



Olive News



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Glenn County Olive Pest Control District Meeting

A meeting of the Glenn County Pest Control District will be held Tuesday, May 18th, at the Orland Memorial Hall. The meeting will start at 10:00 a.m. The purpose of the meeting is to inform growers of the activities of the Pest Control District and to discuss a possible adjustment to the grower assessment. Additionally, Rob Fritts of Certis Chemical Company will discuss the availability of the attract and kill trap.

Sacramento Valley Olive Day

Wednesday, May 26, 2004

**Corning Veterans Hall - 1620 Solano Street, Corning
8:30 a.m. to 1:00 p.m.**

- 8:00 Registration
- 8:30 **Introduction**
Bill Krueger, UC Farm Advisor, Glenn and Tehama Counties
- 8:40 **Implications of Olive Fly Infestation for Growers and Cannery**
Musco and /or Bell Carter Representative
- 9:00 **What You Need to Spray for Olive Fly**
Doug Compton, Tehama County Ag. Commissioner's Office
- 9:20 **Olive Fly - Biology, Control and Research Update**
Marshall Johnson, UC Ag. Entomologist, Kearney Ag. Center
- 10:00 **Olive Fly Trapping Update**
Tim Ksander, Ag Advisers, Yuba City
- 10:20 **Olive Pest Control Districts Update**
Glenn and Tehama Counties Pest Control District Representatives
- 10:40 **Break**

11:00 **Mechanical Harvest of Olives, Past, Present and Future**
Louise Ferguson, UC Olive Specialist, Kearney Ag. Center, Parlier

11:30 **Irrigation of Olives - Review**
Joe Connell, UC Farm Advisor, Butte County

12:00 **California Olive Committee Update**
Jan Nelson, California Olive Committee

12:20 **Lunch**
Courtesy of Bell Carter Olives and Musco Olives

A total of 2.5 hours of continuing education, (.5 of laws and regulations and 2 of other) have been approved for this meeting.

See registration form on the back of this newsletter.

2003 Fruit Set Observations and Implications

Many area growers experienced a disappointing crop set in 2003. Shotberry (small worthless fruit) production was higher than usual, especially with Manzanillo variety. While the reasons for these observations is not completely clear, trying to understand what happened can be useful as 2004 bloom and fruit set period approaches.

Alternate bearing. Olives are notorious for alternate bearing. In my experience, one of the most reliable predictors of crop is the crop the previous year. Large crops tend to lead to smaller crops the following year. I think alternate bearing was a major factor in the disappointing Sevillano crop. Generally we had two heavy Sevillano crops back to back in 2001 and 2002. Most Sevillano orchards showed a very light bloom in 2003. This potential light crop was predictable from the limited amount of new growth that was present in the trees. The previous heavy crop limited shoot growth and because the flowers are born only on the new shoots, this limited the flowers and potential crop.

There were some orchards which had what appeared to be adequate bloom, but ended up with light crops with lots of shotberries. Many olive varieties and Manzanillo in particular are only partially self fruitful. What this means is that, while pollen from Manzanillo is capable of setting Manzanillo fruit, this pollen germinates slower and grows slower down the pistil and may not reach the ovary while it is still receptive. Pollen from another compatible variety will germinate and grow faster and therefore can be more effective in setting fruit. This problem is aggravated by unseasonably warm weather during the

bloom period because the period of susceptibility will be reduced due to accelerated degeneration of the ovary. Last year in the Orland area, I recorded full bloom in two Manzanillo orchards on May 22nd. Average maximum temperatures for the three day period from May 20 to May 23 were 11 degrees higher than average. Conditions such as these would be expected to emphasize the importance of cross pollination.

In the San Joaquin Valley, the importance of cross pollination to fruit set has been clearly demonstrated and artificial pollination is a common practice in areas where natural cross pollination is limited. In the Sacramento Valley, where Manzanillos are often planted in close proximity to Sevillano and there is presumably a large amount of Sevillano pollen in the air during bloom, demonstrating the benefit of cross pollination has been difficult.

