

HAPPY 65th ANNUAL GRAPE DAY

**LODI WINEGRAPE
COMMISSION:
Research & Education**

Stephanie Bolton

PhD, Plant Pathology - Grapes and Wine

Grower Communications & Sustainable Winegrowing Director

(aka the new Matt Hoffman)

stephanie@lodiwine.com

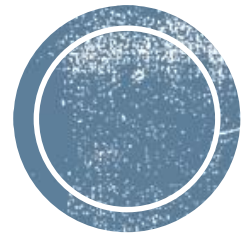


Hello, I'm your Grower Liaison for the Lodi Winegrape Commission

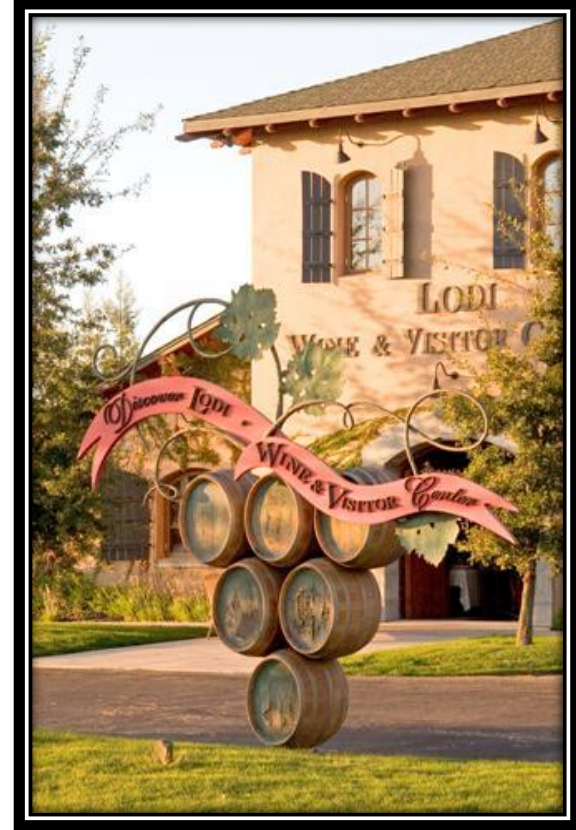


- I will help connect you to the resources you need to farm to your full potential.
 - Research programs
 - Educational programs
 - Networking with universities, companies, and industry leaders across the globe
 - With expert guidance from the one and only Stuart Spencer





Lodi Winegrape Commission since 1991



2545 W. Turner Rd.

(209)367.4727

Research, Education, & Communications Committee

Chair: Charlie Starr

Amy Blagg

Pieter den Hartog

Brad Goehring

Stan Grant

Michael Klouda

Galen Schmiedt

Chris Storm

Keith Striegler

Joe Valente

Paul Verdegaal

Larry Whitted



RESEARCH that...

- is locally applicable and USEFUL
- is timely and efficient
- involves grower participation
- creates results growers can implement in the short- and long-term

- RESEARCH FOCUS GROUPS -

MEALYBUG BIOCONTROL



GRAPEVINE VIRUSES



ROOTSTOCK SELECTION



RESEARCH FOCUS GROUP #1: MEALYBUG BIOCONTROL

- Stephanie Bolton, Lodi Winegrape Commission
- Mark Shimosaki, Pest Control Advisor
- Larry Whitted, Pest Control Advisor
- Mike Klouda, Viticultural Manager, Michael David Winery
- Chris Storm, Viticultural Manager, Vino Farms
- Tom Hoffman, Crush District 11 Grower, Heritage Oak Winery
- Jay Leone, Crush District 11 Grower, Leone Vineyards, USDA NOP-certified
- Jeff Perlegos, Crush District 11 Grower
- Clint Nelson, Grower Outreach, E&J Gallo
- Paul Verdegaal, UCCE Farm Advisor, San Joaquin County



How many mealybugs does it take to transfer a virus to a grapevine?



