



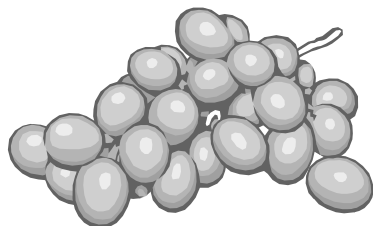
# THE SCOOP

on fruits and nuts in Stanislaus County

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by Roger Duncan

Pomology and  
Viticulture Advisor



## 2008 North San Joaquin Valley Almond Day

Sponsored by  
The University of California Cooperative Extension

January 22, 8:30 a.m. - 12:00 noon  
Stanislaus County Agricultural Center  
Service and Crows Landing Roads, Modesto

**2.0 Hours of Continuing Education Credit**

**8:00 Registration**

**8:30 Welcome and Introductions – Roger Duncan**

**Almond Irrigation, Water Stress & Productivity**

*Dr. Ken Shackel, Dept. of Plant Sciences, UC Davis*

**Almond Pruning by the Numbers**

*Roger Duncan, Pomology Advisor, UCCE-Stanislaus County*

**Understanding the Role of the Soil Microbial Community  
in Almond Replant Disease**

*David Doll, (Future) Pomology Advisor, UCCE-Merced County*

**Weed Control and Label Updates in Almonds**

*Kurt Hembree, Weed Advisor, UCCE-Fresno County*

**Predicting NOW Damage**

*Dr. Joel Siegel, Research Entomologist, USDA ARS, Parlier, CA*

**Organic Almond Disease Control**

*Dr. Brent Holtz, Pomology Advisor, UCCE-Madera County*

**12:00 Adjourn**

U.S. Department of Agriculture, University of California, and Stanislaus County Board of Supervisors cooperating

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## Dormant Sprays

By Janine Hasey, UCCE, Sutter-Yuba Counties

The pesticides used in the conventional dormant spray generally include oil, an organophosphate or pyrethroid insecticide and copper. The target pests controlled by the oil are San Jose scale (low to moderate populations), brown almond mite and European red mite. Organophosphate insecticides control peach twig borer and San Jose scale.

Pyrethroid insecticides control peach twig borer but not scale. In peaches, copper controls peach leaf curl. Delayed dormant spray timing (early to mid-February before bloom), is more effective than dormant spray timing for controlling San Jose scale, European red mite, and peach leaf curl. Another benefit to spraying later during the dormant period is that there is generally more orchard floor vegetation in late January to mid-February reducing pesticide runoff potential.

With increasing concern and regulations regarding pesticides in surface water, growers must seriously consider their dormant spray options and management. The first step is **monitoring** for the pests by taking dormant shoot samples. These samples will help you determine the levels of San Jose scale and European red mite populations and the most appropriate pesticide and rates to use. In peaches, if less than 10 percent of sampled shoots have San Jose scale, oil alone should be an effective control. If over 10 percent, then consider using an organophosphate or the insect growth regulator Seize<sup>®</sup>. In almonds, if fewer than 30% of spurs are infested with San Jose scale, no treatment is necessary.

When applying any pesticides, they should not be applied 48 hours before a predicted rain event to avoid runoff. For the organophosphate Diazinon, the label states that it cannot be applied 48 hours before a predicted rain event or when soil moisture is at field capacity.

Growers now have more dormant or bloom time control options available with newer chemistries that have reduced hazard to the environment and greater work safety. Materials such as biological insecticides or insect growth regulators are replacements for the traditional broad spectrum contact pyrethroids and organophosphates.

## Reduced Hazard Dormant Spray Options

For peaches, reduced hazard insecticide programs build from the basic dormant/delayed dormant spray which is oil for scale and copper for peach leaf curl. In almonds the need for a dormant spray is based on San Jose scale control.

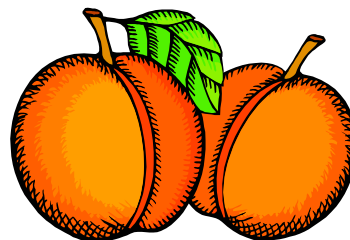
Below are programs that have been demonstrated to be effective:

Target Insect	Reduced Hazard Material	Rate	Spray Timing
Peach twig borer	Intrepid <sup>®</sup> 2F	12-16 oz/acre	Delayed dormant <u>or</u> 20-70% bloom
Peach twig borer	Dimilin <sup>®</sup> 2L	12-16 oz/acre	Dormant <u>or</u> delayed dormant <u>or</u> 20-30% bloom
Peach twig borer	Spinosad <sup>®</sup> (Success <sup>®</sup> )	6 oz/acre 4 oz/acre	Delayed dormant <u>or</u> 30-70% bloom (avoid bees)
Peach twig borer	<i>Bacillus thuringiensis</i> (Bt)	1-2 lb	2-3 bloom / petal fall sprays
San Jose scale	Seize <sup>®</sup> 35W	4 oz/acre	Delayed dormant plus 2 gal oil/acre

Bt, Spinosad<sup>®</sup>, Dimilin<sup>®</sup> and Intrepid<sup>®</sup> also control omnivorous leaf roller and oblique banded leafroller which are occasional peach and almond pests. A trial conducted in Stanislaus County indicated that bloom timing may be more effective than dormant sprays for controlling leaf rollers. This may also be true for peach twig borer.

