COOPERATIVE EXTENSION UNIVERSITY OF CALIFORNIA

TREE AND VINE NOTES

MARCH 2004

# PRESSURE CHAMBER DEMONSTRATION

**Monday, April 19th, 2004 - 10:00 to 11:30**

**Kamangar prune orchard, about 5 miles east of Merced on the south side of Childs Avenue next to the small canal. From freeway 99 take the Childs Ave exit and proceed east. After crossing Arboleda, begin looking for the Cooperative Extension Sign.**

The pressure chamber has become widely accepted as a tool for irrigation scheduling and water conservation in orchards and vineyards since its introduction by UC Cooperative Extension several years ago. We will have a demonstration of its use and will have some different models on display. We will be referring to prunes but the technology applied to any woody perennial. Funding for this project has been provided by the CDFA's Buy California Initiative and the USDA.


Using a pressure chamber

**FOG SPOT IN APRICOTS**

Last year some apricot orchards sustained severe damage from a disorder known as fog spot. It expresses itself as reddish or purplish spots that may coalesce into larger spots or patches which become scabs. We do not know what the organism is, nor are we sure when the damage took place. It is suspected that the fungus *Alternaria* plays a role. Symptoms usually begin appearing 2-3 weeks after full bloom. This year I am doing a bagging study and will be utilizing a wetness meter (the type used to time apple scab sprays) in an attempt to learn more about this problem.

Fog spot indentation

Fog spot cracking

If you have apricots, try to keep detailed records about wet days and how long the trees stayed wet. Record when you first see the symptoms. Let me know what you find out. Since we do not know the details about the organism the best we can recommend is to protect the tree before a rain event with a very broad spectrum fungicide, an example of which would be Pristine.

**POWDERY MILDEW IN APRICOTS**

Last year powdery mildew was also severe in some apricot blocks. The key to PM control is protecting the tree before infections can get established. Once they get going they are difficult to eradicate. We have several good fungicides that are effective for PM. They include: Rally, Topsin, Break, and Abound. One that I would like to test but is not registered on apricots yet it Quintec. (I need some trees that will not be harvested this year to test an unregistered material so if you know of some, let me know).


Mildew scar in April

**CHILL HOURS & BLOOM**

**Maxwell Norton, UC Cooperative Extension, Merced County**

We finished up the season with 1009 hours at or below 45F. This was measured in an almond orchard about half way between Cressey and Livingston. The total was close to our 10 year average of 1054. The number of hours below 32F was 162 – pretty good. Many thanks to our volunteer observer Stan Fidel who has been taking measurements for us for over 20 years! To look at a detailed chart of these temperatures go to **cemerced.ucdavis.edu** and select Tree & Vine Program > Chilling Hours Chart. Or come by the office and we will make you a copy.

Full bloom in peaches was reported by the Peach Association as March 9 for our area which is 1 day later than last year. Bloom is excellent for all varieties of peaches including the Stanislaus variety which has been a poor bloomer in past years. While weather was poor for the first half of almond bloom, it has been excellent for peaches.

**CHECK OUT OUR WEBSITE**
**cemerced.ucdavis.edu**
Subscribe to this newsletter on the web site. The web version is in color and will include pictures. Lots of information and upcoming events. Something we should include? Let us know!

I am starting an e-mail list to send out material related to tree and vine production that is not pest management related. I anticipate that this would be about once per month on an irregular basis. If you want to be on that list – e-mail me with your full name and e-mail and I will put you on. Any e-mails that bounce twice are purged from the list, so let me know if you change your e-mail.

I maintain an e-mail list for tree and vine pest management topics. I occasionally send out information related to tree and vine pest management that has a time value. I you want to be on that list – e-mail me with your full name and e-mail and I will put you on. Any e-mails that bounce twice are purged from the list, so let me know if you change your e-mail.

**PUBLICATIONS AVAILABLE AT COOPERATIVE EXTENSION**
Back in Stock - **Making Table Wine at Home**
If you've ever thought about making your own zinfandel, pinot noir, Chenin blanc, or any other table wine at home, this manual can get you started. Organized into eight short chapters that discuss the ingredients and practices that make a good table wine, you will learn how to bring those elements together in a home winery. Individual chapters cover red wines, white wines, spoilage and stability problems, juice and wine analysis, wine quality, and the wine-making facility. 2004. #21434 $15.00 44 pp.