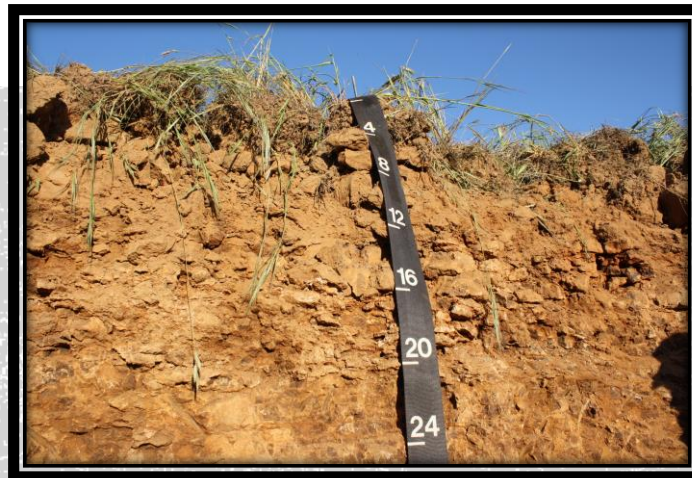
MEALYBUG BIOCONTROL



Can mealybugs transfer viruses from remnants of old vines underground onto newly planted vines?



MEALYBUG BIOCONTROL



Which mealybug biocontrol agents are most effective in our region?



MEALYBUG BIOCONTROL

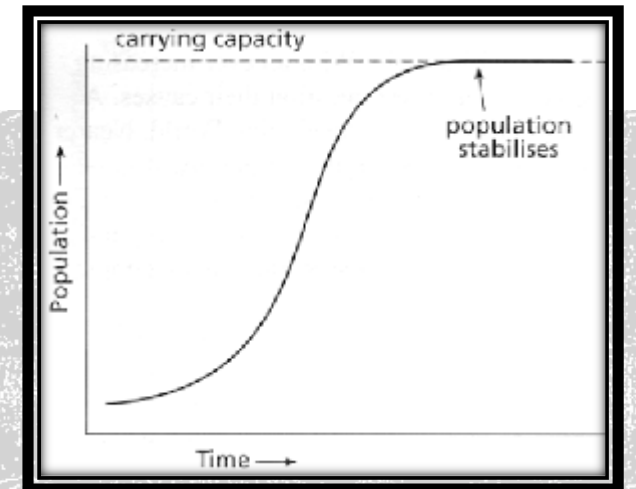


Univ. of Florida

What's the most cost-effective way to increase the population of mealybug biocontrol agents over time?



MEALYBUG BIOCONTROL



RESEARCH FOCUS GROUP #2: GRAPEVINE VIRUSES

- Charlie Starr, Pest Control Advisor & Lodi Winegrape Commission's REC Chair
- Keith Striegler, Grower Outreach, E&J Gallo
- Paul Verdegaal, UCCE Farm Advisor, San Joaquin County
- Kyle Brown, LangeTwins
- Matt Frank, Treasury
- You?



**How long does it take
before symptoms
appear in a virus-
infected grapevine?**



GRAPEVINE VIRUSES



When should we start rogueing, and do we need to also rogue the adjacent grapevines?



GRAPEVINE VIRUSES



What's a cost-effective grapevine virus sampling strategy?



GRAPEVINE VIRUSES



If we remove an infected vineyard, how do we best prepare the land before planting new ground?



GRAPEVINE VIRUSES



Do virus management practices change if the vines are infected with a complex of viruses?



GRAPEVINE VIRUSES

- **NEW!:** [Grapevine Red Blotch-associated Virus \(GRBaV\)](#)
- Grapevine leafroll-associated virus type 1 (GLRaV-1)
- Grapevine leafroll-associated virus type 2 (GLRaV-2)
- Grapevine leafroll-associated virus type 3 (GLRaV-3)
- Grapevine fanleaf virus (GFLV)
- Grapevine virus B (GVB, corky bark associated virus)
- Pierce's Disease (*Xylella fastidiosa*)
- Grapevine leafroll-associated virus type 4 (GLRaV-4)
- Grapevine leafroll-associated virus type 5 (GLRaV-5)
- Grapevine leafroll-associated virus type 6 (GLRaV-6)
- Grapevine leafroll-associated virus type 7 (GLRaV-7)
- Grapevine leafroll-associated virus type 9 (GLRaV-9)
- Grapevine fleck virus (GFKV)
- Grapevine virus A (GVA)
- Grapevine virus D (GVD)
- Grapevine Rupestris stem-pitting associated virus (GRSPaV)
- Grapevine Leafroll associated virus 2 Red Globe Strain (LR2-RG)
- Grapevine syrah virus - 1 (GSyV-1)
- Grapevine rupestris stem pitting associated virus syrah strain (GRSPaV-Syrah)