We have often observed higher levels of shotberry fruit in the more isolated orchards which would likely have less exposure to Sevillano pollen. Last year this situation was exaggerated to the point, I believe, crop load was negatively effected.

Wet rainy weather or wind during bloom can also negatively effect fruit set.

In conclusion, most local Manzanillo orchards usually will set adequate crops without artificial pollination, however in isolated orchards or in years which are not conducive to good pollination Manzanillo blocks may benefit from artificial pollination. In the San Joaquin Valley, typically, a total of 100 to 120 grams per acre of pollen from a compatible variety are applied 2 to 4 times during the bloom.

Chemical Thinning

Olive bloom is rapidly approaching and appears as though it will be at least a week to 10 days early. Generally the bloom looks good.

Too much bloom and subsequently too much crop is not a good thing. Excessive crops result in smaller less valuable fruit and set the stage reduced crop the following year by reducing shoot growth during the current year.

Controlling the crop can be very beneficial. This usually done in two ways, pruning and chemical thinning. Pruning removes potential fruit and leaves and stimulates growth which will help minimize alternate bearing. Chemical thinning removes some the fruit and no leaves. Chemical thinning can be more effective than pruning for improving fruit size and controlling alternate bearing because it removes only fruit and changes the leaf to fruit ratio.

Risks of chemical thinning. The thinning response is dependant on the temperatures shortly following application. Response can vary from no thinning if temperatures are unusually cool following application to nearly complete crop removal if temperatures are excessively warm following application.

Timing. The time to spray is most often determined by fruit size. Sprays are applied when fruit on the north and south sides of the trees average between 1/8 and 3/16 of an inch. With normal weather, this will usually be between 12 and 15 days after full bloom. It is useful to note the day of full bloom (when approximately 80% of the flowers are open, 10% are unopened and 10% are at petal fall) this will allow you to predict when the spray will be applied.

Amount to use. A common rate used in this area is 96 ounces of the Liqui-Stik Concentrate product per acre. Rate trials that we have conducted have shown reduced thinning response when rates are lowered below 72 ounces of product per acre.

Thinning precautions. As mentioned earlier, thinning response is affected by temperatures following treatment. Our research has shown that the first two or three days after treatment are the most critical. I suggest that close attention be paid to weather forecasts prior to treatment and if forecasted temperatures are significantly warmer or lower than average, treatments be delayed until more normal temperatures return. As the length of time from full bloom increases, the thinning response decreases. If fruit are on the big side, warmer temperatures after treatment should be less of a concern. Avoid stress which can accentuate thinning by making sure the trees are well watered before treatment.

The following table shows average temperatures for Orland for the months of May and June. These may be helpful for understanding or predicting both fruit set due to conditions during bloom and thinning response due to conditions following the application of a chemical thinner.

Date	Max Temp	Min Temp
May 1	77	50
May 2	76	51
May 3	78	52
May 4	79	51
May 5	80	50
May 6	77	52
May 7	78	53
May 8	78	52
May 9	76	52
May 10	82	53
May 11	80	51
May 12	77	50
May 13	76	50
May 14	75	50
May 15	76	51
May 16	78	52
May 17	79	52
May 18	79	52
May 19	81	53
May 20	81	53
May 21	82	54
May 22	83	55
May 23	84	55
May 24	81	55
May 25	82	55
May 26	79	56
May 27	80	55
May 28	78	52
May 29	78	53
May 30	82	56
May 31	83	56
June 1	84	57
June 2	82	55
June 3	80	55
June 4	81	56
June 5	81	56
June 6	81	55
June 7	83	56
June 8	86	58
June 9	85	56
June 10	83	57
June 11	83	57
June 12	82	57
June 13	85	57
June 14	86	59
June 15	85	59
June 16	83	58
June 17	86	59
June 18	86	59
June 19	87	58
June 20	88	60
June 21	88	60
June 22	86	58
June 23	88	60
June 24	88	58
June 25	84	57
June 26	85	58
June 27	83	58
June 28	84	57
June 29	85	59
June 30	87	59

Sacramento Valley Olive Day Registration Form

Print or Type Only

First Name: _____ Last Name: _____

Company: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: () _____ Fax No.: () _____

Email: _____

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