I would like to attend the Lake County Organic Winegrowing Workshop

Name: ___________________________________  Phone: __________________________

Vineyard Name: ____________________________  email address: ___________________

FEES: $25 for LCWGC Members, $35 for non-members
SPACE IS LIMITED, Please Register Early
Registration Deadline: March 17th
May 2008 Winegrape Tailgate Meetings

Sponsored by Central California Winegrowers & California Sustainable Winegrowing Alliance
Funded in part by grants from United States Department of Agriculture Risk Management Agency & California Department of Pesticide Regulation

AGENDA (identical per date)

9:00 a.m. Registration and Overview – Reducing Risk
Peter Vallis, Central California Winegrowers
Joe Browde, California Sustainable Winegrowing Alliance

9:15 – 9:35 a.m. Grape Marketing and You
Jeff Bitter, Allied Grape Growers

9:35 – 9:55 a.m. Spray Liability – Issues and Insurance
Keri Hennesay and Elsa Lara, United Valley Insurance Company

9:55 – 10:25 a.m. Worker Heat Stress Prevention and Regulations
Amalia Neidhardt, Cal/OSHA

Break

10:30 – 11:10 a.m. Maintaining Irrigation Systems for Maximum Efficiency
Cal West Rain

Testing Efficiency of Your Drip System
Steven Neil, California AgQuest Consulting

11:10 – 11:20 a.m. Vineyard Practices for Pest Management and Quality Winegrowing
Host Grower

11:20 – Noon Reduced-Risk, Cost-Effective Pest Management
Movento® Insecticide (vine mealybug), Bayer Crop Science
Enviromist Sprayer Technology, BUBCO, Inc.

FREE LUNCH provided by Rain & Hail Insurance Company

1.5 Hours of Continuing Education Credits for Pesticide Applicators and PCAs

To RSVP or for more information contact Central California Winegrowers at:
559-618-1856 or rbron@ccwinegrowers.org
SUSTAINABLE WINEGROWING Targeted Education WORKSHOP
July 31, 2008 @Ridge Vineyards; 18100 Monte Bello Road, Cupertino, CA 95014
Focus = **Risk Management** pertaining to water conservation/quality & pests)

Audience: Santa Cruz Mountains Winegrowers
Sponsors: Viticulture Association of the Santa Cruz Mountains, California Sustainable Winegrowing Alliance, CSU-Fresno Center for Irrigation Technology

*Funded by grants from USDA Risk Management Agency & CA Department of Pesticide Regulation*

**AGENDA**

9:30 am  Sign-In and Refreshments

9:45 am  Opening – CA Sustainable Winegrowing Program Update
          **Joe Browde, California Sustainable Winegrowing Alliance**

          **Segment = Water-Related Regulations**

10:00 am Water Issues and Regulations affecting Santa Cruz Mountain Vineyards
          **Mary Ellen Dick, Ag Water Quality Program Coordinator – Central Coast Ag Water Quality Coalition**

10:30 am Integrated Pest Management (non-weed) – Methods and Controls
         **Laura Breyer, Breyer’s Vineyard IPM Services**

11:00 am Effective Use of Pest Natural Enemies (incl releases)
         **David Gates and Caleb Mosley, Ridge Vineyards**

11:30 am Under-The-Vine Sustainable Weed Management
         **John Roncoroni, UC Cooperative Extension**

Noon    LUNCH

          **Segment = Management of Water (Conservation & Quality) and Associated Energy**

12:30 pm Best Vineyard Practices for Conserving Water
         **Mark Greenspan, Advanced Viticulture**

1:00 pm  Maximizing Efficiency of Irrigation Pumping and Drip Systems
         **Bill Green, CSU-Fresno Center for Irrigation Technology**

2:00 pm  Tour and Discussion of Ridge Vineyards’ Water & IPM Practices
         **David Gates and Caleb Mosley, Ridge Vineyards**

3:00 pm  END

*2.5 hours of Continuing Education Credits for Pesticide Applicators and PCAs*
Sustainable Grape Growing Workshop

December 11, 2008, 7:00 A.M. – 1:00 P.M.
Location: California State University – Fresno
Fresno State Agricultural Sciences Building – Ag 109 Classroom

Sponsored by:
San Joaquin Valley Winegrowers, California State University – Fresno Viticulture & Enology Department & California Sustainable Winegrowing Alliance