RESEARCH FOCUS GROUP #3: ROOTSTOCK SELECTION



- Stephanie Bolton, Lodi Winegrape Commission
- Keith Striegler, Grower Outreach, E&J Gallo
- Paul Verdegaal, UCCE Farm Advisor, San Joaquin County
- Chris Storm, Vino Farms
- John Duarte, Duarte Nursery
- Stan Grant, Progressive Viticulture
- You?



Create a rootstock survey to best guide decision making.



ROOTSTOCK SELECTION





Gather data from growers on rootstock variability in terms of nutrient uptake, drought tolerance, etc.

ROOTSTOCK SELECTION

Plan trials with new rootstocks.



ROOTSTOCK SELECTION



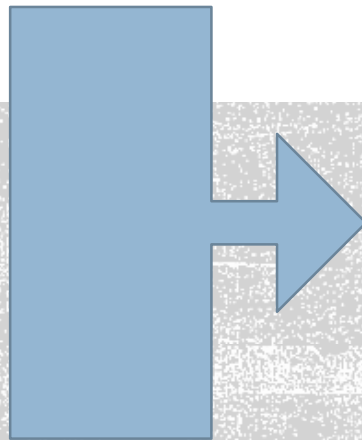
Alan Kawakami, left, Lynn Mills, center, and Markus Keller work in WSU's grape rootstock trial.

 (Courtesy Washington State University)

Create a master rootstock selection flow chart to guide new plantings.



ROOTSTOCK SELECTION



RESEARCH EDUCATION



EDUCATIONAL SERIES

- Relevant
- Specific to Crush District 11
- Connect growers to experts and industry leaders
- Timely
- Building upon previous knowledge
- Advertised through website, email, and mailings





YOU SHOULD ALWAYS BE LEARNING. IF YOU'RE THE SMARTEST PERSON IN THE ROOM, YOU'RE IN THE WRONG PLACE.

– Erica Bearman



VINEYARD BRANDING



DISEASE MANAGEMENT



MECHANIZATION



- EDUCATIONAL SERIES -

PREMIUMIZATION



CONSERVATION



TECHNOLOGY



EDUCATIONAL SERIES #1: MECHANIZATION

Mechanization (meck·ah·nye·zay·shun) *noun*
the process of changing from working largely or exclusively by hand to doing that work with machinery.

The time has come for more mechanization in winegrapes



Farmworker decline, higher wages trigger specialty crop mechanization

The decline in the number of Mexican workers working in U.S. agriculture is largely due to Mexico's improved economy, plus Mexicans staying home due to the financial fallout from the U.S.'s Great Recession, says USDA-Economic Research Service economist Tom Hertz.



More mechanized machinery is expected in the specialty crop industry, even in areas where mechanization was once thought impossible to achieve.

EDUCATIONAL SERIES #1: MECHANIZATION



This trunk scrubber of the vMech system is used by Ste. Michelle Wine Estates to control trunk diseases. The device looks similar to a weed whacker with multiple strings.

PHOTOS COURTESY OF STE. MICHELLE

Vineyard mechanization can help improve grape quality

Vineyard mechanization, which was spurred initially to cut the costs of production and labor needs, particularly in the San Joaquin Valley (SJV), can also be a factor in improved quality, says Jim Kennedy, chairman of Fresno



Hansen: **Vineyard mechanization** – Is grape quality impacted?

Good Fruit Grower - Dec 14, 2016

Vineyard managers are looking to reduce hand labor and increase **mechanization** in their fields. Some very specific tasks, like how Ignacio ...



Rain forces North Coast **vineyard** workers to hustle on pruning duties

Santa Rosa Press Democrat - Jan 19, 2017

Rain forces North Coast **vineyard** workers to hustle on pruning duties ... The drive toward **mechanization** is expected to increase in the North ...

Date TBD but soon!
Mechanization series:



Pruning

Paul Verdegaal &

Kaan Kurtural

Gallo Vineyard

EDUCATIONAL SERIES #2: DISEASE MANAGEMENT

DISEASE (diss·eeze) *noun*

a disorder of structure or function in a plant, especially one that produces specific signs or symptoms or that affects a specific location and is not simply a direct result of physical injury.

