



University of California ≈ Cooperative Extension
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<http://cesutter.ucdavis.edu>



Orchard Notes

DEC 2005/JAN 2006

12th ANNUAL SACRAMENTO VALLEY CLING PEACH DAY

Thursday, January 19, 2006, 8:30 a.m. – 12:00 noon

Lunch 12:00 – 1:00 p.m.

Agricultural Building, 142 Garden Highway, Yuba City

MEETING PROGRAM

8:30 a.m. Registration, Coffee and Danish , *Courtesy of Dow AgroSciences*

9:00 a.m. Welcome, *Janine Hasey, UC Farm Advisor, Sutter and Yuba Counties*

WORKSHOP

IMPLEMENTING SUSTAINABLE/INTEGRATED PEST MANAGEMENT (IPM) STRATEGIES IN YOUR PEACH ORCHARD

SPEAKER PARTICIPANTS INCLUDE:

Janine Hasey, UC Farm Advisor
Walt Bentley, UC IPM Advisor, Kearney Ag Center
Carolyn Pickel, UC IPM Advisor, Sacramento Valley
Barbara Ohlendorf, UC IPM Guidelines Coordinator

Using the UC IPM website, <http://ipm.ucdavis.edu>, we will demonstrate how to access and use the peach pest management information that is available online. You will learn how to use the updated Peach Pest Management Guidelines; the new Year-Round IPM Program for Peach which includes the annual checklist form and when and how to monitor for peach pests; information on resistance management, insecticides and water quality, buffer zones, and beneficial insects; fungicide efficacy and timing tables; integrated weed management and more. Even if you don't use a computer, much of this information is in publication form and available from our office.

This workshop will provide all the latest IPM tools available to peach growers as they strive to implement more sustainable/IPM practices in their orchards.

BREAK

11:00 a.m. California Cling Peach Board Business Session

11:10 a.m. Sustainable Pest Management and Natural Resources Conservation Service (NRCS)
DeeDee Levine, Soil Conservationist, NRCS

11:20 a.m. Regulatory Update on Sustainable Pest Management
Jan Kendel, Ag Biologist, Sutter County Agricultural Department

LABOR SAVING STRATEGIES

11:30 a.m. Chemical and Mechanical Thinning
Kitren Glozer, Staff Research Associate, UC Davis

LUNCH

12:00 Noon - Chicken lunch provided by California Cling Peach Board. Please RSVP to the Sutter/Yuba Extension office at (530) 822-7515 by 10:00 a.m. Tuesday January 17th if you plan to stay for lunch. You may also fax to (530) 673-5368 or email: pabagley@ucdavis.edu to have your name put on the list for lunch.

If special accommodations are required please call in advance to 530-822-7515.

Meeting Sponsored by University of California Cooperative Extension,
Sutter & Yuba Counties
Co-Sponsor – Sutter County Agricultural Department

PCA and Private Applicator Credit Pending – 2.5 hours, includes .5 hour of regulations

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**DORMANT SPRAY – PEACHES**

The pesticides used in the conventional dormant spray include oil, an organophosphate or pyrethroid and copper. The target pests controlled by the oil are San Jose scale (low to moderate populations) and European red mite, the organophosphate controls peach twig borer and San Jose scale, pyrethroids control peach twig borer (not scale), and 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 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. If San Jose scale is below 10 percent, oil alone should be an effective control. If over 10 percent, then consider using an organophosphate such as Supracide or the insect growth regulator Seize. When applying organophosphates, pyrethroids, or 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.

Below are programs that have been demonstrated to be effective:

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

Bt, Spinosad, and Intrepid also control oblique banded leafroller which is an occasional peach pest. Seize applied delayed dormant with the oil and copper spray, 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 and help ensure that our insecticide tools remain effective. Part of our IPM workshop on January 19, 2006 will cover dormant shoot sampling, insecticides and water quality.

### CHILLING HOURS UPDATE

|                   |     |         |     |
|-------------------|-----|---------|-----|
| December 19, 2005 | 380 | 2005-06 | ?   |
| December 20, 2004 | 336 | 2004-05 | 994 |
| December 19, 2003 | 293 | 2003-04 | 886 |
| December 20, 2002 | 275 | 2002-03 | 779 |

Chilling hours recorded at our office in Yuba City on Garden Highway. For hours below 45° F model. The chilling units for the same model on 12/18/05 at the Nicolaus Cimis station were 451.