7:00 a.m. REGISTRATION and COFFEE

7:30 a.m. Welcome and Program Summary
Peter Vallis, San Joaquin Valley Winegrowers
Joe Browde, CA Sustainable Winegrowing Alliance

8:00 a.m. Farm Labor Contractor Issues
Gilbert Molina, California Association of Agriculture Labor (CAAL)

8:30 a.m. Optimizing New Pesticides for Integrated Pest Management Programs
Steve Quashnick, Wilbur-Ellis

9:00 a.m. Air Quality and Pesticides – Updated Regulations and Mitigation Tactics
Randy Segawa, CA Department of Pesticide Regulation

9:30 a.m. Greenhouse Gases and Vineyards – Understandings and Management
Kerri Steenwerth, USDA-ARS & University of California – Davis
Joe Browde, CA Sustainable Winegrowing Alliance

10:00 a.m. BREAK and REFRESHMENTS

10:10 a.m. Successfully Balancing Five Key Steps in Canopy Management
Kaan Kurtural, California State University - Fresno

10:50 a.m. Economic Considerations for Mechanically Managing Grapevine Canopies
Robert Wample, California State University - Fresno

11:45 a.m. In-the-vineyard Demonstration of Mechanical Canopy Management

12:15 p.m. LUNCH

1.5 Hours of Continuing Education Credits for Pesticide Applicators and PCAs

Funding support by USDA-Risk Management Agency, CA Dept of Pesticide Regulation, Wine Institute, & California Association of Winegrape Growers
March 2009 Grape Grower Tailgate Meetings

*Sponsored by San Joaquin Valley Winegrowers Association & California Sustainable Winegrowing Alliance
*Funded in part by a grant from the California Department of Pesticide Regulation

Tuesday, March 10  Cacciatore Fine Wines
                 1875 S Elm St, Pixley, CA 93256

Wednesday, March 11 San Joaquin Wine Company (Deniz Packing Shed)
                      21801 Avenue 16, Madera, CA 93637

Thursday, March 12  Yonan Farms
                    NE Corner of Foote & Keyes Rd (1/16 mile west of 99), Ceres, CA 95328

AGENDA (identical per date)

9:00 a.m.          Registration and Introduction
                   Peter Vallis, San Joaquin Valley Winegrowers

9:15 – 9:35 a.m.   Achievements and Focus – Sustainable Grape Growing in the San Joaquin Valley
                   Joe Browde, California Sustainable Winegrowing Alliance

9:35 – 10:20 a.m.  Nematodes: Diagnosis and Management in Grapes &
                   Preplant Soil Fumigants: Rules, Regulations, and Availability
                   Michael McKenry, University of California Cooperative Extension

Break

10:25 – 11:10 a.m. Monitoring Tools for Judicious Irrigation Decision-Making
                   Ron Brase, California AgQuest Consulting
                   Stan Grant, Progressive Viticulture

11:10 – 11:45 a.m. Market Outlook for Grape Concentrate and Wine
                   Greg MaGill, Ciatti Company

11:45 a.m. – Noon  On-Site Vineyard Practices – Pest Management and Quality Winegrowing
                   Host Grower

FREE LUNCH provided by Deerpoint Group, Inc.

1.5 Hours of Continuing Education Credits for Pesticide Applicators and PCAs

To RSVP or for more information contact San Joaquin Valley Winegrowers at:
559-354-1409 or rbron@sjvgrapes.org
April 2009 Grape Grower Tailgate Meetings

Sponsored by San Joaquin Valley Winegrowers Association & California Sustainable Winegrowing Alliance
Funded in part by a grant from the California Department of Pesticide Regulation

Tuesday, April 28
Wilson Ag
29736 Fresno Avenue, Shafter, CA 93263

Wednesday, April 29
James Unti Farms
12501 Road 20 (East side between Aves 12 & 13), Madera, CA 93637

Thursday, April 30
Duarte Ranch
6743 Dusty Lane (between Wellsford & Albers Rds), Modesto, CA 95357

AGENDA (identical per date)

9:00 a.m.  Registration and Introduction
   Peter Vallis, San Joaquin Valley Winegrowers

9:15 – 9:30 a.m.  Achievements and Focus – Air Quality in the San Joaquin Valley
   Joe Browde, California Sustainable Winegrowing Alliance

9:30 – 10:00 a.m.  Update on Air Quality Regulations and Their Implementation
   Johnnie Siliznoff, USDA-Natural Resources Conservation Service

10:00 – 10:30 a.m.  Sustainable Mite Management Strategies and Tactics
   Kip Green, Britz
   Break

10:35 – 11:05 a.m.  Heat Stress: Practical Ways to Follow Regulations and Protect Workers
   Jack Passarella, The Zenith

11:05 – 11:40 a.m.  Grape Market Update
   Jeff Bitter, Allied Grape Growers

11:40 – Noon  On-Site Vineyard Practices – Pest Management and Quality Winegrowing
   Host Grower

FREE LUNCH provided by Deerpoint Group, Inc.