< NEWS / FEATURES



A leaf from a Merlot grapevine shows red veins and red blotches on margins and interveinal regions, typical symptoms of red blotch disease.

Photo courtesy of Washington State University.

March 1, 2016

Beating Red Blotch

Grapevine virus an emerging, concerning menace



**Thursday, February 28th
UC Davis On the Road:**



Viruses

8:30am – lunchtime

Constellation Barrel Room

Details on lodigrowers.com

EDUCATIONAL SERIES #3: VINEYARD BRANDING



BRANDING (bran·deeng) *verb*

the **marketing** practice of creating a name, symbol or design that identifies and differentiates your vineyard from other vineyards. An effective **brand** strategy gives you a major edge in an increasingly competitive market.

LEX VINI

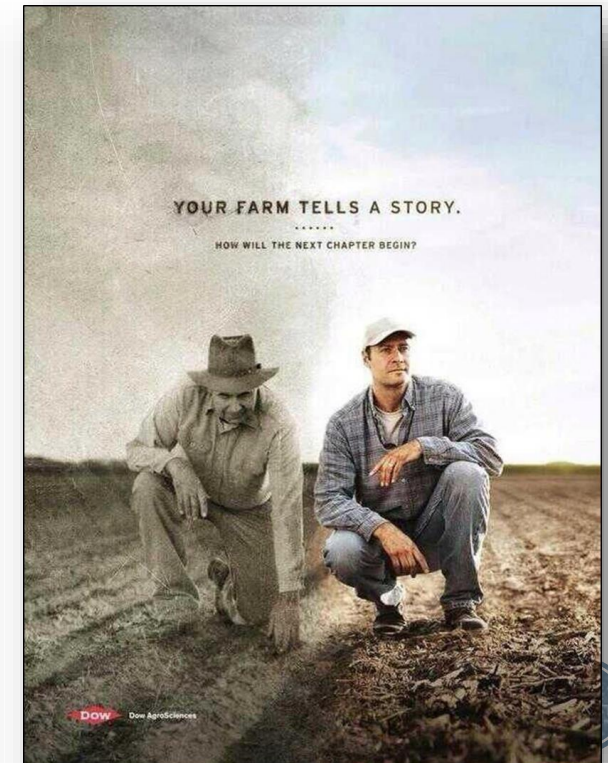
Branding Strategies in Agricultural Commodities: Vineyard & Block Designates

03/17/14

By Katja Loeffelholz, Dickenson, Peatman & Fogarty

The prominence of vineyard-designated wines is another lesson in value-added agricultural branding which presents both the winery and the vineyard owner or lessee with a number of marketing and legal issues. Recognizing the value of vineyard designated names, vineyards have long been designating blocks within their vineyards with proprietary names.

In this way, even though multiple wineries are purchasing grapes from the same vineyard property, each winery can have a distinct name to refer to the vineyard block where the grapes were grown, also known as the "block designate." If a vineyard owner sells wine grapes to a winery under a vineyard designate or block designate, the winery may use that vineyard or block name on wine produced from those grapes to designate origin so long as such use complies with the vineyard designation labeling requirements of the Alcohol and Tobacco Tax and Trade Bureau (TTB). Accordingly, the vineyard owner — not the winery — theoretically owns rights in the name.



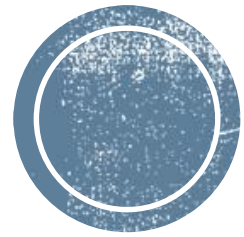
EDUCATIONAL SERIES #4: PREMIUMIZATION

PREMIUMIZATION (pree·me·uhm·eye·zhay·shun) *noun*
the move towards more expensive, higher quality grapes.



U.S. wine tops \$10-a-bottle average for first time, expert says





Date TBD in March
Premiumization series:
\$400/ton vs. \$1500/ton
Grower & Winemaker Panel

EDUCATIONAL SERIES #5: TECHNOLOGY

TECHNOLOGY (teck·nah·low·gee) *noun*

science or knowledge put into practical use to solve problems or invent useful tools.