### UPDATED 2005 TREE AND VINE HERBICIDE REGISTRATION TABLE

Included for your reference is an updated 2005 Registration Status of Herbicides in Trees and Vines with the susceptibility of weeds to herbicide table on the back. This replaces the table sent out in

the October/November 2005 issue of "Orchard Notes". The postemergence herbicide Shark was recently registered in several tree crops for control of broadleaf weeds and was added to the table.



## YEAR END REMINDER

Remember when filing your pesticide use reports to also list any biological materials used such as Bt or Success, insect growth regulators like Intrepid, Dimilin or Seize, mating disruption pheromone dispensers, sprayables or other pheromone products, and any other reduced hazard materials. There are growers who don't think they have to report these materials because they typically do not have worker safety issues. Technically they are all pesticides and

have to be reported. All of your pesticide reports go to the California Department of Pesticide Regulation where they are compiled in a number of ways and available to the public. Underreporting these types of materials is not beneficial to your industry – it is advantageous to show the public which crops and the number of acres where reduced hazard options for pest control are being used.

*Thank you all for your support of our programs this past year. A special thank you to cooperators on research projects and educational programs, I truly appreciate your efforts and contributions. May the 2006 year be prosperous for all of you.*

JANINE HASEY  
U.C. FARM ADVISOR

*SEASON'S GREETINGS*

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# Herbicide Registration on Horticultural Tree and Vine Crops – 2005

Revised 12/05

| Herbicide-Common Name<br>(trade name)       | Almond | Apple | Apricot | Cherry            | Grape | Kiwi | Nectarine | Olive | Peach | Pear | Pecan | Prune | Walnut | Pomegranate | Pistachio |
|---------------------------------------------|--------|-------|---------|-------------------|-------|------|-----------|-------|-------|------|-------|-------|--------|-------------|-----------|
| <b>Preemergence</b>                         |        |       |         |                   |       |      |           |       |       |      |       |       |        |             |           |
| dichlobenil ( <i>Casoron</i> )              | N      | R     | N       | R                 | R     | N    | N         | N     | N     | R    | N     | N     | N      | N           | N         |
| diuron ( <i>Karmex, Diurex</i> )            | N      | R     | N       | N                 | R     | N    | N         | R     | R     | R    | R     | N     | R      | N           | N         |
| EPTC ( <i>Eptam</i> )                       | R      | N     | N       | N                 | N     | N    | N         | N     | N     | N    | N     | N     | R      | N           | N         |
| isoxaben ( <i>Gallery</i> )                 | NB     | NB    | NB      | NB                | NB    | NB   | NB        | NB    | NB    | NB   | NB    | NB    | NB     | NB          | NB        |
| napropamide ( <i>Devrinol</i> )             | R      | R     | R       | R                 | R     | R    | R         | R     | R     | R    | R     | R     | R      | R           | R         |
| norflurazon ( <i>Solicam</i> )              | R      | R     | R       | R                 | R     | N    | R         | N     | R     | R    | R     | R     | R      | N           | N         |
