University of California Cooperative Extension Fresno County

Vine Lines

Stephen J. Vasquez, Viticulture Farm Advisor

February 2008 Issue

International Table Grape Symposium

Matthew Fidelibus and Stephen Vasquez

The International Table Grape Symposium is convened every few years in countries having a significant interest in table grapes. Previous meetings have been held in California, Chile, and Australia and, most recently, in Somerset West, South Africa, November 14 -16, 2007. The purpose of the meetings are to provide opportunities for university researchers, growers, and representatives from agricultural companies, to network, exchange ideas, and learn what's new in the culture and postharvest technology of table grapes.

Attendees heard more than five dozen presentations on diverse subjects including the release of new rootstocks and scions, new uses for plant growth regulators, the performance of new trellis covers, the management of irrigation and fertilization, advances in irrigation and fertilization, new postharvest technologies, pest and disease management and new insights from biotechnology. Several California grape growers, farm advisors, and other academics participated in the meeting. A detailed review of the presentations is not possible—the book of abstracts is nearly two hundred pages long—but a quick listing of a few of the talks will serve as an indication as to the breadth of material discussed. Many of the participants were from Italy, and several of their talks presented new information in the management of 'Italia', their famous white seeded cultivar. Several Israeli researchers also attended, and their work tended to be more technical, with several talks on grape molecular genetics. An Australian, I.J. Cameron, presented one of the most controversial talks in which he asserted that a certain combination of grapevine viruses improved the size and color of 'Crimson Seedless' grapes. Our hosts, the South Africans, spoke on diverse subjects, including

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California Agriculture Contributes Significantly to the State

A recent study by the UC Agricultural Issues Center has documented California agriculture's significant contribution to the California economy.

Now available on the Web, "Agriculture's Role in the Economy," provides the Center's estimates of the direct and multiplier effects of agriculture in the state and in regional economies, as well as a summary of relevant government statistics. Also discussed in the report is the economic role of agriculture in California relative to other countries.

"Agriculture's Role in the Economy," as a stand alone chapter 5 of the *Measure of California Agriculture*, is available for free download from the UC Agricultural Issues Center Web site at:

http://www.aic.ucdavis.edu.

The report documents that, in addition to farms, about 90,000 commercial establishments in California are connected to agricultural production, including farm machinery manufacturing, food and beverage manufacturing companies and others. According to the Center's analysis, in 2002 the combined agriculture production and processing industry in California directly accounted for

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grapevine nutrition, berry pigmentation, grapevine breeding programs, and fruit fly management. After the meeting, many of the attendees toured the two most important table grape growing regions of South Africa; the Western Cape and the Orange River (Figure 1).

The Western Cape region includes Somerset West, where the conference was held, but most of the table grapes in the Western Cape are grown in the Berg River region, near Paarl, or in the Hex River valley (Figure 2.). The principal varieties grown in the Hex River are Dauphine (27%), Crimson Seedless (12%), Redglobe (12%), and Barlinka (11%). The Western Cape is a winter rainfall region with a moderate climate. In February, at the peak of summer, the average high temperature is about 88 ˚F, and in July, the coldest month, the average low temperature is 45 ˚F. Grapes ripen relatively late here compared to the other growing regions of South Africa.

The Orange River is the largest grape growing region in South Africa, with more than 274,000 acres planted to vines. Located just south of Namibia, the country which borders South Africa to the North West, this region has a desert-like climate which is considerably hotter than the other grape growing regions in South Africa. The warm temperatures allow early harvests; the first 'Flame Seedless' grapes are picked from the middle of November. Normally there is less than five inches of rain per year, so irrigation water is taken from the

Figure 1. South African table grape growing regions visited: Hex River Valley and Orange River near Upington.

Orange River. The principal varieties grown in the Orange River area are Thompson Seedless (28%), Sugraone (28%), Prime (21%), and Flame Seedless (10%). Most (60%) South African table grapes are marketed to Northern Europe and the United Kingdom (25%).