**Pests of Landscape Trees & Shrubs: An Integrated Pest Management Guide - Second Edition -** Completely revised
This is the ultimate guide to managing landscape pests. The second edition covers more types of ornamental trees and shrubs, more pests, and contains more photographs and illustrations, together making it 25% larger.

With this manual in hand you will be able to diagnose and manage hundreds of insect, mite, weed, plant disease, and nematode pests. Inside you'll find updated information on how to use environmentally safe, ecologically based IPM methods - landscape designs that prevent pests; how to select resistant varieties; advice on the use of less-toxic pesticides such as botanicals, oils, and soaps; and tips on planting, irrigating, and other plant-care cultural activities that help in avoiding problems.

The second edition contains 70 new pest sections, including 13 new diseases, 12 new weeds, and 40 new insect and mite pests. Here you'll find over one hundred pages of easy-to-use tree and shrub pest tables, double the number found in the first edition! As with the first edition, these pest tables are invaluable in helping you identify common pest problems - now on over 200 types of ornamental trees and shrubs. Includes 432 color photographs, 117 drawings and tables, references, glossary, and an index. #3359 $42.00

**BUDDING GRAFTING PHOTOS**
Two publications containing several good budding and grafting photos are posted on our website **cemerced.ucdavis.edu** in the gardening section.

**FREE ON-LINE PUBLICATIONS**
8090 Photographic Guide to Citrus Fruit Scarring
http://anrcatalog.ucdavis.edu/merchant.ihtml?pid=5592&step=4

74112 Olive Fruit Fly: Pest Notes for Home and Landscape
http://anrcatalog.ucdavis.edu/merchant.ihtml?pid=5600&step=4

8115 Patch Budding: A Convenient Method for Top-Working Olives
http://anrcatalog.ucdavis.edu/merchant.ihtml?pid=5602&step=4

**PRUNE ORCHARD CHECKLIST FOR FEBRUARY/MARCH**
**by Franz Neiderholzer**

Get orchard ready for bloom -- a plowed or mowed orchard is warmer than an orchard with tall weeds/cover crop.
Get air-blast sprayer ready to apply bloom fungicides.
If you have sprinkler (impact or micro-jet) irrigation, check out/maintain irrigation system used for frost control.
Make plans to protect flowers at bloom -- if bloom time weather is wet. Prune flowers are susceptible to brown rot beginning at green bud.
Peach twig borer traps should be up by April 1, use 2 traps per block.

**INSTALLING PERCHES FOR HAWKS**
**by Maxwell Norton**

Some have expressed interest in installing perches for hawks to encourage them to frequent local fields. While there is no scientific evidence to demonstrate that hawk perches will increase squirrel or vole control in commercial orchards, having a few around certainly can't hurt. In one study in alfalfa, 18" 2x2s mounted 8.2 ft and 16.4 ft high were both used by both hawks and owls. In another study 1.5" wooden dowels mounted 30 ft high around fruit orchards were used in 2 of the 3 sites but they could not measure a decrease in the number of voles trapped. Encouraging raptors is generally beneficial and they are fun to watch.

**BUDBREAK IN GRAPES**
**by Maxwell Norton**

Budbreak is an important time in grapes. From this point forward, the new shoots are susceptible to both powdery mildew and phomopsis cane and leaf spot. In rare instances of a wet winter followed by a wet spring, downey mildew can also be a problem. Downey mildew continues to be rare in the North SJV. In addition to disease pressure, frost is a big hazard for the succulent new growth.

Emerging Grape Shoots

French Columbard bud break

Three inch shoots

Early prevention is the key to managing almost all diseases. For phomopsis, after budbreak apply an effective contact fungicide (such as ziram, captan, maneb or mancozeb) before a rain event for protection. Once you get a few inches of growth and have enough tissues to absorb it, a systemic fungicide (such as Pristine, Sovran, Abound or Flint) will give you extended control of both phomopsis and powdery mildew. Best control will occur when applied just before spring rains when the shoots average 0.5"long and applied again when the shoots are 5-6" long.

For good powdery mildew control, the powdery mildew index will tell you if you need to apply and when to apply. Current temperatures are ideal for powdery mildew and if they continue after you have green tissue exposed, you need to protect that tissue. In any case, wait till you get close to 100% bud break before putting on the first wettable sulfur. Do not apply any systemic fungicides until you have enough green tissue to absorb it.

The first step in frost protection is preparing the ground. The soil underneath the vine should already be devoid of weeds – dead or alive. The middles should be cultivated and smoothed down and wetted or they should be mowed close and wetted. Any green shoots are susceptible to frost damage.