| oryzalin ( <i>Surflan, Farm Saver</i> )     | R      | R     | R       | R                 | R     | R    | R         | R     | R     | R    | R     | R     | R      | R           | R         |
| oxyfluorfen ( <i>Goal</i> )                 | R      | R     | R       | R                 | R     | R    | R         | R     | R     | R    | R     | R     | R      | R           | R         |
| pendimethalin ( <i>Prowl</i> )              | NB     | NB    | NB      | NB                | NB    | N    | NB        | N     | NB    | NB   | NB    | NB    | NB     | N           | R         |
| pronamide ( <i>Kerb</i> )                   | N      | R     | R       | R                 | R     | N    | R         | N     | R     | R    | N     | R     | N      | N           | N         |
| simazine ( <i>Princep, Caliber 90</i> )     | R      | R     | N       | R<br>sour<br>only | R     | N    | R         | R     | R     | R    | N     | N     | R      | N           | N         |
| thiazopyr ( <i>Visor</i> )                  | NB     | N     | NB      | NB                | NB    | N    | NB        | N     | NB    | N    | N     | NB    | NB     | N           | NB        |
| Trifluralin ( <i>Treflan</i> )              | R      | R     | R       | R                 | R     | NB   | R         | NB    | R     | NB   | R     | R     | R      |             |           |
| <b>Post emergence</b>                       |        |       |         |                   |       |      |           |       |       |      |       |       |        |             |           |
| Carfentrazone ( <i>Shark</i> )              | R      | R     | R       | R                 | R     | R    | R         | R     | R     | R    | R     | R     | R      | R           | R         |
| Clethodim ( <i>Prism</i> )                  | NB     | NB    | NB      | NB                | NB    | N    | NB        | NB    | NB    | NB   | NB    | NB    | NB     | N           | R         |
| 2,4-D ( <i>Clean-crop, Orchard Master</i> ) | R      | R     | R       | R                 | R     | N    | R         | N     | R     | R    | R     | R     | R      |             |           |
| fluazifop-p-butyl ( <i>FusiladeDX</i> )     | NB     | NB    | R       | R                 | NB    | NB   | R         | NB    | R     | NB   | R     | R     | NB     | NB          | NB        |
| Flumioxazin ( <i>Chateau</i> )              | R      | NB    | NB      | NB                | R     | N    | NB        | NB    | NB    | NB   | NB    | NB    | NB     | N           | R         |
| glyphosate ( <i>Roundup, Touchdown</i> )    | R      | R     | R       | R                 | R     | R    | R         | R     | R     | R    | R     | R     | R      | R           | R         |
| glufosinate ( <i>Rely</i> )                 | R      | R     | N       | N                 | R     | N    | N         | N     | N     | N    | R     | N     | R      | N           | N         |
| halosulfuron ( <i>Sandea</i> )              |        | N     | N       | N                 | N     | N    | N         | N     | N     | N    | R     | N     |        | N           | N         |
| MSMA                                        | NB     | NB    | NB      | NB                | N     | N    | N         | N     | NB    | NB   | N     | NB    | NB     | N           | N         |
| Paraquat ( <i>Gramoxone</i> )               | R      | R     | R       | R                 | R     | R    | R         | R     | R     | R    | R     | R     | R      | N           | R         |
| sethoxydim ( <i>Poast</i> )                 | R      | R     | R       | R                 | R     | N    | R         | NB    | R     | R    | R     | NB    | R      | NB          | NB        |