Seize<sup>®</sup> applied at delayed dormant timing has been very effective in reducing or eliminating scale in peach orchards where it was used on blocks with over 10 percent San Jose scale as determined from annual dormant shoot sampling.

Alternating with different materials and chemistries every year will help manage insect resistance. This will help to ensure that our insecticide tools remain effective.



The following ANR publications are now available from Communication Services or online:

#### **Weeds of California and Other Western States**

This encyclopedic yet easy-to-use guide covers 262 individual entries. It includes a full description of 451 species and another 361 plants compared as similar species, representing 63 plant families. Features of this guide include **Color photos** of over 700 weeds including seeds, seedlings, flowers, and mature plants. Also included is a **CD of all of the photographs from the book** with over 3000 images! \$100.00.

<http://anrcatalog.ucdavis.edu/InOrder/Shop/ItemDetails.asp?ItemNo=3488>

#### **Reducing Runoff from Irrigated Lands Series:**

- ◆ **Causes and Management of Runoff from Surface Irrigation in Orchards**  
<http://fruitsandnuts.ucdavis.edu/crops/8214.pdf>
- ◆ **Managing Existing Sprinkler Irrigation Systems**  
<http://fruitsandnuts.ucdavis.edu/crops/8215.pdf>
- ◆ **Measuring Irrigation Flows in a Pipeline**  
<http://fruitsandnuts.ucdavis.edu/crops/8213.pdf>
- ◆ **Soil Intake Rates and Application Rates in Sprinkler-Irrigated Orchards**  
<http://fruitsandnuts.ucdavis.edu/crops/8216.pdf>
- ◆ **Storing Runoff from Winter Rains**  
<http://fruitsandnuts.ucdavis.edu/crops/8211.pdf>
- ◆ **Understanding Your Orchard's Water Requirements**  
<http://fruitsandnuts.ucdavis.edu/crops/8212.pdf>

#### **Light Brown Apple Moth:**

##### **Quarantine, Management and Potential Impacts**

UC IPM has produced a new publication about light brown apple moth, a new exotic pest found recently in California and now under quarantine regulation. Authored by 9 UC ANR scientists, the publication is intended to answer grower and resident questions about light brown apple moth, its biology, management and regulation, and possible impacts on California commodities and residential areas. Download the publication from the UC IPM Web site at: <http://www.ipm.ucdavis.edu/EXOTIC/lightbrownapplemoth.html>. The publication is also featured on the UC IPM home page and under "Exotic and Invasive Pests" linked from every page.

#### **Sediment Management Goals and Recommended Practices for Orchards and Vineyards**

<http://anrcatalog.ucdavis.edu/InOrder/Shop/ItemDetails.asp?ItemNo=8219>

#### **Monitoring Soil Moisture for Irrigation Water Management**

<http://anrcatalog.ucdavis.edu/InOrder/Shop/ItemDetails.asp?ItemNo=21635>

## **New Viticulture Web Site Is Now Available**

A wealth of information about grape growing is now accessible at the University of California's new user-friendly Integrated Viticulture Online Web site.

The new site, located at <http://iv.ucdavis.edu>, is designed to increase accessibility to the work of University researchers. Content is continuously added and updated. Photos and links to valuable publications, people, and online resources are included. Instructional video modules also can be downloaded, featuring presentations from recent workshops and seminars, and a calendar of viticultural seminars and events round out the Web site's offerings.

## **Interpersonal Negotiation Skills**

By Gregorio Billikopf, University of California

The very thought of negotiating sounds intimidating, yet we are all experienced negotiators. Any time we come to an agreement on anything, we do so through negotiation. Some of this happens somewhat subconsciously, while other situations are difficult enough that much planning and effort are required. Nowhere is this truer than in interpersonal negotiation, especially if tensions are running high.

A free hour and a half seminar is now available for you to listen to in your pickup or at home, or share with your employees, as you see fit. The audio seminar is aimed at helping individuals improve their negotiation skills with a business partner, employees, and at home.

To download, click on the link within the yellow row, entitled: **Negotiation Skills Audio**.

<http://www.cnr.berkeley.edu/ucce50/ag-labor/7labor/13.htm>

## THE SCOOP on fruits and nuts

### TAKE A LOOK AT WHAT'S INSIDE:

- ❄ **Dormant Sprays**
- ❄ **Reduced Hazard Dormant Spray Options**
- ❄ **New ANR Publications**
- ❄ **New Viticulture Website**
- ❄ **Interpersonal Negotiation Skills**



### UPCOMING MEETINGS:



#### **2008 North San Joaquin Valley Almond Day**

January 22, 2008 8:30 a.m. - 12:00 noon  
Stanislaus County Agricultural Center, Modesto, CA

#### **Tree & Vine IPM Update Breakfast Meetings**

Begin March 5 & continue every 1st & 3rd Wednesday through June  
7:00 - 8:00 a.m., Peach Tree Restaurant, 2535 E. Whitmore Ave, Ceres, CA

#### **Variety Focus: Cabernet Sauvignon**

May 15, 2008, 8:00 a.m.- 3:30 p.m., Freeborn Hall, UC Davis

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