During our tour, we were able to see fruit in the Orange River growing region near harvest. The cultivar 'Prime' was a week from being harvested and measures to protect it from bird damage had been implemented several weeks before our arrival (Figure 3). South African labor is much less costly than in California and growers can afford multiple passes through the vineyard using hand labor. For bird protection, each cluster is wrapped with a translucent cloth to discourage bird feeding. At harvest, the cloth is removed and fruit is then taken to a packing house where it is packed according to customer specifications, super cooled, stored and then flown to its final destination.

Also grown in the Orange River region were 'Flame Seedless' that were also near harvest (Figure 4). The tour group was shown some hail damage that had occurred several weeks prior to our arrival (Figure 4 inset). The damage was only experienced on vines at the end of each row,

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Figure 2. A table grape vineyard in the Hex River Valley, South Africa, November, 2007.

which failed to mature properly, leaving over 90% in perfect condition. However, a week after the meeting a much stronger storm traveled through the region and devastated a small percentage of the 'Prime' vineyards resulting in 100% losses.

These meetings provide an excellent opportunity to learn more about the science and business of table grape growing. If you are interested in attending a future meeting, you will be interested to know that the next meeting will be held in Davis, California, in 2010**.** The meeting is being convened by Stephen Vasquez and Jennifer Hashim-Buckey, UCCE farm advisors, with assistance from other University of California colleagues. For further information, contact Stephen Vasquez at sjvasquez@ucdavis.edu.

Matthew Fidelibus is a Cooperative Extension Specialist in the Department of Viticulture and Enology, UC Davis. Stephen Vasquez is a Viticulture Farm Advisor, UC Cooperative Extension in Fresno County. Photos courtesy of Matthew Fidelibus, Stephen Vasquez and Jennifer Hashim-Buckey.

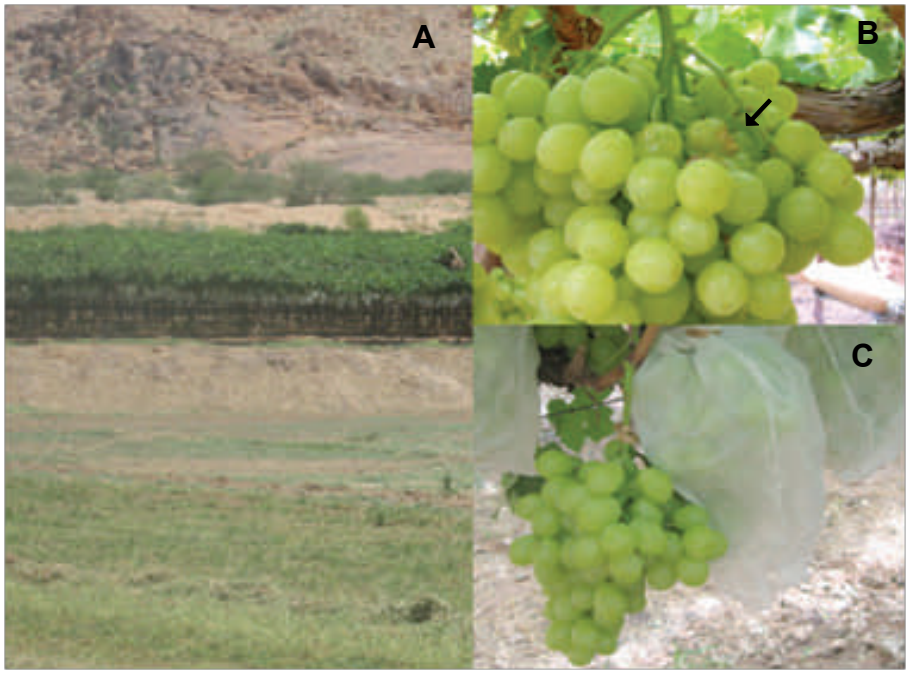


Figure 3 A-C. A. South African grape growers frequently use expensive cultural practices, such as bagging individual clusters of grapes to protect them from birds. B. Grape cluster displaying bird damage (arrow). C. Unblemished clusters of Prime, an early white seedless variety that is nearly ready to harvest in mid-November, in the Orange River region of South Africa.