**Note:** This is intended as a general guide only. Before use of any herbicide, consult the label. Labels change frequently and often contain special restrictions regarding specific use of a company's product.  
 N = Not registered, NB = nonbearing, R = Registered

## 2005 Susceptibility of Weeds to Herbicides

### Preemergence

### Postemergence

|                           | Preemergence |        |          |         |         |      |          |         |       |      |         | Postemergence |      |           |       |       |          |       |
|---------------------------|--------------|--------|----------|---------|---------|------|----------|---------|-------|------|---------|---------------|------|-----------|-------|-------|----------|-------|
|                           | Casoron      | Karmex | Devrinol | Solicam | Surflan | Goal | Simazine | Treflan | Prowl | Kerb | Gallery | Roundup       | MSMA | Gramoxone | 2,4-D | Poast | Fusilade | Prism |
| <b>Annual Broadleaves</b> |              |        |          |         |         |      |          |         |       |      |         |               |      |           |       |       |          |       |
| Cheeseweed (Malva)        | C            | P      | P        | P       | P       | C    | P        | N       | N     | P    | C       | P             | N    | P         | P     | N     | N        | N     |
| Chickweed                 | C            | C      | C        | P       | C       | N    | C        | C       | C     | C    | C       | C             | C    | C         | P     | N     | N        | N     |
| Clover                    | P            | P      | P        | N       | N       | P    | C        | N       | N     | N    | P       | P             | N    | P         | P     | N     | N        | N     |
| Fiddleneck                | C            | C      | C        | P       | C       | C    | C        | C       | C     | N    | C       | C             | N    | P         | P     | N     | N        | N     |
| Filaree                   | P            | C      | C        | P       | N       | C    | P        | N       | N     | N    | C       | P             | N    | P         | P     | N     | N        | N     |
| Flax-leaved Fleabane      | C            | N      | N        | N       | N       | N    | C        | N       | N     | N    |         | C             | N    | P         | C     | N     | N        | N     |
| Goosefoot                 | C            | C      | C        | C       | C       | C    | C        | C       | C     | C    | P       | N             | N    | P         | C     | N     | N        | N     |
| Grounsel                  | C            | N      | P        | P       | N       | C    | C        | N       | N     | N    | C       | C             | N    | C         | C     | N     | N        | N     |
| Henbit                    | C            | C      | N        | P       | C       | C    | C        | C       | C     | C    | C       | C             | C    | C         | P     | N     | N        | N     |
| Horseweed (Mare's tail)   | P            | N      | N        | N       | N       | N    | C        | N       | N     | N    | P       | C             | N    | P         | C     | N     | N        | N     |
| Knotweed                  | C            | C      | C        | P       | C       | P    | C        | C       | C     | C    | P       | C             | N    | P         | P     | N     | N        | N     |
| Lambsquarter              | C            | C      | C        | P       | C       | C    | C        | C       | C     | C    | C       | N             | N    | N         | C     | N     | N        | N     |
| Mustard                   | C            | C      | P        | P       | N       | C    | C        | N       | N     | C    | C       | P             | N    | C         | C     | N     | N        | N     |
| Nightshade                | C            | C      | N        | C       | P       | C    | C        | N       | P     | C    | C       | C             | P    | C         | C     | N     | N        | N     |
| Pigweed                   | P            | C      | P        | P       | C       | C    | C        | C       | C     | N    | C       | C             | N    | C         | C     | N     | N        | N     |
| Prickly Lettuce           | C            | C      | C        | C       | N       | C    | C        | N       | N     | N    | C       | C             | N    | P         | C     | N     | N        | N     |
| Puncturevine              | C            | P      | N        | C       | C       | C    | P        | P       | P     | N    |         | C             | N    | C         | C     | N     | N        | N     |
| Purslane                  | C            | C      | C        | C       | C       | C    | C        | C       | C     | C    | C       | C             | N    | C         | C     | N     | N        | N     |
| Shepherdspurse            | C            | C      | N        | P       | N       | C    | C        | N       | N     | C    | C       | C             | N    | C         | C     | N     | N        | N     |
| Sowthistle                | C            | C      | C        | C       | N       | C    | C        | N       | N     | P    | C       | C             | N    | P         | C     | N     | N        | N     |
| Spurge                    | C            | P      | N        | C       | C       | C    | P        | C       | C     | N    | P       | C             | P    | P         | P     | N     | N        | N     |
| Wild Radish               | C            | C      | N        | N       | N       | C    | P        | N       | N     | C    | C       | C             | N    | C         | C     | N     | N        | N     |

### Annual Grasses

|                  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual Bluegrass | C | C | C | C | C | P | C | C | C | C | P | C | N | P | N | N | N | C |
| Barnyardgrass    | P | C | C | C | C | P | C | C | C | C | P | C | P | C | N | C | C | C |
| Crabgrass        | P | C | C | C | C | N | P | C | C | C | P | C | C | C | N | C | C | C |
| Ryegrass         | N | C | C | C | C | N | N | C | C | C | P | C | N | P | N | C | C | C |
| Wild Barley      | C | C | C | C | C | P | C | C | C | C | N | C | N | P | N | C | C | C |
| Wild Oats        | P | P | C | C | P | P | C | P | C | P | N | C | N | P | N | C | C | C |
| Fescues          | P | C | C | C | C | C | C | C | C | C | N | P | N | C | N | N | N | N |

### Perennials

|                |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Field Bindweed | P | N | N | N | P | N | N | P | P | N | N | P | N | N | P | N | N | N |
| Bermudagrass   | P | N | N | P | N | N | N | P | P | N | N | C | N | N | N | P | P | P |
| Dallasgrass    | N | N | N | N | N | N | N | N | N | N | N | C | C | N | N | C | C | C |
| Johnsongrass   | N | N | N | P | N | N | N | P | P | N | N | C | C | N | N | C | C | C |

C = Controlled  
P = Partial Control  
N = Not Controlled

**UPCOMING MEETINGS  
MARK YOUR CALENDARS**

Sacramento Valley Cling Peach Day

January 19, 2006

Yuba City

(See first page for program)

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Sutter/Yuba/Colusa Walnut Day

February 22, 2006

1:00 – 4:00 p.m.

Yuba City

(Information will follow in the next issue of
“Orchard Notes”)