



# Olive News



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To simplify information, trade names of products have been used. No endorsement of named products is intended, nor is criticism implied of similar products which are not mentioned.

## HANDS-ON OLIVE FLY WORKSHOPS

Two similar meetings are being presented. Attend the one that is most convenient.

Who should attend: Olive Growers, especially if you have less than 500 trees.

When & Where: **May 21, 2009, 4:00 to 6:00 p.m.**  
Matt Koball's orchard, 21850 South Ave., Corning. West of I-5 where South Avenue intersects Rawson Road.

**May 28, 2009, 4:00 to 6:00 p.m.**  
John Erickson's olive orchard, south of Road 24 and west side of Road M. Park at edge of orchard.

### Topics covered:

- ◆ How to identify the olive fruit fly.
- ◆ How to assemble Plastic McPhail and sticky traps. Sticky traps will be available at no charge to take home.
- ◆ How to make an Olipe trap (bring your own 1 liter bottle).
- ◆ Mass trapping for olive fly control.
- ◆ How to mix, load and apply GF-120 (Spinosad) with a hand-can, backpack sprayer or a 4-wheeler. The pesticide and sprayers will be available for demonstration.
- ◆ Surround sprays for olive fly control

### Who to contact if you have questions:

Jean Miller (934-6501), Ernie Simpson (865-9829), Doug Compton (527-4504) or Bill Krueger (865-1107).

# CHEMICAL THINNING

Developing olive bloom appears non-uniform, ranging from light and spotty on most Sevillano orchards I have seen to very heavy on some Manzanillo blocks. Many Manzanillo blocks have varying amounts of bloom within the orchard ranging from very heavy to moderate to light.

Heavy blooming trees are at risk of excessive fruit set leading to small fruit size and lower value.

Controlling the heavy crops are essential. This is usually done by pruning and/or chemical thinning. Pruning removes potential fruit and leaves and stimulates growth which will help minimize alternate bearing. Pruning is the preferred method for Sevillano. Chemical thinning with Naphthalene Acetic Acid (NAA) 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. Pruning plus thinning is recommended for crop control in heavy blooming Manzanillo.

**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. This can be determined by folding a standard 2 x 3 1/2 inch business card in half across the narrow dimension. When 11 to 16 fruit can be placed side by side across the card, it is time to thin. With normal weather, this will usually be between 12 and 18 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) to allow you to predict when the spray will be applied.

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

**Table 1.  
Average  
Temperatures  
for Orland for  
May through  
June**

Source: California  
Irrigation  
Management  
Information  
System (CIMIS)  
<http://cimis.water.ca.gov>

**Amount to use.** A common rate used in this area is 96 ounces of the Liqui-Stik Concentrate 200 product per acre. Rate trials that we have conducted have shown reduced thinning response when rates of 72 ounces of product per acre or less were used.

**Thinning precautions.** Hot weather during and following bloom, especially when accompanied by drying winds, can reduce fruit set and make thinning unnecessary. Pay close attention to weather conditions during the developing fruit set up until the time of thinning.

Our research has shown that the first two or three days after treatment are the most critical in determining the thinning response. I suggest that close attention be paid to weather forecasts prior to treatment and if forecasted temperatures are significantly warmer or lower than average, (see Table 1) 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.

If you have any questions about chemical thinning, please contact me at 530-865-1152.

## **OLIVE FLY UPDATE**

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Olive Fly traps should be placed in individual orchards to follow insect development within those orchards. These results can be compared to area wide trapping results which are available along with other information related to olive fly at [http://ceglenn.ucdavis.edu/Orchard\\_Crops110/Olives.htm](http://ceglenn.ucdavis.edu/Orchard_Crops110/Olives.htm) . This will allow you to follow trends and make some judgment on the effectiveness of your treatment program

- Treatment with GF 120 should begin with the upswing of trap activity (April through May) and regular treatments (every other row weekly or every row every other week) should begin slightly before pit hardening, usually in early June.
- The GF 120 label recommends a range of concentrations from 4 parts water to 1 part GF 120 to 1.5 water to 1 part GF 120. The higher concentrations have been shown to kill flies for a longer period of time. In areas with low populations such as here, where the flies will not consume all of the bait, higher concentrations will control flies for a longer period of time.
- The bait spray needs to remain tacky to be attractive to flies.
- Olive flies are sensitive to high summer temperatures. Sensitivity is much greater in the absence of food or water. Eggs are the most sensitive stages. Eggs will die after one day of exposure to 105 degrees F. Adults and 1<sup>st</sup> instars will begin to die after several days of exposure to 100 degrees or greater depending on the availability of food or water. This heat mortality and the difference in consecutive days of high temperatures between the Sacramento Valley and San Joaquin is thought to explain the reduced levels of infested fruit that have been found in the SJV compared to the Sacramento Valley. This sensitivity to heat, most likely, also explains why we have seen lower levels of infestations during hot summers compared to the cooler 2004 summer. A website is available which uses climatic maps to aid in olive fly management decisions ( <http://arcims.gis.uckac.edu/CIMIS/> ).
- The presence of honeydew from black scale feeding will reduce the effectiveness of GF 120 sprays and allow the flies to better survive high temperatures.
- Many growers have had success by reducing or stretching out spray intervals during the hot periods which coincided with 0 or very low catches in the orchards and then resuming normal spray programs when the weather cooled and trap catches resumed in September.