Figure 4. Flame Seedless grapes, near harvest, Upington, South Africa, November 2007. Flame Seedless displaying hail damage failed to mature (inset).

Ed Weber

Ed Weber, UC Cooperative Extension Napa County director, died from a heart condition while bike riding in Napa on Dec. 31. He was 51.

Weber began his career with UCCE as Napa County viticulture farm advisor in 1988. In 2001, he was promoted to county director and continued to advise the grape industry. He was also chair of the ANR Communications Advisory Board for four of the six years he served on the board.

Because Weber knew Napa Valley's vineyards intimately, he was an invaluable resource to other researchers.

"If a researcher wanted to work on a particular problem, Ed would know which part of Napa Valley to go to find a vineyard with that particular challenge," said Jim Wolpert, UC Davis viticulture specialist. "And he would know which vineyard companies or wineries would have the resources to be good cooperators. Faculty and specialists at Davis and Berkeley relied heavily on Ed for assistance in water and soil issues and pests."

Wolpert said Weber was also an excellent independent researcher.

"He engaged in the controversial area of 'long hang time' where wineries were asking growers to let grapes mature to very high sugar levels," Wolpert said. "Ed's research documented how much of the sugar increase was due to dehydration, not sugar increase, giving growers a scientific basis for negotiating contracts with wineries. The fact that he could tackle a contentious subject and retain the respect of both sides is a testament to his diplomatic skills, beyond simply finding the answer."

An expert in winegrape production, rootstocks, Pierce's disease, phylloxera and other grape pests and diseases, Weber was often interviewed for radio, television and newspaper articles dealing with grape production issues.

Lynn Alley of Wine Spectator wrote, "Weber was highly respected among wine writers and grape growers alike, who relied upon him to translate into plain English the latest information on anything related to growing grapes."

He wrote nearly 60 industry trade journal articles in his career. Weber's prolific writing skills were admired his colleagues. Rhonda Smith, Sonoma County viticulture advisor, said, "When he completed a field research project, he not only presented the results at meetings, but he consistently wrote them up for statewide audiences and beyond. Ed was efficient and incredibly productive in his work. He didn't sweat the small stuff, but stayed focused on issues that were really important to grape growers, and the wine grape industry."

"In addition to Ed's leadership and expertise in viticulture, Ed provided administrative leadership for our UCCE programs as county director," said Kim Rodrigues, director of the North Coast and Mountain region. "I realize now how much he did for all of us. It is NOT true that each of us is replaceable – in fact, it will require several people to replace Ed and all the work he did."

Weber earned his B.S. in Plant Science (specializing in floriculture) and his M.S. in Horticulture (specializing in viticulture), both from University of California, Davis.

Weber is survived by his wife, Anne Jungerman; their three sons Reid, 17, Grady, 13, and Owen, 10; his mother, Wanda Minnick Weber of Napa; and sisters Susan Weber of Berkeley, Jane Weber McCabe of Laguna Hills, and Marilyn Weber Kleinhein of Los Angeles.

A college fund has been set up for Weber's sons:

Owen, Grady and Reid Weber
College Fund
Washington Mutual Bank
699 Trancas Street
Napa CA, 94558
Acct #4412509650 (include in credit memo of check).

New UC Cooperative Extension Study Examines Organic Raisin Production

A new economic study from the University of California Cooperative Extension (UCCE) is now available for raisin growers interested in organic raisin production.