1.5 Hours of Continuing Education Credits for Pesticide Applicators and PCAs

To RSVP or for more information contact San Joaquin Valley Winegrowers at:
559-354-1409 or rbron@sjvgrapes.org
**12th Annual IPM Seminar**

Mendocino College, Ukiah California  
November 13, 2009  
8am – 4pm  
Location: The Lodge at Blue Lakes, Blue Lakes, Lake County  
C.E. Hours requested from DPR 2 hr L&R, 5 hrs other  

Contact Person: Jim Xerogeanes, jxerogea@mendocino.edu  
(707) 468-3148 office  
(707) 972 -3139 cell  

<table>
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<th>Speaker</th>
<th>Title/Department</th>
<th>Topic</th>
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<td>Steve Hajik</td>
<td>Agric. Comm. Lake County</td>
<td>Update on Laws and Regulations</td>
<td>8:00-9:00 am</td>
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<td>Lisa Francioni</td>
<td>Wine Institute Project Manager</td>
<td>California Sustainable Winegrowing Program and Certification</td>
<td>9:00 – 9:30am</td>
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<td>Minghua Zhan</td>
<td>Department of Land, Air and Water</td>
<td>PURE - Pesticide Risk Decision Support Tool</td>
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<td>Resources, UC Davis</td>
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<td>Paul Anamosa Ph. D</td>
<td>Soil Scientist and Viticulturist</td>
<td>Organic Fertilizers: Improving their effectiveness by understanding their chemistry</td>
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<td>Kent Daane UC</td>
<td>Kearney Agricultural Center</td>
<td>Impact of invasive species on grape management in California</td>
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<td>Kearney Experiment Station</td>
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<td>Lucia Varela, Ph.D.</td>
<td>North Coast IPM Advisor, UCCE</td>
<td>Leaf rollers in California Vineyards: Omnivorous Leafroller, Orange Tortrix, LBAM and European Grape Berry Moth identification and management</td>
<td>1:00 – 2:00pm</td>
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<td>Kim Horton</td>
<td>Sterling Insectaries</td>
<td>Proper application and use of biological control arthropods</td>
<td>2:00 – 3:00pm</td>
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<td>Doug Gubler, Ph.D.</td>
<td>UC Davis Plant Pathology lab</td>
<td>Bot Canker of grapevine</td>
<td>3:00 – 4:00 Pm</td>
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The Livermore Valley Winegrowers Association invites you to our first Grower Tailgate, a **NEW bi-annual educational series geared towards growers in the Livermore Valley**. Grower Tailgates will be led by industry experts and provide an informative platform for growers to exchange vineyard information with their peers.

**January 7, 2010**  
8:30am – Noon  
Deer Ridge Vineyards  
1828 Wetmore Rd., Livermore CA

**TOPIC:** Sustainable Weed & Pest Management*  
*Hosted by the California Sustainable Winegrowing Alliance, UC Cooperative Extension, and the Livermore Valley Winegrowers Association.*

**AGENDA FOR JANUARY 7, 2010**

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<th>Activity</th>
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<tr>
<td>8:30 AM</td>
<td>Registration &amp; Refreshments (Bagels and Coffee)</td>
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| 9:00-9:15 | CA Sustainable Winegrowing Program Update  
*Presenter: Joe Browde, CA Sustainable Winegrowing Alliance* |
| 9:15-10:00 | Under-The-Vine Sustainable Weed Management  
*Presenter: John Roncoroni, UC Cooperative Extension* |
| 10:00-10:45 | Integrated Pest Management (non-weed) – Methods and Controls  
*Presenter: Laura Breyer: Pest Control Advisor* |
| 10:45-11:00 | Break               |
| 11:00-11:30 | Livermore Valley Pest Management Challenges and Resolutions  
*Presenters: Bryan Anthony (Wente Vineyards) & Mike Wanless (Wisner Vineyards)* |
| 11:30-12:00 | “Hot Topic” Pest Issues for Livermore Valley  
*Presenter: Bob Blumenthal, Alameda County Agricultural Department* |
| 12:00 – 12:30 | Tour of Vineyard (weather permitting)  
*Guides: Bryan Anthony (Wente Vineyards) & Carl Lyle (Deer Ridge Vineyards)* |