✓ **The technology** bringing ever finer wines to our table

TNT Magazine - Feb 3, 2017

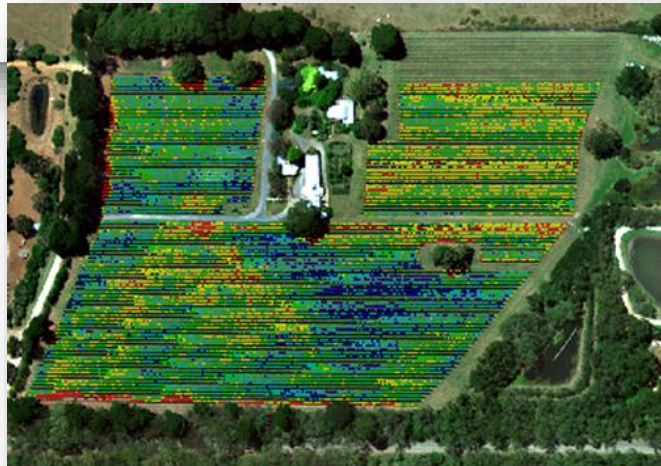
It's called Precision **Viticulture** (the science, production and growing of thanks to advances in aerial imaging **technology**, is saving ...



✓ **Spore samplers** give farmers an early warning system aga

Capital Press - Feb 2, 2017

"The time is right to use this **technology**," Woodhall said. ... Mahaffee s studying spore samplers in **viticulture** and hops in 2002, along with ...



Berry Size: A Machine Vision Perspective

By Omeed Mirbod and Stephen Nuske, Ph.D. Up until now growers in the viticulture industry...



EDUCATIONAL SERIES #6: CONSERVATION

CONSERVATION (kaan·sir·vay·shun) *noun*

preservation, protection, or restoration of the natural environment, natural ecosystems, vegetation, wildlife, and other resources.



Progressive Viticulture

Wine grapes go green: **THE SUSTAINABLE VITICULTURE STORY**

Wine grapes and wine are among California's signature products, and they fuel a powerful economic engine in the state. Each year, 20 million tourists roam the state's wine regions, tasting, purchasing and taking in the beauty of the landscape. California, which produces 90% of the nation's wine supply, generates revenues of \$19 billion a year





**It's not what you
take when you leave
this world behind you.**

**It's what you
leave behind you
when you go.**

- Randy Travis, Three Wooden Crosses





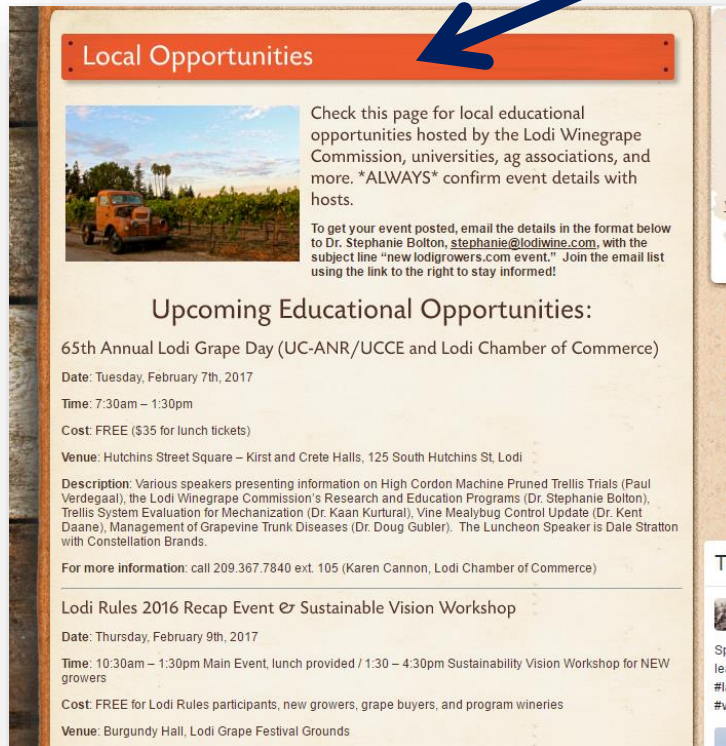
**Thursday, February 9th
Lodi Rules for Sustainable
Winegrowing
10:30am – lunchtime
Burgundy Hall, Grape Festival**

RSVP to stephanie@lodiwine.com



RESOURCES

- www.lodigrowers.com
- email list-serve
- mailing list
- weather service
- Vineyard Supplier Directory
new edition coming



Local Opportunities

Check this page for local educational opportunities hosted by the Lodi Winegrape Commission, universities, ag associations, and more. *ALWAYS* confirm event details with hosts.