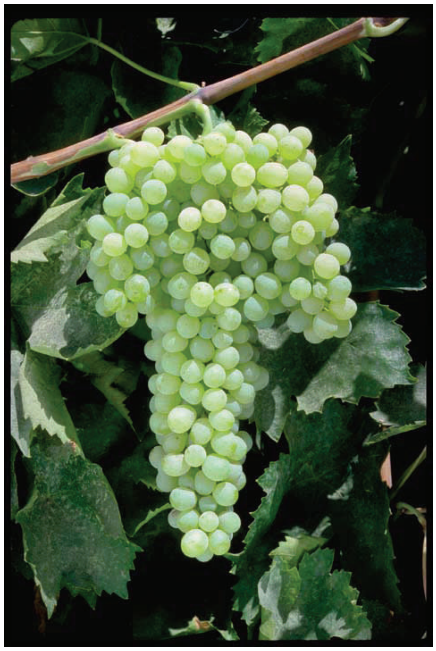
Consumer interest in organically certified produce has increased in recent years. Commonly found at farmers markets, roadside produce stands and small local markets, organic produce can now be found in large grocery chains nationwide. Demand, marketing campaigns and an increase in cost of conventionally grown fresh fruits and vegetables has made organic products an option for all consumer groups. California's grape growers have benefited from increased demand for organic products. Table 1 shows the increase in certified grape acreage over the past four years.

As a result of the demand for California organically grown raisins, UC Cooperative Extension was asked to complete a cost analysis that itemized production cost. Growers and packers using methods to produce and pack organic raisins contributed to this study.

Sample Costs to Produce Organic Raisins using a continuous tray system is intended as a guide to help growers make production decisions, determine potential returns, prepare budgets and evaluate production loans. The study is based on a hypothetical farm using practices common in the San Joaquin Valley. Input and reviews were provided by UCCE farm advisors, growers, pest control advisers and other agricultural associates.

Assumptions used to identify current costs for production operations, material inputs, cash and non-cash overhead are described in the study. Tables in the study show establishment costs, profits over a range of prices and yields, monthly cash costs, hourly equipment costs, and the whole farm annual equipment, investment and business overhead costs.

The study was prepared by Stephen Vasquez, UCCE farm advisor, Fresno County; Jennifer Hashim-Buckey, UCCE farm advisor, Kern County; Matthew Fidelibus and Peter Christensen, UCCE viticulture specialist and



viticulture specialist, emeritus, respectively, Department of Viticulture and Enology, UC Davis, Bill Peacock. UCCE farm advisor, Tulare County; Karen A. Klonsky, UCCE extension specialist and Richard De Moura, staff research associate, UC Davis Department of Agricultural and Resource Economics, UC Davis.

The study is available from the Department of Agricultural and Resource Economics, University of California, One Shields Avenue, Davis, CA 95616 and from local UC Cooperative Extension offices. The study also can be downloaded from the department's website at http://coststudies.ucdavis.edu.

Similar reports are available for many commodities from 1931 to the present. A $3.00 handling fee is charged for each report mailed from the department.

For additional information, call (530) 752-3589 or (530) 752-1517.

Table 1. California's certified grape acreage.

Grapes	2004	2005	2006	2007
Raisin	1,578	1,845	1,750	2,438
Table	2,164	2,460	2,985	3,734
Wine	7,761	8,034	8,370	9,240
Juice	78	46	46	38
Other*	3,156	4,761	2,970	2,971
Total	**14,737**	**17,146**	**16,120**	**18,421**

*Grapes with multiple uses and not used for one type of production from year to year.
Adapted from CCOF Directory and Resource Guide-2008

California Ag

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$97.7 billion of the state sales output, 3.8 percent of jobs, 2.5 percent of labor income and $39.6 billion (2.9 percent) of labor and property income and indirect business taxes.

Overall, including ripple effects, agricultural production and processing generated 7.3 percent of all jobs, 5.6 percent of all labor income and 6.5 percent ($90.2 billion) of labor and property income and indirect business taxes in the state.

The employment multiplier for the California agricultural production and processing industry in California was found by the Center to be 1.94 in the year 2002, meaning that for every job in agricultural production and processing an additional 0.94 jobs are generated in the state. With reference to the combined agricultural production and processing industry, for every $1 of direct labor income in agriculture, $1.27 additional labor income is generated in the state.

In addition to analyzing the role of agriculture in the state economy, the report analyses economic effects in the Central Valley, San Joaquin Valley, Sacramento Valley and Central Coast regions.

Discussing the global context, the UC Agricultural Issues Center report concludes that, if California were a country, its agricultural value would rank between fifth and ninth among countries of the world, depending which currency exchange rates are used, ahead of Canada, Mexico, Germany and Spain.