**Pending – 2.5 Hours of Continuing Education Credit for Pesticide Applicators and PCA’s**

* This Grower Tailgate is funded in part by a grant from the CAL Department of Pesticide Regulation

**RSVP is Mandatory. RSVP at www.LVwine.org/calendar or call the office (925) 447-9463.**

**FREE for LVWA members. $20 for non-members.**

Livermore Valley Winegrowers Association  
3585 Greenville Road, Suite 4  
Livermore CA 94550  
(925) 447-9463  
www.LVwine.org
### Innovative Grape Growing Solutions Workshop
January 20, 2010 from 7:30 am – 5:00 pm
California State University – Fresno, Fresno, CA 93740
Agenda in DPR-desired format for CEU submission

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<th>CE Hrs Requested</th>
<th>Time</th>
<th>Speaker/Affiliation</th>
<th>Title/Topic &amp; How it Relates to Pest Management or Pesticides</th>
<th>% of Time Related to Pest Management or Pesticides</th>
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<td>NA</td>
<td>Registration</td>
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<td>7:50 am – 8:00 am</td>
<td>Joe Browde, CA Sustainable Winegrowing Alliance</td>
<td>Welcome &amp; Acknowledgements</td>
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<td>1.0 hr O</td>
<td>8:00 am – 9:00 am</td>
<td>Andrew Landers, Cornell University</td>
<td>Optimizing Spray Applications for Grape Growers; tactics for ensuring on-target pesticide deposition</td>
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<tr>
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<td>9:00 am – 9:30 am</td>
<td>Carrie Ayon &amp; Susan Hatmaker, Sutton-Hatmaker Law Firm</td>
<td>Contract Employment Law Updates for Growers</td>
<td>0%</td>
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<tr>
<td>0</td>
<td>9:30 am – 10:00 am</td>
<td>Selen Eryuce, Turkish Consulate Commerce Attache</td>
<td>The Turkish Commerce Market – Setting Raisin Prices</td>
<td>0%</td>
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<tr>
<td>0</td>
<td>10:00 am – 10:10 am</td>
<td>NA</td>
<td>Break</td>
<td>NA</td>
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<tr>
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<td>10:10 am – 10:40 am</td>
<td>Jennifer Hashim-Buckey, UC Cooperative Extension</td>
<td>Potassium Impacts on Maturity and Yield</td>
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<td>10:40 am – 11:10 am</td>
<td>Lisa Francioni, CA Sustainable Winegrowing Alliance</td>
<td>Sustainable Winegrowing and Certification</td>
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<tr>
<td>0</td>
<td>11:10 am – 11:30 am</td>
<td>NA</td>
<td>Walk to vineyard for equipment displays &amp; demos</td>
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<tr>
<td>0.5 hr O</td>
<td>11:30 am – 1:10 pm</td>
<td>Vineyard equipment vendors</td>
<td>Lunch + 1.0 hr Vineyard Equipment Session: Displays &amp; Demos</td>
<td>50% of 1.0 hr equipment time pertinent to pesticide spraying and weed management</td>
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<tr>
<td>0</td>
<td>1:10 pm – 1:30 pm</td>
<td>NA</td>
<td>Walk to building for continued seminars</td>
<td>NA</td>
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<tr>
<td>0.75 hr O</td>
<td>1:30 pm – 2:15 pm</td>
<td>Kent Daane, UC Cooperative Extension</td>
<td>Vine Mealybug: Pest Status &amp; Management</td>
<td>100%</td>
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<tr>
<td>0.5 hr O</td>
<td>2:15 pm – 2:45 pm</td>
<td>Stephen Vasquez, UC Cooperative Extension</td>
<td>Moth Pests: Threats, Identification, &amp; Control</td>
<td>100%</td>
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<tr>
<td>0.33 hr O</td>
<td>2:45 pm – 3:05 pm</td>
<td>Kim Gallagher Horton, Sterling Insectary</td>
<td>Effectively Managing Natural Enemy Releases; releases and controls</td>
<td>100%</td>
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<tr>
<td>Time</td>
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<tr>
<td>0:00</td>
<td>3:05 pm – 3:15 pm</td>
<td>NA</td>
<td>Break</td>
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<tr>
<td>0:00</td>
<td>3:15 pm – 3:45 pm</td>
<td>John Williamson, PureSense</td>
<td>Irrigation &amp; Water Conservation</td>
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<tr>
<td>0:00</td>
<td>3:45 pm – 4:15 pm</td>
<td>Robert Wample, Soil Topography &amp; Information Systems</td>
<td>Precision Soil Mapping &amp; Why</td>
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<td>0:00</td>
<td>4:15 pm – 5:00 pm</td>
<td>Emilio Miranda, Allied Grape Growers, Greg Berg, Oxbo, Manuel Huizar, Table Grape Grower, Steve Spate, Raisin Bargaining Association</td>
<td>Crop Load Objectives &amp; Management Panel</td>
<td>0%</td>
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March 2010 Grape Grower Tailgate Meetings