To get your event posted, email the details in the format below to Dr. Stephanie Bolton, stephanie@lodiwine.com, with the subject line "new lodigrowers.com event." Join the email list using the link to the right to stay informed!

Upcoming Educational Opportunities:

65th Annual Lodi Grape Day (UC-ANR/UCCE and Lodi Chamber of Commerce)
Date: Tuesday, February 7th, 2017
Time: 7:30am – 1:30pm
Cost: FREE (\$35 for lunch tickets)
Venue: Hutchins Street Square – Kirst and Crete Halls, 125 South Hutchins St, Lodi

Description: Various speakers presenting information on High Cordon Machine Pruned Trellis Trials (Paul Verdegaa), the Lodi Winegrape Commission's Research and Education Programs (Dr. Stephanie Bolton), Trellis System Evaluation for Mechanization (Dr. Kaan Kurtural), Vine Mealybug Control Update (Dr. Kent Daane), Management of Grapevine Trunk Diseases (Dr. Doug Gubler). The Luncheon Speaker is Dale Stratton with Constellation Brands.

For more information: call 209.367.7840 ext. 105 (Karen Cannon, Lodi Chamber of Commerce)

Lodi Rules 2016 Recap Event & Sustainable Vision Workshop
Date: Thursday, February 9th, 2017
Time: 10:30am – 1:30pm Main Event, lunch provided / 1:30 – 4:30pm Sustainability Vision Workshop for NEW growers
Cost: FREE for Lodi Rules participants, new growers, grape buyers, and program wineries
Venue: Burgundy Hall, Lodi Grape Festival Grounds



LoCA
THE WINES OF LODI CALIFORNIA

[About](#) [Lodi Rules](#) [Education](#) [Coffee Shop Blog](#) [Directory](#)

750 Lodi Growers

Authentic and Passionate
World Class Quality

EVENTS CALENDAR

- LODI RULES 2016 Recap Event**
February 9 @ 10:30 am - 1:30 pm
- Executive Committee**
February 9 @ 2:00 pm - 3:00 pm

[View All Events](#)

COFFEE SHOP

Biological Control of Vine Mealybug
February 6th, 2017

For years I have attended educational meetings in which the vine mealybug (*Planococcus ficus*) was portrayed as some kind of super-pest. I was told why it was so much worse than the grape mealybug and also why biological control would not work on it. In fact, I was told this as recently as last month by an entomologist with a Ph.D. from U.C. Berkeley. I believed it, more or less....

[VIEW MORE](#)

Comments (0) | [ShareThis](#)

NITROGEN FERTILIZER FORMS
January 4th, 2017

by Stan Grant, Viticulturist it is a fact: chemistry is fundamental to life. It is also a primary means to directly influence grapevines, especially their mineral nutrition. Thankfully, our modern mineral nutrient toolbox includes a wide array of chemical tools for this purpose. To use them appropriately and effectively, we need to know about their characteristics and their behaviors in vineyards. In

DAILY FORECAST

JOIN OUR EMAIL LIST
FOR NEWS, EVENTS AND OFFERS

Tweets by @LodiGrower

Lodi Winegrowers
@LodiGrower

Spot the #sustainability! There are at least four obvious sustainable efforts. #langetwins #sustainableag #lodiwine #viticulture #lodirules

How can we continue to grow not only grapes, but our local industry?

- Stay informed
- Good communication
- Prepare for future changes
- Use and protect our resources
- Vineyard branding
- Support each other & our workforce
- Be open to finding creative solutions to challenges
- Remember: If we made it through Prohibition, we can make it through anything!



**A farmer has to be an
optimist or he/she wouldn't
still be a farmer. – Will Rodgers**





Thank you for your attention!

Stephanie Bolton, PhD
Grower Communications &
Sustainable Winegrowing Director
Lodi Winegrape Commission
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