Light Brown Apple Moth in California

As state officials press on with eradication plans to rid California of the light brown apple moth (Figure 1), the University of California Statewide Integrated Pest Management Program has produced a publication to answer the public's questions.

Light Brown Apple Moth in California: Quarantine, Management, and Potential Impacts

http://ipm.ucdavis.edu/PDF/PUBS/lbam091207.pdf

To date, the moth, a native of Australia, has been found in Alameda, Contra Costa, Los Angeles, Marin, Monterey, Napa, San Francisco, San Mateo, Santa Barbara, Santa Clara, Santa Cruz, and Solano counties. Because the moth likes to eat more than 250 plant species, including grapes and other key crops, state and federal governments have begun an eradication campaign.

The publication answers questions about how to identify the moth, its biology, management alternatives and regulation, and possible impacts on California commodities and residential areas. Authored by nine UC scientists and reviewed by experts from across the U.S. and from Australia and New Zealand, the publication was developed quickly to fill the immediate need for information by UC Cooperative Extension county staff.

The moth, a native of Australia, had never before been found in North America until it was identified in the San Francisco Bay area in February. The moth could damage grapes, apples, pears, and stone fruits, as well as a number of ornamental plant species.

Figure 1. Light brown apple moth.

Nursery products are especially vulnerable because many of them are shipped outside the affected counties to other states and on the international market. US Department of Agriculture-Animal and Plant Health Inspection Service and the California Department of Food and Agriculture have interstate and intrastate quarantines in effect.

Keeping the pest from spreading to other areas of the state is critical, and this will be accomplished by regular monitoring with traps, inspection, treatment of infested nursery stock or other commodities, and destruction of green waste.

USDA has committed $75 million for eradication efforts in California and to begin a nationwide survey.

For additional information:
www.ipm.ucdavis.edu
www.cdfa.ca.gov

Calendar of Events

Local Meetings and Events

San Joaquin Valley Vit Tech Group
March 19, 2008
10:00 a.m. — 12:00 p.m.
Fresno County Farm Bureau
1274 W. Hedges Avenue, Fresno, CA
Contact: Jon Holmquist, (559) 661-5539

U.C. Davis University Extension Meetings

(800) 752-0881

Recent Advances in Viticulture and Enology (RAVE)
March 20, 2008
8:30 a.m. — 4:45 p.m.
Freeborn Hall, North Quad
Davis, CA
Instructor: Faculty
Section: 073VIT201

Managing the Small Vineyard II
May 10, 2008
9:00 a.m. — 4:00 p.m.
Room 198, Young Hall, East Quad,
UC Davis, CA
Instructor: Donna Hirschfelt
Section: 074VIT204

****Introduction to Wine Analysis for Home Winemakers***
May 17, 2008
8:00 a.m. — 6:00 p.m.
Room 123, Enology Building, California Ave.
UC Davis, CA
Instructor: Michael Ramsey
Section: 074VIT203

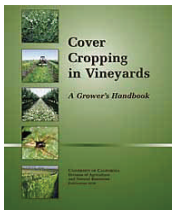
****Introduction to Wine Analysis for Professional Winemakers and Winery Lab Workers***
May 24, 2008
8:00 a.m. — 6:00 p.m.
Room 123, Enology Building, California Ave.
UC Davis, CA
Instructor: Michael Ramsey
Section: 074VIT205

*Participants must be 21 years of age or older to enroll and attend.

Publications from the University of California

Weeds of California and other Western States, 2007
ANR Publication 3488
Price - $100.00 + tax and shipping

This easy-to-use guide is the most comprehensive guide available on weeds in the Western United States. Package includes a CD of all of the photographs from the book.



Cover Cropping in Vineyards, 1998
ANR Publication 3338
Price - $20.00 + tax and shipping

This guide details technical and theoretical information on how cover crops affect vineyards and promote ecological stability.

Order Form

Publication	Qty.	Price	Subtotal
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Cover Cropping		$ 20.00	

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