Sponsored by San Joaquin Valley Winegrowers Association & California Sustainable Winegrowing Alliance
Funded in part by a grant from the California Department of Pesticide Regulation

Tuesday, March 9
ASV Wines
31502 Peterson Road
McFarland, CA 93250

Wednesday, March 10
Mission Bell Winery
12667 Road 24
Madera, CA 93637

Thursday, March 11
McManis Family Vineyards & Winery
18700 East River Road
Ripon, CA 95366

AGENDA (identical per date)

9:00 a.m.  
Registration and Introduction  
Peter Vallis, San Joaquin Valley Winegrowers, and Joe Browde, California Sustainable Winegrowing Alliance

9:10 – 9:40 a.m.  
Rules for and Practically Managing Heat Stress  
Jack Passarella, The Zenith (arranged and supported by United Valley)

9:40 – 10:10 a.m.  
Technology for Tracking Farming Activities (including pest management)  
Cliff Ohmart, SureHarvest

10:10 – 10:30 a.m.  
Movento – Registration and Management Update  
Tim Sitton, Bayer Crop Science

Break

10:40 – 11:10 a.m.  
How Pest-Based Quarantines Work and Implications for San Joaquin Valley grapes  
County Ag Commissioners (arranged by California Department of Food & Agriculture)

11:10 – 11:40 a.m.  
Water Quality for Agricultural Irrigation  
Deborah Miller, Deerpoint Group

11:40 – Noon  
On-Site Pest Management & Tour of Crush – what happens to your grapes  
Host Grower/Winemaker

The Famous SJVWA Gourmet BBQ Lunch to Follow

1.5 Hours of Continuing Education Credits for Pesticide Applicators and PCAs

To RSVP or for more information contact San Joaquin Valley Winegrowers at:  
559-354-1409 or rbron@sjvgrapes.org
PEST MANAGEMENT WARM UP  
March 31, 2010, 8:30-11:30 a.m.  
Big Valley Grange, 1510 Big Valley Rd. Lakeport

AGENDA

8:30-9:00 a.m.  Registration, coffee, pastries

9:00-9:45 a.m.  Introducing Sustainability Metrics and the Pesticide Risk Mitigation Engine, PRiME. Joe Browde, California Sustainable Winegrowing Alliance, and Cliff Ohmart, SureHarvest, will explain how metrics are a valuable tool for sustainability guidance. They will also introduce PRiME, a pesticide risk calculator developed by the IPM Institute of North America.

9:45-10:15 a.m.  Leafhoppers from the ground up. A panel of North Coast PCAs, Laura Breyer, Breyer’s Vineyard IPM Services, Jeff Gleaves, Ag Unlimited, and Randy Krag, Beckstoffer Vineyards Red Hills, will discuss integrated pest management for leafhoppers, including vine nutrition, canopy management, and how to decide when control is necessary. The PCAs will discuss their experiences with conventional and organic leafhopper materials.

10:15-11:00 a.m.  Sustainable undervine weed management John Roncoroni, UC Cooperative Extension Weed Science Advisor, will cover both conventional and organic weed management, including both chemical and non-chemical options.

