

TREE PEST UPDATES

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April 19, 1999

CODLING MOTH

HOST CROPS: Apple, Pear, Walnut

[Not all **walnut** orchards need treatment every year or every generation. If you had greater than 3% worm damage last year and are catching high numbers in your traps, you probably need to treat this generation. If you had more than 5% damage last year you probably need to treat this generation.]

BIOFIX: The moths began flying in most orchards on **April 13**. If your orchard traps indicate your flight started later, use the date that the flight began in your own traps as your biofix. Some orchards caught a few moths before April 13th, but the weather was not warm enough for mating before April 12th so don't set your biofix before that.

TREATMENT TIMING: If the weather remains "normal", the projected treatment dates are as follows:

Organophosphate Sprays (Guthion, Imidan, Lorsban, Supracide): Orchards with high populations, spray at 250-300 degree days (DD). This should occur **on May 3-7 or 19-23 days after your own biofix**. Orchards with low populations can wait until 400 DD. This should occur **on May 14 or 30 days after your own biofix**.

Insect Growth Regulator Sprays (Confirm): Currently registered for **walnuts** only. It's soft on the beneficials so you shouldn't have later problems with aphids or mites. It has been most successful in orchards with low populations and with excellent spray coverage. Confirm should be applied at the beginning of egg hatch about 200-250 DD. This is expected to occur on **April 29 to May 3rd or 15 to 19 days after your own biofix**. An additional spray may be required if a second peak occurs for the 1st generation. Look for this 2nd peak to begin in late May or early June.

Mating Disruption: Dispensers should have been hung in the orchards **before April 13** or your own orchard biofix. If they went up afterwards, you may want to consider a supplemental control for the first generation (sprays, wasps).

Wasps (*Trichogramma platnerii*): These have been used successfully in walnuts with low populations and in pears as a supplemental control for mating disruption. Releases should begin about 100 DD, which should occur on **April 20th** and should continue at 10 day intervals throughout the first generation flight. Give me a call if you would like more detailed information about using wasps.

FOR MORE DETAILED INFORMATION ON TREATMENT TIMING, CALL FOR A COPY OF OUR MOST RECENT IPM GUIDELINES FOR APPLES, PEARS, OR WALNUTS.

What's a Biofix?: It's just the beginning of the flight for each new generation. We usually have 3 generations for codling moth in this area. We use the Biofix to begin degree day calculations for each generation so we know when egg laying, hatchout, and other lifecycle events will happen. This helps us to time our treatments most effectively.

What's a Degree Day? Insects develop faster or slower depending on the temperature. Degree days are a measure based on the maximum and minimum temperatures for each day which allow us to figure out how fast the insects are developing. You may see them abbreviated as DD or °D. If you have the daily maximum & minimum temperatures for your orchard, you can look the degree days up on a chart. If you have access to the Internet, you can get Brentwood weather data and do a degree day calculation from the UC IPM Program home page. This page also lets you calculate the projected degree days based on historical weather data so you can make projections for treatment windows (this is how I do it!). The address is <http://www.ipm.ucdavis.edu>. Give me a call if you would like a degree day chart or more information.

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CODLING MOTH UPDATE

Note: The above information is provided to serve as baseline data for East Contra Costa County. For best results compare with traps and observations in your own orchards. Depending on pest pressure, sprays may not be necessary. Projected treatment times are based on historical weather data