11:00-11:30 a.m.  How does agriculture affect Clear Lake Water Quality? Members of the public often have strong, but unsubstantiated opinions about how farming practices influence Clear Lake. After several years working in the Lake County Public Works Division of Water Resources, Erica Lundquist will summarize what is currently known on this topic
The Livermore Valley Winegrowers Association invites you to our Grower Tailgate Meeting. Bi-annual Grower Tailgates take place indoors and are led by industry experts, providing an informative platform for growers to exchange vineyard information with their peers.

**April 20, 2010**

*8:30am – Noon*

Deer Ridge Vineyards
1828 Wetmore Rd., Livermore CA

**TOPIC: Irrigation Decision Making & New Pest Threats***

*Hosted by the California Sustainable Winegrowing Alliance, UC Cooperative Extension, and the Livermore Valley Winegrowers Association.*

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**AGENDA FOR TUESDAY, APRIL 20**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:30 AM</td>
<td>Registration &amp; Refreshments (Bagels and Coffee)</td>
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<tr>
<td>9:00-9:45</td>
<td>CA Sustainable Winegrowing Program Update &amp; Certification</td>
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<td>Presenters: Lisa Francioni and Joe Browde, CA Sustainable Winegrowing Alliance</td>
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<tr>
<td>9:45-10:45</td>
<td>Irrigation Decision Making &amp; Best Practices</td>
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<td>Presenter: Mark Greenspan, Advanced Viticulture LLC</td>
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<td>10:45-11:00</td>
<td>Break</td>
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<tr>
<td>11:00-11:30</td>
<td>Light Brown Apple Moth – Regulatory Implications, ID Biology &amp; Management</td>
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<td>Presenters: Bob Blumenthal, Alameda County Agricultural Department</td>
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<td>Janet Caprille, UC Cooperative Extension</td>
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<tr>
<td>11:30-12PM</td>
<td>European Grapevine Moth – Regulatory Implications, ID Biology &amp; Management</td>
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<tr>
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<td>Presenters: Bob Blumenthal, Alameda County Agricultural Department</td>
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<td>Janet Caprille, UC Cooperative Extension</td>
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<td>Pending – 1.5 Hours of Continuing Education Credit for Pesticide Applicators and PCA’s</td>
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*This Grower Tailgate is funded in part by a grant from the CAL Department of Pesticide Regulation*

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**RSVP Mandatory before 1/4/10. RSVP at www.LVwine.org/calendar or call LVWA office.**

**FREE for LVWA members. $20 for non-members.**
April 2010 Grape Grower Tailgate Meetings

Sponsored by San Joaquin Valley Winegrowers Association & California Sustainable Winegrowing Alliance
Funded in part by grants from the California Department of Pesticide Regulation and USDA Natural Resources Conservation Service

Tuesday, April 27  Equinox Tree & Vine 208 Ranch
½ Mile North of Ave 112 on Road 208
Terra Bella, CA 93720

Wednesday, April 28  Ranch Holdings 5
27522 Avenue 11 (Just east of HWY 145)
Madera, CA 93637

Thursday, April 29  Jackson-Rodden Ranches
4000 Ellenwood Road
Oakdale, CA 95361

AGENDA (identical per date)

9:00 a.m.  Registration and Introduction
Peter Vallis, San Joaquin Valley Winegrowers, and Joe Browde, California Sustainable Winegrowing Alliance

9:10 – 9:40 a.m.  Financial Services (Estate Planning, Life, Disability and Health)
Leanne Williams, United Valley

9:40 – 10:10 a.m.  Chilean Earthquake and You: The World Wine Market Update
Ciatti Company & Allied Grape Growers Tag-Team

10:10 – 10:30 a.m.  Introducing Sustainability Metrics – What’s in It for Me?
Cliff Ohmart, SureHarvest

Break

10:40 – 11:10 a.m.  Air Quality Update – Regulations, Implementation, and Cost-Share
Johnnie Siliznoff, USDA Natural Resources Conservation Service

11:10 – 11:40 a.m.  Making Natural Enemy Releases Work – Discussion & Demonstration
Kim Gallagher Horton, Sterling Insectary

11:40 – Noon  On-Site Grower Testimonial & Innovative Practices (focus pest management)
Host Grower

The Famous SJVWA Gourmet BBQ Lunch to Follow

1.5 Hours of Continuing Education Credits for Pesticide Applicators and PCAs

To RSVP or for more information contact San Joaquin Valley Winegrowers at:
559-618-1856 or rbron@sjvgrapes.org